

Module: Introduction**Page: W0. Introduction****W0.1****Introduction**

Please give a general description and introduction to your organization.

CMS Energy Corporation's (CMS Energy) business strategy is focused primarily on its principal subsidiary, Consumers Energy Company (Consumers Energy or Company), an electric and natural gas utility serving approximately 6.7 million of Michigan's 10 million residents. CMS Energy, through its CMS Enterprises subsidiary, is also engaged in domestic independent power production and the marketing of independent power production.

This report is ONLY for the principal subsidiary of CMS Energy, Consumers Energy, and only for facilities with large sources of water withdrawals that maintain a National Pollutant Discharge Elimination System (NPDES) permit consisting of steam electric generating units.

Consumers Energy acknowledges that the long term sustainability of our Company depends upon our ability to listen to our stakeholders and conduct business that promotes environmental health, increases societal value, and brings economic success so that we can provide safe, reliable, and affordable energy to our customers. This commitment is advanced by our "Leave it Better Than We Found It" corporate culture.

In 2015, Consumers Energy continued its commitment to sustainability by maintaining first quartile sustainability performance as compared to by its peers and being ranked the second most sustainable utility in the United States as determined by Sustainalytics, a sustainability rating organization. Consumers Energy is committed to maintaining 1st quartile performance as defined by our corporate sustainability goal for 2013-2017. As a utility, we recognize that our operations use large quantities of water, albeit primarily non-consumptively for non-contact cooling purposes. As part of objectives under this corporate sustainability goal, the Company created a performance progress report for our water usage and disclosure of results to the public; which is updated annually. Another objective under the corporate sustainability goal is to reduce our water usage intensity 17% by 2017 and 20% by 2020.

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 Form 10-K for the year ended December 31, 2015 and as updated in subsequent 10-Qs. 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.

W0.2**Reporting year**

Please state the start and end date of the year for which you are reporting data.

Period for which data is reported
Thu 01 Jan 2015 - Thu 31 Dec 2015

W0.3**Reporting boundary**

Please indicate the category that describes the reporting boundary for companies, entities, or groups for which water-related impacts are reported.

Companies, entities or groups over which financial control is exercised

W0.4**Exclusions**

Are there any geographies, facilities or types of water inputs/outputs within this boundary which are not included in your disclosure?

Yes

W0.4a**Exclusions**

Please report the exclusions in the following table

Exclusion	Please explain why you have made the exclusion
Hydroelectric Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use. Our Ludington Pumped Storage Facility is not included in this report.
Electric Distribution Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use.
Gas Distribution, Transmission and Storage Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use. Therefore, our natural gas compressor stations are not included in this report.
Service Center, Call Centers and Office Buildings	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use.
Non-Utility Operations	This report focuses on Consumers Energy's largest sources of water withdrawals, our steam electric power generating facilities which operate under National Pollutant Discharge Elimination System permits and comprise a majority of our water use.

Further Information

Module: Current State

Page: W1. Context

W1.1

Please rate the importance (current and future) of water quality and water quantity to the success of your organization

Water quality and quantity	Direct use importance rating	Indirect use importance rating	Please explain
Sufficient amounts of good quality freshwater available for use	Vital for operations	Important	Direct Use: Quality freshwater from nearby lakes and rivers is withdrawn primarily for non-contact cooling purposes. In addition, water quality is important in steam generation as specific chemicals, including some salts, can result in boiler and condenser tube/pipe corrosion over time. Without this water input, our steam electric generating facilities would not be able to operate as currently configured. While our intake systems can accommodate moderate fluctuations in water levels, maintaining historic lake and river levels is important to ongoing utilization of our current water intake infrastructure without significant and costly modification. Indirect Use: Freshwater is essential to coal mining operations for use in exploration, mining, processing and various other uses.
Sufficient amounts of recycled, brackish and/or produced water available for use	Important	Important	Direct: Recycled water is used for non-contact cooling and other plant processes and reduces the amount of freshwater withdrawn for these uses. Two of our generating facilities use primarily recycled water for condenser cooling. Indirect: Recycled water is important for mining operations particularly in arid climates with less freshwater availability. Large percentages of water used for coal exploration, mining and processing operations are recycled and reused.

W1.2

For your total operations, please detail which of the following water aspects are regularly measured and monitored and provide an explanation as to why or why not

Water aspect	% of sites/facilities/operations	Please explain
Water withdrawals- total volumes	76-100	Water withdrawn is monitored at 100% of sites (steam electric generating facilities) due to the significant impact of water at the sites. Water withdrawal volumes are used in a number of programs including water stewardship tracking, water quality monitoring and water use reporting.
Water withdrawals- volume by sources	76-100	Water withdrawn from specific surface water, groundwater and municipal sources is monitored at 100% of sites for the purposes of tracking water quality and availability from local systems.
Water discharges- total volumes	76-100	Water withdrawn is monitored at 100% of sites due to the significant impact of water at the sites. Water withdrawal volumes are used in a number of programs including water stewardship tracking, water

Water aspect	% of sites/facilities/operations	Please explain
		quality monitoring and water use reporting.
Water discharges- volume by destination	76-100	Water discharged to specific destinations, including Great Lakes, inland lakes, rivers, ground and municipal water systems, is tracked for 100% of sites for purposes of ensuring minimal adverse impact to local ecosystems and ensuring the majority of water withdrawn is returned to the watershed. Additionally, these volumes are used for water use reporting, quality monitoring and reporting.
Water discharges- volume by treatment method	76-100	Water discharged following different treatment methods is tracked for 100% of sites to monitor treatment system use and capacity as well as for water quality monitoring and reporting.
Water discharge quality data- quality by standard effluent parameters	76-100	Water discharge quality is monitored at 100% of sites for compliance with National Pollutant Discharge Elimination System (NPDES) surface water discharge permits as well as Groundwater permits.
Water consumption- total volume	76-100	Water consumption is tracked at 100% of sites due to the significant impact of water at the sites, which can result in large consumptive losses for once-through cooling and cooling tower systems for condenser cooling.
Facilities providing fully-functioning WASH services for all workers	76-100	Fully-functioning WASH services are provided for workers at 100% of sites and are monitored for usage.

W1.2a

Water withdrawals: for the reporting year, please provide total water withdrawal data by source, across your operations

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Fresh surface water	2152596.5	Lower	
Brackish surface water/seawater	0	About the same	

Source	Quantity (megaliters/year)	How does total water withdrawals for this source compare to the last reporting year?	Comment
Rainwater	0	About the same	
Groundwater - renewable	1838.2	Lower	
Groundwater - non-renewable	0	About the same	
Produced/process water	0	About the same	
Municipal supply	4001.5	Higher	Municipal water is used primarily for condenser cooling at our gas-fired combined cycle plants. Both of these plants ran significantly more in 2015 than 2014, resulting in higher withdrawals.
Wastewater from another organization	0	About the same	
Total	2158436.1	Lower	

W1.2b

Water discharges: for the reporting year, please provide total water discharge data by destination, across your operations

Destination	Quantity (megaliters/year)	How does total water discharged to this destination compare to the last reporting year?	Comment
Fresh surface water	2153578.3	Lower	
Brackish surface water/seawater	0	About the same	
Groundwater	208.8	Lower	
Municipal/industrial wastewater treatment plant	337.6	Higher	
Wastewater for another organization	0	Not applicable	
Total	2154124.7	Lower	

W1.2c

Water consumption: for the reporting year, please provide total water consumption data, across your operations

Consumption (megaliters/year)	How does this consumption figure compare to the last reporting year?	Comment
4311.5	Higher	Additional running time on gas-fired combined cycle units with cooling towers resulted in more water consumed through primarily evaporative losses in 2015 than 2014.

W1.3

Do you request your suppliers to report on their water use, risks and/or management?

No

W1.3a

Please provide the proportion of suppliers you request to report on their water use, risks and/or management and the proportion of your procurement spend this represents

Proportion of suppliers %	Total procurement spend %	Rationale for this coverage
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W1.3b

Please choose the option that best explains why you do not request your suppliers to report on their water use, risks and/or management

Primary reason	Please explain
Important but not an immediate business priority	Water is an important resource to coal suppliers, however, risks related to water use and availability are mitigated by sourcing coal from a variety of different mines and regions.

W1.4

Has your organization experienced any detrimental impacts related to water in the reporting year?

Yes

W1.4a

Please describe the detrimental impacts experienced by your organization related to water in the reporting year

Country	River basin	Impact indicator	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy
United States of America	Other: Ground water supply well field	Phys-Declining water quality Reg-Regulatory uncertainty	Higher operating costs	At our J.H. Campbell coal-fired facility, we operate a groundwater well field system to provide high quality boiler make-up to unit boilers. The water	Ground water well system length of impact is ongoing until a solution can be identified and implemented. New regulation length of impact is	The ground water system financial impact is estimated to range between US \$50,000 - \$1,000,000. The new regulation financial impact is	Engagement with public policy makers Infrastructure investment Infrastructure maintenance Increased	For the ground water well field system, the Company is investigating the cause of the water quality and quantity decline, and in turn will make capital investment to eliminate or hasten the effects. Alternatively, the

Country	River basin	Impact indicator	Impact	Description of impact	Length of impact	Overall financial impact	Response strategy	Description of response strategy
				quality and reliable system yield has declined recently. Additionally, new federal regulations affecting operation of cooling water intake systems and effluent limitations of process waters specific to the steam electric industry have the potential to require infrastructure modifications at both the JH Campbell and DE Karn facilities. New regulations are being challenged in the courts, and as a result, creating regulatory uncertainty regarding what might ultimately be required to comply with these regulations.	ongoing until the 2023-2024 time frame. The regulatory uncertainty length of impact is likely a 1-2 year time frame.	estimated to range between US \$70,000,000 and \$104,000,000. The regulatory uncertainty financial impact is unknown.	capital expenditure	Company will make capital investment to replace this infrastructure. For the new regulation, the Company is developing compliance strategies, including conceptual plans for facility infrastructure modification. For the regulatory uncertainty, the Company is engaged with industry groups to stay aware of court challenges/decisions to better understand how those decisions may/may not affect our regulatory compliance strategies, and in turn, our capital investment needs and associated market competitiveness.

W1.4b

Please choose the option below that best explains why you do not know if your organization experienced any detrimental impacts related to water in the reporting year and any plans you have to investigate this in the future

Primary reason	Future plans
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Further Information

Module: Risk Assessment

Page: W2. Procedures and Requirements

W2.1

Does your organization undertake a water-related risk assessment?

Water risks are assessed

W2.2

Please select the options that best describe your procedures with regard to assessing water risks

Risk assessment procedure	Coverage	Scale	Please explain
Water risk assessment undertaken independently of other risk assessments	Direct operations and supply chain	All facilities and some suppliers	The water risk at each steam electric generation facility is considered on an individual basis. These generating facilities use large amounts of water which require water related risks to be evaluated frequently through NPDES, groundwater and water withdrawal permit requirements. Risk assessments are built into the environmental regulations that we operate under. We operate in a regulatory environment that is mature in regards to water risk assessment and we rely on this framework as a risk assessment tool. Consumers Energy also utilizes a system that assesses the water risk of new projects. This assessment takes into account the water

Risk assessment procedure	Coverage	Scale	Please explain
			withdrawal and discharge capacities allowed in current permits and does not allow the project to proceed if it exceeds the current permit capacity, and in some cases, the resource capacity established by the State of Michigan. This assessment addresses any water issues that may occur during project inception. Additionally, the Company requests information from its largest suppliers, on a cost basis, to discern if the supplier has the potential to negatively impact the environment, if an environmental management system has been implemented and whether cost effective measures to avoid pollution have been implemented.

W2.3

Please state how frequently you undertake water risk assessments, what geographical scale and how far into the future you consider risks for each assessment

Frequency	Geographic scale	How far into the future are risks considered?	Comment
Annually	Facility	3 to 6 years	When a system design change is presented the impacts on water needs is evaluated to verify that it is consistent with available system and resource capacity and regulatory requirements. Similarly, when new projects are considered, water needs are vetted with associated regulatory requirements. At a minimum, this is reviewed every 5 years with NPDES permit renewals. Water use is reported to state and federal regulatory agencies on an annual basis.

W2.4

Have you evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy?

Yes, evaluated over the next 1 year

W2.4a

Please explain how your organization evaluated the effects of water risks on the success (viability, constraints) of your organization's growth strategy?

The Company has forecasted trends in surface water levels in the Great Lakes and the long term (10- 30 years in the future) risk associated with changing lake levels. Fluctuations in water levels could have significant impact on generating facility cooling water operations.

Generating facility operations staff are provided with monthly water level data from the U.S. Army Corps of Engineers (USACE). This report shows the most recent twenty-four month data plus a six month projection. This information helps staff keep abreast of recent trends and forecast short-term changes. Although they have been rarely observed, there are concerns over Great Lakes surface water levels being too low to support full operation. Due to its location on the Western edge of Lake Erie, our JR Whiting Generating Facility is susceptible to the seiche effect, which is a temporary drawdown of surface water due to strong westerly winds, and has procedures in place to mitigate any loss of operations which may result. JR Whiting was retired in April 2016. Another known issue at the DE Karn Generating Facility is ice buildups at various points in the intake system reducing flow. Reduced surface water levels would exacerbate these issues.

Long term Great Lakes water level research does not provide targets with high confidence levels. There is a great deal of variance in projections from the research community. For purposes of this discussion on risk, it was decided that the best future projection for surface water levels would be the most extreme recorded levels from the past 100 years.

W2.4b

What is the main reason for not having evaluated how water risks could affect the success (viability, constraints) of your organization's growth strategy, and are there any plans in place to do so in the future?

Main reason	Current plans	Timeframe until evaluation	Comment

W2.5

Please state the methods used to assess water risks

Method	Please explain how these methods are used in your risk assessment
Internal company knowledge Other: Michigan Water Withdrawal Assessment Tool	The Water Withdrawal Assessment Tool was developed by Michigan State University to assess potential impacts to classes of rivers and streams from surface water and groundwater withdrawals. State of Michigan regulations require use of this tool under certain circumstances (i.e. new or increased large withdrawals) to evaluate potential adverse impacts to water resources. This assessment is used to register new or increased withdrawals within a specific threshold, and determines need to obtain water withdrawal permits over this threshold. The tool is organized on a watershed/river system basis, and in turn, on a stream reach basis so that within a watershed potential impacts to individual reaches of streams/rivers can be evaluated. Water use for new facilities and increased use at existing facilities to accommodate plant modification and growth are evaluated using this tool. At project conception stages, internal Company knowledge regarding water supply needs relative to existing source supply and quality is used to inform project needs, including siting and location components. Moreover, our ability to maintain and enhance our business is dependent upon securing water withdrawal and discharge permits. As such, incorporating watershed and/or basin issues, basin or resource management plans, and changing regulatory requirements into our calculus helps us better understand and predict resource limitations, permitting challenges, and potential capital and operational costs. The Company's growth strategy is affected by many factors, including but not limited to water resources. Fortunately, our existing footprint within the Great Lakes basin is an area of abundant freshwater supply. Accordingly, factors other than water resources (such as fuel supply) tend to have a greater influence on organization growth strategies.

W2.6

Which of the following contextual issues are always factored into your organization's water risk assessments?

Issues	Choose option	Please explain
Current water availability and quality parameters at a local level	Relevant, included	Water available and quantity are important to Consumers Energy generating facilities, primarily as once-through cooling water. Water levels and general conditions are monitored by facility operations and corporate environmental staff on a routine basis. When a system design change is presented the impacts on water needs are evaluated (via the Water Withdrawal Assessment Tool and internal knowledge of the resource) to verify that there is available water capacity with no adverse impact. Similarly when new

Issues	Choose option	Please explain
		projects are considered water needs are vetted with associated water quality standards and reporting requirements.
Current water regulatory frameworks and tariffs at a local level	Relevant, included	As these issues arise, they are evaluated under the existing framework of State water withdrawal regulations, waste water discharge permitting and other applicable water availability and quality regulations. To do this, Consumers Energy uses internal Company knowledge.
Current stakeholder conflicts concerning water resources at a local level	Relevant, included	Consumers Energy has local personnel throughout the State of Michigan who are responsible for stakeholder conflicts. These representatives ensure that such conflicts are brought to the attention of the appropriate personnel so that their risks will be assessed and a resolution will be implemented. The Company uses internal Company knowledge of the stakeholders, the stakeholders' issues and the particular resource to address the issue.
Current implications of water on your key commodities/raw materials	Relevant, not yet included	At this time, the Company does not require suppliers to report specifically on water use and quality risks. However, the Company does request information from suppliers to discern if materials and/or services could negatively impact the environment, if an environmental management system has been implemented and whether cost effective measures to avoid pollution have been implemented.
Current status of ecosystems and habitats at a local level	Relevant, included	When assessing new projects an internal review captures any impacts on aquatic ecosystems and habitats to determine if applicable permits are required. If a permit is required, risks are mitigated through the permitting process. To be successful in this process, the Company uses its internal knowledge of sensitive ecosystems, species and habitats, and at times, knowledge of technical experts outside the Company.
Current river basin management plans	Relevant, included	When assessing new projects, an internal review to identify any impacts on river basins, and in turn to determine if any permits are required. If a permit is required, risks are mitigated through the permitting process. To be successful in this process, the Company uses its internal knowledge of existing river basin management plans or governmental policies on this issue.
Current access to fully-functioning WASH services for all employees	Relevant, included	Employees doing physical labor need showers. The majority of these employees are at generating facilities and natural gas compressor stations (and our gas storage operations and service centers, which are not captured in the scope of this report). Employees at all facilities have access to restrooms and potable water.
Estimates of future changes in water availability at a local level	Relevant, included	Estimates of future changes in water availability are a part of every facility's planning process. The Company uses the Water Withdrawal Assessment Tool, internal Company knowledge and other publicly available information to address this issue. The Company has forecasted trends in the Great Lakes' surface water levels and the long term (10- 30 years in the future) risk associated with changing lake levels. Fluctuations in water levels could have significant impact on generating facility cooling water operations. Generating facility operations staff are provided with monthly water level data from the U.S. Army Corps of Engineers (USACE). This report shows the most recent twenty-four month data plus a six month projection. This information helps staff keep abreast of recent trends and forecasted short-term changes. Although they have been rarely observed, there are concerns over Great Lakes surface water

Issues	Choose option	Please explain
		levels being too low to support full operation. Due to its location on the Western edge of Lake Erie, our JR Whiting Generating Facility is susceptible to the seiche effect, which is a temporary drawdown of surface water due to strong westerly winds, and has procedures in place to mitigate any loss of operations which may result. JR Whiting was retired in April 2016. Another known issue is at the DE Karn Generating Facility where ice buildups at various points in the intake system reduce flow. Reduced surface water levels would exacerbate these issues. Long term Great Lakes water level research does not provide targets with high confidence levels. There is a great deal of variance in projections from the research community. For purposes of this discussion on risk, it was decided that the best future projection for surface water levels would be the most extreme recorded levels from the past 100 years.
Estimates of future potential regulatory changes at a local level	Relevant, included	Risk is primarily addressed at the State and federal regulatory level. We track local regulations and changes to them and respond on a case by case basis, often by responding directly to the regulatory agency as part of a public meeting/comment period or collaboratively working with an industry trade association or group.
Estimates of future potential stakeholder conflicts at a local level	Relevant, included	Evaluated on a case by case basis. Consumers Energy has local personnel throughout the State of Michigan who are responsible for stakeholder conflicts. These representatives ensure that potential future conflicts are brought to the attention of the appropriate personnel so that there risks will be assessed and a resolution will be implemented. The Company uses its internal knowledge to address this issue.
Estimates of future implications of water on your key commodities/raw materials	Relevant, included	Long term Great Lakes water level research does not provide targets with high confidence levels. There is a great deal of variance in projections from the research community. For purposes of this discussion on risk, it was decided that the best future projection for surface water levels would be the most extreme recorded levels from the past 100 years.
Estimates of future potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Future potential changes to ecosystems and habitats are evaluated on a case by case basis. When assessing new projects an internal review captures any impacts on aquatic ecosystems and habitats to determine if a permit is required. If a permit is required, risks are mitigated through the permitting process.
Scenario analysis of availability of sufficient quantity and quality of water relevant for your operations at a local level	Relevant, included	Due to an evaluation of sufficient water quantity and quality at our proposed and permitted Thetford Generating Facility, it was decided to permit and use air cooling instead of water cooling. The Company has forecasted trends in surface water levels in the Great Lakes and the long term (10- 30 years in the future) risk associated with changing lake levels. Fluctuations in water levels could have significant impact on generating facility cooling water operations. Generating facility operations staff are provided with monthly water level data from the USACE. This report shows the most recent twenty-four month data plus a six month projection. This information helps staff keep abreast of recent trends and forecast short-term changes. Although they have been rarely observed, there are concerns over Great Lakes surface water levels being too low to support full operation. Due to its location on the Western edge of Lake Erie, our JR Whiting Generating Facility is susceptible to the seiche effect, which is a temporary drawdown of surface water due to strong westerly winds, and has procedures in place to mitigate any loss of operations which may result. JR Whiting was retired in April 2016. Another known issue at the DE Karn Generating Facility where ice buildups at various points in the intake system reduces flow. Reduced surface water levels

Issues	Choose option	Please explain
		would exacerbate these issues. Long term Great Lakes water level research does not provide targets with high confidence levels. There is a great deal of variance in projections from the research community. For purposes of this discussion on risk, it was decided that the best future projection for surface water levels would be the most extreme recorded levels from the past 100 years.
Scenario analysis of regulatory and/or tariff changes at a local level	Relevant, included	The Company uses its internal knowledge to address this issue. The Company has government/regulatory/legislative affairs departments that track the prevailing agendas of government agencies, regulatory programs and legislative bodies to gage the potential for changes in regulations and laws affecting the electric utility sector.
Scenario analysis of stakeholder conflicts concerning water resources at a local level	Relevant, included	The Company uses its internal knowledge to evaluate on a case by case basis. The Company participates on several working stakeholder committees/groups affecting water-centric regulations (e.g. Governor's Water Use Advisory Committee). Through our participation in these groups, the Company maintains awareness of stakeholder concerns.
Scenario analysis of implications of water on your key commodities/raw materials	Relevant, not yet included	
Scenario analysis of potential changes in the status of ecosystems and habitats at a local level	Relevant, included	Future potential changes to ecosystems and habitats are evaluated on a case by case basis. When assessing new projects an internal review captures any impacts on aquatic ecosystems and habitats to determine if a permit is required. If a permit is required, risks are mitigated through the permitting process.
Other		

W2.7

Which of the following stakeholders are always factored into your organization's water risk assessments?

Stakeholder	Choose option	Please explain
Customers	Relevant, included	When assessing water risks we take into account our customers' perspectives as it is important our customers recognize our commitment to being a reliable and environmentally conscious company while also keeping electric and gas rates affordable. We do this through conducting a materiality assessment. This assessment allows a variety of Company stakeholders to communicate to the Company what environmental, social and governance

Stakeholder	Choose option	Please explain
		issues are the most important to them.
Employees	Relevant, included	Employee knowledge and understanding of water risks is acknowledged as a vital component to managing water risks. Responsibility for maintaining compliance with permits and water regulation is a shared among employees. The level and amount of training connected to water risks is evaluated to determine the Company's overall risk and based on job function. We also engage our employees through conducting a materiality assessment. This assessment allows a variety of Company stakeholders to communicate to the Company what environmental, social and governance issues are the most important to them.
Investors	Relevant, included	We have made investors aware of our water stewardship initiative as part of our overall environmental stewardship commitment. When assessing water risks, we take into consideration how investors perceive water risk as their perceptions drive our ability to acquire capital and earn a return on their investment. To further take into account the views of the investment community, Consumers Energy responds to an annual questionnaire from Sustainalytics, a sustainability benchmarking organizing who specializes in the sustainability interests of investors. Sustainalytics provides us with a list of issues that are most material to the investment group within the categories of environment, social and governance.
Local communities	Relevant, included	In communities where our facilities are located, local communities are directly impacted by our water use decisions. Our employees comprise portions of these local communities. Thus considering impacts to local communities is also considering impacts to employees. When planning new projects we take into consideration how local communities will be impacted. We also participate in various state advisory groups to further protect these communities such as the Michigan Department of Environmental Quality's Water Use Advisory Council and Wetlands Advisory Council where we serve as the representative for Michigan's electric and gas utilities. We also participated in an "expert" workshop hosted by the International Joint Commission (IJC) to develop "ecological indicators" to measure the efficacy of actions taken under the renewed Great Lakes Water Quality Agreement between the United States and Canada. Our Senior Vice President for Governmental and Public Affairs also serves on the IJC's Great Lakes Water Quality Board. Additionally, we have an internal process for stakeholder engagement for new generation projects. We also engage with local communities through conducting a materiality assessment. This assessment allows a variety of Company stakeholders to communicate to the Company what environmental, social and governance issues are the most important to them.
NGOs	Relevant, included	Consumers Energy monitors prominent environmental non-governmental organizations (NGOs) to take their opinions into considerations when assessing environmental risk. The Company's Foundation supports numerous watershed based conservation groups including Friends of the Rouge, Huron Pines, and Headwaters Conservancy to decrease the State's water risks. The Foundation also supports various land conservancies, such as the Grand Traverse Land Conservancy, the Little Traverse Bay Conservancy, and others which protect the land and the watersheds within their service area. NGOs have an opportunity to comment on the NPDES permit in the permitting process. Additionally, we engage with NGOs through conducting a materiality assessment. This assessment allows a variety of Company stakeholders to communicate to the Company what environmental, social and governance issues are the most important to them.
Other water users at a local level	Relevant, included	We assess all local water users to determine water risks. This includes other industries with high water usage rates such as agriculture.

Stakeholder	Choose option	Please explain
Regulators	Relevant, included	We comply with all water withdrawal and discharge regulations as well as regulations dealing with sensitive species and habitats, water resources (i.e., wetlands, streams, and floodplains), and erosion and sedimentation control. We also engage with regulators through conducting a materiality assessment. This assessment allows a variety of Company stakeholders to communicate to the Company what environmental, social and governance issues are the most important to them.
River basin management authorities	Not relevant, explanation provided	There are no specific River Basin management authorities in our territory.
Statutory special interest groups at a local level	Relevant, included	When new projects are submitted for environmental review that affect Native American tribes on the Au Sable, Manistee and Muskegon Rivers, as well as treaty waters of Lake Michigan, we proceed with consideration for these tribes.
Suppliers	Relevant, included	The Company requests information from suppliers to discern if an environmental management system has been implemented and whether cost effective measures to avoid pollution have been implemented.
Water utilities/suppliers at a local level	Relevant, included	We assure that the water supplies of water utilities/suppliers are unaffected by Company operations. We comply with all water based regulation.
Other		

W2.8

Please choose the option that best explains why your organisation does not undertake a water-related risk assessment

Primary reason	Please explain
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Further Information

Module: Implications

Page: W3. Water Risks

W3.1

Is your organization exposed to water risks, either current and/or future, that could generate a substantive change in your business, operations, revenue or expenditure?

Yes, direct operations and supply chain

W3.2

Please provide details as to how your organization defines substantive change in your business, operations, revenue or expenditure from water risk

Consumers Energy defines a substantive change in our business, operations, revenue or expenditure for water risk as any change that would dramatically affect our operation reliability, costs or reputation. The definition applies to direct operations. Specific levels of change or numeric metrics of change in business, operations, revenue or expenditure for water are not established. Electricity markets are complex and based on many factors, including the relative cost of electricity within an established organization, often covering several states. The organization is approved by the Federal Energy Regulatory Commission (FERC) to coordinate, control and monitor the use of the electric transmission system by utilities, generators and marketers.

W3.2a

Please provide the number of facilities* per river basin exposed to water risks that could generate a substantive change in your business, operations, revenue or expenditure and the proportion this represents of total operations company-wide

Country	River basin	Number of facilities exposed to water risk	Proportion of total operations (%)	Comment
United States of America	Other: Lake Michigan Watershed	4	61-70	A facility is a steam electric generation facility.
United States of America	Other: Lake Huron Watershed	1	21-30	A facility is a steam electric generation facility.
United States of America	Other: Lake Erie Watershed	1	6-10	A facility is a steam electric generation

Country	River basin	Number of facilities exposed to water risk	Proportion of total operations (%)	Comment
				facility.

W3.2b

Please provide the proportion of financial value that could be affected at river basin level associated with the facilities listed in W3.2a

Country	River basin	Financial reporting metric	Proportion of chosen metric that could be affected within the river basin	Comment
United States of America	Other: Lake Michigan Watershed	% generation capacity	91-100	Ultimately each facility within the watershed and the associated electric generation capacity of each facility could be affected.
United States of America	Other: Lake Huron Watershed	% generation capacity	91-100	Ultimately each facility within the watershed and the associated electric generation capacity of each facility could be affected.
United States of America	Other: Lake Erie Watershed	% generation capacity	91-100	Ultimately each facility within the watershed and the associated electric generation capacity of each facility could be affected.

W3.2c

Please list the inherent water risks that could generate a substantive change in your business, operations, revenue or expenditure, the potential impact to your direct operations and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
United States of America	Other: Lake Michigan Watershed	Physical- Drought Regulatory- Regulation of discharge quality/volumes leading to higher compliance costs Regulatory- Regulatory uncertainty	Higher operating costs	Changing water levels could result in the restructuring of cooling water intake and discharge structures. More stringent water use and/or discharge regulations could affect cost to customers as a result of increased capital spending and operation and maintenance costs.	>6 years	Unknown	Medium-high	Engagement with public policy makers Increased capital expenditure	Medium-high costs	Strategy is site specific, but would generally include relocating intake structure locations. Strategy also includes continued engagement with policy makers to ensure sound science and appropriate cost-benefit evaluations are considered.
United States of America	Other: Lake Huron Watershed	Physical- Drought Regulatory- Regulation of discharge quality/volumes leading to higher compliance costs Regulatory- Regulatory uncertainty	Higher operating costs	Changing water levels could result in the restructuring of cooling water intake and discharge structures. More stringent water use and/or discharge regulations could affect cost to customers as a	>6 years	Unknown	Medium-high	Engagement with public policy makers Increased capital expenditure	Medium-high costs	Strategy is site specific, but would generally include relocating intake structure locations. Strategy also includes continued engagement with policy makers to ensure sound

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				result of increased capital spending and operation and maintenance costs.						science and appropriate cost-benefit evaluations are considered.

W3.2d

Please list the inherent water risks that could generate a substantive change in your business operations, revenue or expenditure, the potential impact to your supply chain and the strategies to mitigate them

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
United States of America	Other: Lake Michigan Watershed	Physical-Seasonal supply variability/Inter annual variability Regulatory-Regulatory uncertainty	Higher operating costs	The largest supplier cost is the cost of fuel (i.e. coal and natural gas). Impact might include water regulations specific to the coal and natural	>6 years	Unknown	Unknown	Engagement with public policy makers	Our strategy would be implemented on a case by case. Potential costs remain unknown at this time.	Costs are too difficult to predict at this time due to unknown magnitude of potential impacts.

Country	River basin	Risk driver	Potential impact	Description of impact	Timeframe	Likelihood	Magnitude of potential financial impact	Response strategy	Costs of response strategy	Details of strategy and costs
				gas industries. Coal supply could be impacted by lake levels, and in turn require we dredge intake locations to support continued operation.						
United States of America	Other: Lake Huron Watershed	Physical-Seasonal supply variability/Inter annual variability Regulatory-Regulatory uncertainty	Higher operating costs	The largest supplier cost is the cost of fuel (i.e. coal). Impact might include water regulations specific to the coal industry. Fuel supply could be impacted by lake levels, and in turn require we dredge intake locations to support continued operation.	>6 years	Unknown	Unknown	Engagement with public policy makers	Our strategy would be implemented on a case by case. Potential costs remain unknown at this time.	Costs are too difficult to predict at this time due to unknown magnitude of potential impacts.

W3.2e

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your direct operations that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
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W3.2f

Please choose the option that best explains why you do not consider your organization to be exposed to water risks in your supply chain that could generate a substantive change in your business, operations, revenue or expenditure

Primary reason	Please explain
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W3.2g

Please choose the option that best explains why you do not know if your organization is exposed to water risks that could generate a substantive change in your business operations, revenue or expenditure and discuss any future plans you have to assess this

Primary reason	Future plans
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Further Information

Page: W4. Water Opportunities

W4.1

Does water present strategic, operational or market opportunities that substantively benefit/have the potential to benefit your organization?

Yes

W4.1a

Please describe the opportunities water presents to your organization and your strategies to realize them

Country or region	Opportunity	Strategy to realize opportunity	Estimated timeframe	Please explain
United States of America	Other: Continued business operation	Water has and will continue to be an important resource in electric generation. It is used to generate steam to turn a turbine. Additionally, water is used for condenser cooling at our gas and coal-fired units. Consumers Energy understands the significance of the Great Lakes and their impact on our business. Having these abundant water resources available to our operations allows the company to efficiently operate. We intend to continue to protect and preserve the Great Lakes while using them to fulfill our operational needs. If we did not have access to a water source Consumers Energy's generating units would not be able to operate.	>6 years	Water is a necessary component for our operations. In the future, access to water sources will continue to be considered when developing new generating assets.

W4.1b

Please choose the option that best explains why water does not present your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain
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W4.1c

Please choose the option that best explains why you do not know if water presents your organization with any opportunities that have the potential to provide substantive benefit

Primary reason	Please explain
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Further Information

Module: Accounting

Page: W5. Facility Level Water Accounting (I)

W5.1

Water withdrawals: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Country	River basin	Facility name	Total water withdrawals (megaliters/year) at this facility	How does the total water withdrawals at this facility compare to the last reporting year?	Please explain
Facility 1	United States of America	Other: Lake Michigan Watershed	BC Cobb Generating Plant	317500.6	Higher	The BC Cobb Facility used more water in 2015 than 2014 because the plant ran longer with fewer outages resulting in additional water needs for condenser cooling.
Facility 2	United States of America	Other: Lake Michigan Watershed	JH Campbell Generating Complex	888369.9	Lower	The JH Campbell Facility used less water in 2015 than 2014 due to the most water efficient unit generating a higher percentage of the complex's annual total electric generation (in MWh's).
Facility 3	United States of America	Other: Lake Huron Watershed	Karn/Weadock Generating Complex	658945.8	Lower	The Karn/Weadock Facility used less water in 2015 than 2014 because of more plant outages resulting in less condenser cooling water needed.
Facility 4	United States of America	Other: Lake Erie Watershed	JR Whiting Generating Plant	289819.4	Higher	The JR Whiting Facility used more water in 2015 than 2014 due to fewer outages resulting in longer runs and more condenser cooling water needed for all three units.
Facility 5	United States of America	Other: Lake Michigan Watershed	Zeeland Generating Station	2456.3	Higher	The Zeeland Facility used more water in 2015 than 2014 due to increased total generation in 2015 than 2014 resulting in increased condenser cooling water needs.
Facility 6	United States of America	Other: Lake Michigan Watershed	Jackson Generating Station	1344.1	Higher	The Jackson Facility used more water in 2015 than 2014 due to increased total generation in 2015 than 2014 resulting in increased condenser cooling water needs. The Jackson Facility was purchased by Consumers Energy in 2015 and the total withdrawal for 2015 is included into this report.

Further Information

Page: W5. Facility Level Water Accounting (II)

W5.1a

Water withdrawals: for the reporting year, please provide withdrawal data, in megaliters per year, for the water sources used for all facilities reported in W5.1

Facility reference number	Fresh surface water	Brackish surface water/seawater	Rainwater	Groundwater (renewable)	Groundwater (non-renewable)	Produced/process water	Municipal water	Wastewater from another organization	Comment
Facility 1	317487.4	0	0	13.2	0	0	0	0	
Facility 2	886745.1	0	0	1624.8	0	0	0	0	
Facility 3	658744.8	0	0	0	0	0	201.0	0	
Facility 4	289619.1	0	0	200.2	0	0	0	0	
Facility 5	0	0	0	0	0	0	2456.3	0	
Facility 6	0	0	0	0	0	0	1344.1	0	

W5.2

Water discharge: for the reporting year, please complete the table below with water accounting data for all facilities included in your answer to W3.2a

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
Facility 1	317407.7	Higher	The BC Cobb Facility discharged more water in 2015 than 2014 because the plant ran longer with fewer outages resulting in additional water needs for condenser cooling.
Facility 2	888036.4	Lower	The JH Campbell Facility discharged less water in 2015 than 2014 due to the most

Facility reference number	Total water discharged (megaliters/year) at this facility	How does the total water discharged at this facility compare to the last reporting year?	Please explain
			water efficient unit generating a higher percentage of the complex's annual total electric generation (in MWh's) than in 2014.
Facility 3	658608.8	Lower	The Karn/Weadock Facility discharged less water in 2015 than 2014 because of more plant outages resulting in less condenser cooling water needed.
Facility 4	289734.3	Higher	The JR Whiting Facility discharged more water in 2015 than 2014 due to fewer outages resulting in longer runs and more condenser cooling water needed.
Facility 5	121.9	Higher	The Zeeland Facility discharged more water in 2015 than 2014 due to increased total generation in 2015 than 2014 resulting in increased condenser cooling and process water needs.
Facility 6	215.7	Higher	The Jackson Facility discharged more water in 2015 than 2014 due to increased total generation in 2015 than 2014 resulting in increased condenser cooling water needs.

W5.2a

Water discharge: for the reporting year, please provide water discharge data, in megaliters per year, by destination for all facilities reported in W5.2

Facility reference number	Fresh surface water	Municipal/industrial wastewater treatment plant	Seawater	Groundwater	Wastewater for another organization	Comment
Facility 1	317407.7	0	0	0	0	
Facility 2	887827.6	0	0	208.8	0	
Facility 3	658608.8	0	0	0	0	
Facility 4	289734.3	0	0	0	0	
Facility 5	0	121.9	0	0	0	
Facility 6	0	215.7	0	0	0	

W5.3

Water consumption: for the reporting year, please provide water consumption data for all facilities reported in W3.2a

Facility reference number	Consumption (megaliters/year)	How does this compare to the last reporting year?	Please explain
Facility 1	92.9	Lower	Consumptive losses are evaporative losses directly related to hours of operation for the steam electric coal-fired plants. The BC Cobb Facility ran for fewer hours in 2015 than 2014, resulting in lower consumption.
Facility 2	333.5	Higher	Consumptive losses are evaporative losses directly related to hours of operation for the steam electric coal-fired plants. The JH Campbell Facility ran for more hours in 2015 than 2014, resulting in higher consumption.
Facility 3	337.1	Higher	Consumptive losses are evaporative losses directly related to hours of operation for the steam electric coal-fired plants. The Karn/Weadock Facility ran for more hours in 2015 than 2014, resulting in higher consumption.
Facility 4	85.1	Higher	Consumptive losses are evaporative losses directly related to hours of operation for the steam electric coal-fired plants. The JR Whiting Facility ran for more hours in 2015 than 2014, resulting in higher consumption.
Facility 5	2334.5	Higher	Consumptive losses for gas-fired combined cycle plants are primarily due to evaporation from the cooling towers. The Zeeland Facility ran significantly more in 2015 than in 2014, resulting in more condenser cooling water needs and higher evaporative losses from the cooling towers.
Facility 6	1128.4	Higher	Consumptive losses for gas-fired combined cycle plants are primarily due to evaporation from the cooling towers. The Jackson Facility ran more in 2015 than in 2014, resulting in more condenser cooling water needs and higher evaporative losses from the cooling towers. The Jackson Facility was purchased by Consumers Energy in 2015 and the total consumption for 2015 is included into this report.

W5.4

For all facilities reported in W3.2a what proportion of their water accounting data has been externally verified?

Water aspect	% verification	What standard and methodology was used?
Water withdrawals- total volumes	Not verified	Water withdrawals are not verified by an external party, but are reported to the State of Michigan Department of Environmental Quality (MDEQ) through Annual Water Use Reporting for the state's Water Use Program.
Water withdrawals- volume by sources	Not verified	Water withdrawals by sources are not verified by an external party, but are reported to the MDEQ through Annual Water Use Reporting for the state's Water Use Program.
Water discharges- total volumes	Not verified	Water discharges are not verified by an external party, but are reported to the MDEQ through Annual Water Use Reporting for the state's Water Use Program as well as through the NPDES Permit program.
Water discharges- volume by destination	Not verified	Water discharges by destination are not verified by an external party, but are reported to the MDEQ through Annual Water Use Reporting for the state's Water Use Program as well as through the NPDES Permit program.
Water discharges- volume by treatment method	Not verified	Water discharges by treatment method are not verified by an external party, but are reported to the MDEQ through Annual Water Use Reporting for the state's Water Use Program as well as through the NPDES Permit program.
Water discharge quality data- quality by standard effluent parameters	Not verified	Water discharges by treatment method are not verified by an external party, but are reported to the MDEQ through the NPDES Permit program.
Water consumption- total volume	Not verified	Water consumption is not verified by an external party.

Further Information

Module: Response

Page: W6. Governance and Strategy

W6.1

Who has the highest level of direct responsibility for water within your organization and how frequently are they briefed?

Highest level of direct responsibility for water issues	Frequency of briefings on water issues	Comment
Senior Manager/Officer	Scheduled-annual	At least annually, the Chief Executive Officer and President are briefed on water related issues, including progress toward meeting water stewardship goals and impacts of existing and proposed regulations on operations and long-term financial plans.

W6.2

Is water management integrated into your business strategy?

Yes

W6.2a

Please choose the option(s) below that best explain how water has positively influenced your business strategy

Influence of water on business strategy	Please explain
Water resource considerations are factored into location planning for new operations	When a new operations facility is being evaluated, the impacts on water needs are evaluated to verify that there is available water capacity with no adverse impact. This evaluation takes into account the criteria needed to obtain permits. For example, Consumers Energy has proposed and evaluated a new gas fired unit. This evaluation considered water withdrawal needs and associated supply.
Publicly demonstrated our commitment to water	Through our water stewardship goals we are recognized by our stakeholders as an environmentally conscious company creating solid relationships with stakeholders.

W6.2b

Please choose the option(s) below that best explains how water has negatively influenced your business strategy

Influence of water on business strategy	Please explain
Increased capital expenditure	Complying with new regulations increases our capital costs.

W6.2c

Please choose the option that best explains why your organization does not integrate water management into its business strategy and discuss any future plans to do so

Primary reason	Please explain
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W6.3

Does your organization have a water policy that sets out clear goals and guidelines for action?

Yes

W6.3a

Please select the content that best describes your water policy (tick all that apply)

Content	Please explain why this content is included
Publicly available Company-wide Performance standards for direct operations Commitment to customer education Incorporated within group environmental, sustainability or EHS policy	Consumers Energy's water policy is accessible on our Corporate website as a stakeholder outreach tactic. This is a Corporate policy encompassing all of our operations with a heightened focus on our direct generation operations. Consumers Energy also produces an annual Sustainability report which aims to education our stakeholders on our most material environmental, social and governance issues including water.

W6.4

How does your organization's water-related capital expenditure (CAPEX) and operating expenditure (OPEX) during the most recent reporting year compare to the previous reporting year?

Water CAPEX (+/- % change)	Water OPEX (+/- % change)	Motivation for these changes
0	0	

Further Information

Page: W7. Compliance

W7.1

Was your organization subject to any penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations in the reporting year?

No

W7.1a

Please describe the penalties, fines and/or enforcement orders for breaches of abstraction licenses, discharge consents or other water and wastewater related regulations and your plans for resolving them

Facility name	Incident	Incident description	Frequency of occurrence in reporting year	Financial impact	Currency	Incident resolution

W7.1b

What proportion of your total facilities/operations are associated with the incidents listed in W7.1a

W7.1c

Please indicate the total financial impacts of all incidents reported in W7.1a as a proportion of total operating expenditure (OPEX) for the reporting year. Please also provide a comparison of this proportion compared to the previous reporting year

Impact as % of OPEX	Comparison to last year
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Further Information

Page: W8. Targets and Initiatives

W8.1

Do you have any company wide targets (quantitative) or goals (qualitative) related to water?

Yes, targets and goals

W8.1a

Please complete the following table with information on company wide quantitative targets (ongoing or reached completion during the reporting period) and an indication of progress made

Category of target	Motivation	Description of target	Quantitative unit of measurement	Base-line year	Target year	Proportion of target achieved, % value
Reduction of product water intensity	Water stewardship	Reduce water intensity (gal/MWH) by 17% in 2017 and 20% by 2020 through operational efficiencies and strategic shifts in the generating fleet towards less coal-fired generation.	% reduction per unit of production	2012	2020	79%

W8.1b

Please describe any company wide qualitative goals (ongoing or reached completion during the reporting period) and your progress in achieving these

Goal	Motivation	Description of goal	Progress
Other: Improve water stewardship practices company-wide	Water stewardship	In conjunction with the water intensity reduction target, the company is pursuing a goal of improving water stewardship practices, particularly at generating facilities. The goal has several objectives, including: 1) increased scrutiny through environmental review process for projects requiring new water withdrawals, 2) inclusion of reuse or recycle options for projects with water requirements, and 3) management of water-intensive systems with efforts to reduce run time of such equipment where possible. Timeline for achievement is to have all objectives completed and implemented by end of 2019.	Implementation and formalization of objectives in progress. Objective 1&2: formalized process to be implemented by end of 2017. Objective 3: procedure changes for condenser cooling pumps in progress, to be completed by end of 2016.

W8.1c

Please explain why you do not have any water-related targets or goals and discuss any plans to develop these in the future

Further Information

Module: Linkages/Tradeoff

Page: W9. Managing trade-offs between water and other environmental issues

W9.1

Has your organization identified any linkages or trade-offs between water and other environmental issues in its value chain?

Yes

W9.1a

Please describe the linkages or trade-offs and the related management policy or action

Environmental issues	Linkage or trade-off	Policy or action
Aquatic Organism Impact	Linkage	At steam electric generating stations, reductions in cooling water intake structure water withdrawals for once-through cooling systems have been correlated with reductions in impingement and entrainment of fish and other aquatic organisms. Where applicable, the Company is evaluating the design, operation and location of cooling water intake structures to meet federal regulatory requirements/standards aimed at reducing impingement and entrainment mortality.

Further Information

Module: Sign Off

Page: Sign Off

W10.1

Please provide the following information for the person that has signed off (approved) your CDP water response

Name	Job title	Corresponding job category
Linda Hilbert	Executive Director of Environmental and Laboratory Services, Consumers Energy	Environment/Sustainability manager

W10.2

Please select if your organization would like CDP to transfer your publicly disclosed response strategy from questions W1.4a, W3.2c and W3.2d to the CEO Water Mandate Water Action Hub.

Further Information

CDP 2016 Water 2016 Information Request

Module: Introduction**Page: Introduction**

CC0.1**Introduction**

Please give a general description and introduction to your organization.

CMS Energy Corporation's (CMS Energy) business strategy is focused primarily on its principal subsidiary, Consumers Energy Company (Consumers Energy or Company), an electric and natural gas utility serving about 6.7 million of Michigan's 10 million residents. CMS Energy, through its CMS Enterprises subsidiary, is also engaged in domestic independent power production and the marketing of independent power production.

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

Consumers Energy acknowledges that the long term sustainability of our Company depends upon our ability to listen to our stakeholders and conduct business that promotes environmental health, increases societal value, and brings economic success so that we can provide safe, reliable, and affordable energy to our customers. This commitment is advanced by our "Leave it Better Than We Found It" corporate culture.

In 2015, Consumers Energy continued its commitment to sustainability by maintaining first quartile sustainability performance as compared to its peers and being ranked the 2nd most sustainable utility in the United States as determined by Sustainalytics, a sustainability rating organization. Consumers Energy is committed to maintaining 1st quartile performance as defined by our corporate sustainability goal for 2013-2017. As a utility, we recognize that our operations contribute greenhouse gases (GHGs) to the atmosphere. One of the objectives under this corporate sustainability goal for 2013 was to create a performance progress report for our greenhouse gas emissions and disclose our results to the public, a goal that was successfully achieved and maintained through 2015. Additionally, under our sustainability goal in 2015 the Company took on new energy efficiency and alternative fuel projects.

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 Form 10-K for the year ended December 31, 2015 and as updated in subsequent 10-Qs. 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 June 30, 2016.

CC0.2**Reporting Year**

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed

Thu 01 Jan 2015 - Thu 31 Dec 2015

CC0.3**Country list configuration**

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

United States of America

CC0.4

Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

CC0.6

Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

Module: Management

Page: CC1. Governance

CC1.1

Where is the highest level of direct responsibility for climate change within your organization?

Board or individual/sub-set of the Board or other committee appointed by the Board

CC1.1a

Please identify the position of the individual or name of the committee with this responsibility

The Governance and Public Responsibility Committee, a committee of the Board, has the responsibility to review public responsibility matters including the Company's stakeholder outreach, stewardship, and corporate social responsibility strategies to help develop and shape public policies relevant to the Company's business operations.

CC1.2

Do you provide incentives for the management of climate change issues, including the attainment of targets?

No

CC1.2a

Please provide further details on the incentives provided for the management of climate change issues

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment

Further Information

Page: CC2. Strategy

CC2.1

Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities

Integrated into multi-disciplinary company wide risk management processes

CC2.1a

Please provide further details on your risk management procedures with regard to climate change risks and opportunities

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Annually	Board or individual/sub-set of the Board or committee appointed by the Board	State of Michigan	> 6 years	

CC2.1b

Please describe how your risk and opportunity identification processes are applied at both company and asset level

Consumers Energy has an Enterprise Risk Management (ERM) Process to monitor and track potentially significant risks to our business. The ERM process requires business units to annually review, update and report risk profiles to senior management and the Board. This review includes identification of operational risks, financial risks, regulatory risks, strategic risks and risks associated with information/cyber systems. This process also includes carbon-related policy and relevant physical risks.

The Company has additional long term risk management processes with Board review. Our integrated resource planning (IRP) process identifies and quantifies the impact of various risks with regards to providing reliable, cost effective, and environmentally friendly energy to our customers. Consumers Energy maintains a balanced portfolio of resource options to address any risks that the company may face. The IRP process addresses risk by evaluating numerous planning scenarios and sensitivities that potentially affect the business. For example, variables such as electric demand, carbon pricing, fuel prices, state and federal mandates, and market conditions are altered to quantify risk.

On an asset level, physical climate change risks are assessed including the impact of changing weather on our generating plants' abilities to operate as configured. Risks from potential future environmental laws, rules and regulations are also evaluated.

On a company level, risk results are compiled for the Company as a whole to determine the overall potential impact. The corporate risk map plots these risks as to their likelihood of occurrence and potential impact, defining their materiality. Severity is characterized in terms of likelihood and impact. Impact involves potential effect on earnings, market capitalization, reputation and/or level of management involvement. These indicators, along with mitigating actions, are updated annually and presented to senior management and the Board.

CC2.1c

How do you prioritize the risks and opportunities identified?

Risks are prioritized by their likelihood and impact.

CC2.1d

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment

CC2.2

Is climate change integrated into your business strategy?

Yes

CC2.2a

Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process

Consumers Energy has personnel assigned to manage climate change issues for the Company, which includes policy and regulation development, analysis, planning and communication. This team develops the Company's strategy on climate change as a component of the Company's overall business strategy and reports out on status. This team also develops point of view documents that explain the current anticipated impact on the Company from a proposed climate change related regulation. These documents are distributed through the Company as needed. Additionally, Consumers Energy has a corporate sustainability breakthrough goal which includes strategic goals to enhance the Company's overall sustainability performance. Under this goal Consumers Energy established a corporate GHG reduction target. This is a three phase target resulting in a 20% reduction in our Carbon Intensity Ratio (CIR) by 2025 (2008 baseline). There are intermediate goals consisting of 5% CIR reduction by 2015, which was met, and 10% by 2020. The corporate GHG reduction target shows a solid commitment to integrate low-carbon energy generation into our generating portfolio.

Internal communication of our business strategy related to climate change is made by the Chief Executive Officer to the Company's employees and Board through presentations, Company policies and ultimately in our decisions. External communications are made through financial reporting, news releases, the Company's

internet site, the annual Accountability Report and the Carbon Disclosure Project.

Aspects of climate change that have influenced our business strategy include proposed federal legislation as well as by state and U.S. Environmental Protection Agency (EPA) regulation governing emissions of greenhouse gases and also by social pressure, including the investment community, to consider further reducing GHG emissions from our operations.

We have numerous short term business strategies to reduce GHG emissions such as modernizing our natural gas pipeline infrastructure, which reduces fugitive methane emissions, as well as building efficiency standards for any new construction. Modernizing our natural gas pipelines started in 2012 and will continue until approximately 2036. Consumers Energy is a partner to the EPA's Natural Gas STAR Program since 1996. The Natural Gas STAR Program is a voluntary program to identify and address fugitive emissions of methane. As part of our natural gas business, we look for opportunities to reduce methane releases from the storage and delivery of natural gas. We received a "Continuing Excellence Award" in both 2007 and 2009 for our voluntary measures to reduce methane releases.

Additionally, approximately 870,000 upgraded meters were installed by the end of 2015. State-wide installations are planned to continue through 2017 for a total of approximately 1.8 million electric smart meters and 600,000 natural gas meter communication modules. Installed smart meters and natural gas communication modules are currently being read remotely and we have a private and secure customer web portal which enables customers to view energy usage, and make wise energy choices in the future. In 2015, new functionality was added; allowing customers to choose their own bill due date, and remote turn-off and turn-on functionality. All systems work will conclude by the end of 2016.

Aspects of climate change have also influenced our long term strategies through our capacity planning process. In this process we evaluate a number of factors including an estimated carbon price for CO₂ emissions in our generation capacity planning. Future generation planning incorporates this business strategy to make sound business decisions. For example, in 2015 Consumers Energy made near term plans to replace the electrical generation capacity lost from the retirement of seven coal-fired boilers in April 2016. The most substantial business decision influenced by this capacity planning process was the decision to purchase an existing natural gas-fired electric generating facility, the 540 MW Jackson Plant. This facility was acquired in late 2015 and has approximately half of the carbon footprint than the generation it is replacing.

Our long- term strategy also includes building and operating about 306 MW of new wind generation by 2022, long-term power purchase agreements for renewables, and implementation of a customer energy efficiency program. Our efficiency program was initiated through state legislation in 2008. While the current statute has numerous mandates and goals which the Company has met, the efficiency gains will continue into the future and is expected to reduce total customer electric demand by 1% annually and gas demand by 0.75% annually. Michigan is in the midst of building on the momentum created in the 2008 statute and attempting to pass new energy legislation in the near future.

Additionally, in 2015 EPA finalized the Clean Power Plan, a suite of regulations targeting carbon dioxide emissions from existing fossil fuel plants. Significant resources were dedicated to evaluating the potential compliance strategies as the Company moves forward in a lower carbon energy generating environment.

One particular competitive advantage of factoring climate change into our business strategy is that it promotes diversity of our electrical generation portfolio, which leads to an overall reduction of risk associated with price volatility inherent with operating a generating fleet dominated by one fuel source. Consumers Energy is committed to providing safe, reliable and affordable energy to our customers. Maintaining a diverse generation fleet allows our ratepayers to be better insulated from price swings associated with any one particular generating technology or fuel source.

We are moving from a compliance driven organization to an accountability driven organization where consideration of the impacts of our operations influence our future decisions; such as in the area of generation planning and evaluating new technologies. This culture change is being carried out under the umbrella of our Corporate Sustainability Program.

CC2.2b

Please explain why climate change is not integrated into your business strategy

CC2.2c

Does your company use an internal price of carbon?

Yes

CC2.2d

Please provide details and examples of how your company uses an internal price of carbon

Consumers Energy cannot guarantee there will be a carbon cap and trade program, but does consider it a possibility. As a result, we periodically evaluate possible cap and trade options as alternative scenarios and often utilize a carbon allowance price forecast that was developed by a third party industry expert.

For example, on October 23, 2015, the EPA finalized the Clean Power Plan addressing carbon emissions from coal and oil fired Electric Generating Units (EGUs). This was a parallel rulemaking under the Clean Air Act ("CAA") Section 111(d) Existing Source Performance Standards ("ESPS") and CAA Section 111(b) New Source Performance Standards ("NSPS"). The 111(d) rulemaking clearly allows for states to pursue either a rate or mass compliance basis, which may or may not result in a price on carbon. However, on February 9, 2016, the U.S. Supreme Court (SCOTUS) stayed the Clean Power Plan pending judicial review. SCOTUS indicated that the stay will be in effect through a determination by the Court to deny any petitions for writs of certiorari that are filed, or after a judgment is issued by the Court if the Court takes the case on certiorari.

Consumers Energy cannot predict the outcome of this litigation, but will continue to monitor regulatory activity regarding greenhouse gas emissions standards that may affect EGUs.

Regardless of litigation, Consumers Energy will continue to use updated carbon pricing models to evaluate potential carbon pricing scenarios.

CC2.3

Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)

Direct engagement with policy makers
Trade associations
Funding research organizations

CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Other: Emissions regulations on power plants	Oppose	Consumers Energy staff has tracked EPA's development and release of draft regulations under the Section 111 of the CAA – these proposed regulations target GHG emissions from Electric Generating Units (EGUs). EPA has finalized two separate regulatory programs pursuant to the Obama Administration's Climate Action Plan. The first proposal covers new and modified EGUs with the second proposal broadly regulating existing EGUs. In concert, the regulations will set national emission standards for GHG emissions from any fossil fuel-fired EGU. Consumers Energy employs internal staff who participate in utility and industry based trade associations, and heavily participate in the administrative rulemaking process (notice and comment procedures). The Climate Action Plan contains specific deadlines for EPA action. Actions in 2015 included engagement with both State and Federal agencies. This engagement included developing a common position statement from multiple stakeholder groups including state environmental regulators, State Public Service Commissioners, and state based energy providers. Litigation efforts on the Section 111 rulemaking will continue for the next few years; 2015 activities included: providing staff time and data resources in order to better educate regulatory staff; development of internal compliance scenarios for those EPA proposals; and participation in State led workgroups aimed at evaluating potential regulatory compliance options.	While we support transitioning to cleaner fuel sources as infrastructure and economy allow, we believe that EPA's EGU regulations are flawed. The new source performance standards relies on the yet to be commercially developed and deployed Carbon Capture and Sequestration equipment and have advocated such. The Clean Power Plan attempts to regulate broad sections of national energy policy previously outside of EPA jurisdiction. Consumers Energy will continue to participate in industry groups that comment on and educate EPA and the Michigan Department of Environmental Quality on the effects of unjustified demands on the electric utility industry. We will supplement those efforts with company specific input when necessary. Consumers Energy continues to advocate for any state or federal regulations, or guidelines, impacting existing EGUs to recognize prior investments in the generation fleet in order to not penalize any investments in carbon reductions prior to the rulemaking and to and to set a fair standard to be implemented on a reasonable timeline.

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Clean energy generation	Support	In 2015, the State of Michigan, led by the Michigan Agency for Energy (MAE), the Michigan Public Service Commission (MPSC) and the Michigan Economic Development Corporation (MEDC), continued the process evaluating the next round of state energy policy. Consumers Energy staff participated in this research process via roundtable discussions, workgroups, and public presentations.	Consumers Energy supports energy policy that is founded on the Michigan Governor's key goals of: Adaptability; Reliability; Affordability; and Protection of the Environment. We will actively engage in legislative workgroups and discussions to achieve these goals by reexamining the state's existing mandates on utilities for energy efficiency and renewable energy.

CC2.3b

Are you on the Board of any trade associations or provide funding beyond membership?

Yes

CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
American Gas Association (AGA)	Consistent	AGA believes that every discussion about clean energy standards should include natural gas—and that energy efficiency and reduced environmental impacts be considered primary criteria for the nation's climate and energy policies.	Consumers Energy participates in policy development activities as well as technical support activities initiated through AGA.
Edison Electric Institute (EEI)	Consistent	EEI member companies continue to support the goals of our nation's environmental laws and are working to ensure that they are fully met. Further, EEI believes policies to address climate change should seek to minimize impacts on consumers and avoid harm to U.S. industry and the economy.	Consumers Energy participates in policy development activities as well as technical support activities initiated through EEI.
Michigan Manufactures	Mixed	MMA opposes any state and/or regional regulations addressing climate change that exceed federal climate change requirements.	Consumers Energy participates in policy development activities initiated

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
Association (MMA)			through MMA.

CC2.3d

Do you publicly disclose a list of all the research organizations that you fund?

No

CC2.3e

Please provide details of the other engagement activities that you undertake

CC2.3f

What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

Consumers Energy has a policy and strategy group which is the point of contact for climate change strategy. This group is housed in the corporate Environmental Services Department. Additionally, Consumers Energy has a Sustainability Program housed in our Government and Public Affairs Department. There is regular contact between the respective staffs regarding Company activities that may impact our climate change strategy. A driver of our climate change strategy is our GHG reduction initiative, adopted in 2012 and a part of our Corporate Sustainability Program. The Environmental Services Department owns this goal, but progress towards this goal is reported from the Environmental Services Department to the Sustainability Director and then to our breakthrough goal metrics team who reports progress monthly to an executive committee.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?

Absolute target

Intensity target

Renewable energy consumption and/or production target

CC3.1a

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
Abs1	Scope 1	99.3%	10%	2009	18196261	2015	Yes	The electric energy optimization program reduces electrical consumption on a cumulative basis from baseline 2009 to 2015, resulting in a decrease in generation and thus a decrease in emissions. Base year emissions are primarily monitored values via Continuous Emission Monitoring Systems (CEMS) units. Actual emission reductions are based on estimates of reductions based on documented efficiency reductions. Actual

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
								reductions have exceeded the targeted reductions for every year of the program.
Abs2	Scope 3: Fuel- and energy-related activities (not included in Scopes 1 or 2)	100%	6.1%	2009	10876467	2015	Yes	The energy natural gas optimization program reduces natural gas consumption on a cumulative basis from baseline 2009 to 2015, resulting in a decrease in natural gas combustion and thus a decrease in emissions. Actual emission reductions are based on estimates of reductions based on documented efficiency reductions. Actual reductions have exceeded the targeted reductions for every year of the program.

CC3.1b

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1	99.2%	18.6%	Other: U.S. tons CO2 emitted per MWh	2008	1.057	2025	Yes	This is a three phase voluntary reduction that will achieve a minimum 20% reduction in our Carbon Intensity Ratio by 2025. There are intermediate goals consisting of 5% CIR reduction by 2015 and 10% by 2020. The CIR is measured in U.S. tons CO2 emitted per MWh.

CC3.1c

Please also indicate what change in absolute emissions this intensity target reflects

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Decrease	20	No change	0	This is a three phase target will culminate in a minimum 20% reduction in our Carbon Intensity Ratio by 2025. There are intermediate goals consisting of 5% CIR reduction by 2015 and 10% by 2020.

CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
RE1	Electricity consumption	2009		0%	2015	10%	Our renewable energy production target is based on a 2008 state mandate which requires Michigan electric providers to achieve a retail supply portfolio that includes at least ten percent renewable energy by 2015. Consumers Energy exceeded the state required target in 2015.

CC3.1e

For all of your targets, please provide details on the progress made in the reporting year

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Abs1	100%	100%	The efficiency program encourages customer reductions of energy usage through education and monetary rebates for energy efficient appliances and home heating/cooling investments. The program began in 2009. Through year seven of the seven year program, we have realized 109.2% of the total program's goals.
Abs2	100%	100%	The energy efficiency program encourages customer reductions of energy usage through education and monetary rebates for energy efficient appliances and home heating/cooling investments. The program began in 2009. Through year seven of the seven year program, we have realized 123.5% of the total program's goals.
Int1	44%	100%	This is a three phase voluntary reduction that will culminate in a minimum 20% reduction in our Carbon Intensity Ratio by 2025. There are intermediate goals consisting of 5% CIR reduction by 2015 and 10% by 2020.

CC3.1f

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

CC3.2

Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	Energy efficiency programs	Avoided emissions	Other: This is a direct GHG offset calculation association with avoided energy production/consumption			
Product	Coal combustion by-products (CCB)	Avoided emissions	Other: This is a direct GHG offset calculation association with avoided energy production/consumption			Use of CCB in the cement manufacturing process reduces the amount of raw materials required. This reduction in raw materials results in lower emissions from cement manufacturing.

CC3.3

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

Yes

CC3.3a

Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	1	11481
Implementation commenced*	0	0
Implemented*	4	1225040
Not to be implemented	0	0

CC3.3b

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Energy efficiency: Building services	Consumer Energy's Building Services considers Leadership in Energy and Environmental Design ("LEED") standards when evaluating new building projects including; high-efficiency heating, ventilation and air conditioning systems, energy-efficient windows and insulation, and high-efficiency	1613	Scope 2 (location-based)	Voluntary	225000	0	<1 year	Ongoing	This initiative is not restricted to the reporting year only and is expected to reduce greenhouse gas emissions annually. Therefore this initiative is considered to be continuous.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	lighting with motion sensors throughout the building to save electricity. Past projects have utilized high-efficiency rooftop cooling units for multiple temperature zones throughout the buildings and white-colored roofing materials that reflect sunlight and reduce energy use. Additionally, the Company implements efficiency projects in some of its existing buildings. As an example, historic and ongoing efforts at the Company reduced its 2015 energy usage at the corporate headquarters by 1,535,721 kWh of electricity and 7,863 Mcf of natural gas. This resulted in a yearly savings of over \$225,000. Efforts of this nature reduce Scope 2 emissions. These building attributes are a voluntary effort and are expected to save energy throughout the building's life.								
Low carbon energy purchase	The current Renewable Energy Plan provides for 712 MW of renewable capacity by 2022. Through 2015 Consumer Energy has contracted for the purchase of approximately 403 MW of	1213120	Scope 1	Mandatory	0	15900000000	>25 years	Ongoing	This initiative is not restricted to the reporting year only and is expected to reduce greenhouse gas emissions

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	nameplate capacity from renewable energy suppliers. In 2015, these renewable energy sources contributed to a reduction of 1213120 metric tonnes of CO2 emissions. Scope 1 emissions are reduced from these efforts. This is part of a mandatory effort to comply with a 2008 state statute.								annually. Therefore this initiative is considered to be continuous.
Low carbon energy installation	In 2015, the Company planned for its first solar garden project to be operational in April of 2016. A solar garden is a large solar installation that any Consumers Energy customer, both residential and business, can subscribe to. Consumers Energy will own, operation and maintain our Solar Garden facilities.	11481	Scope 1	Voluntary	0	11200000	21-25 years	21-30 years	This initiative is not restricted to the reporting year only and is expected to reduce greenhouse gas emissions annually. Therefore this initiative is considered to be continuous.
Fugitive emissions reductions	We have been an EPA Natural Gas STAR Program Partner since 1996. The Natural Gas STAR Program is a voluntary program to identify and address fugitive emissions of methane. As part of our natural gas business, we look for opportunities to reduce methane releases from the storage and delivery of natural gas. We	9663	Scope 3	Voluntary	709240	557068	<1 year	Ongoing	This initiative is not restricted to the reporting year only and is expected to reduce greenhouse gas emissions annually. Therefore this initiative is considered to be continuous.

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	received a "Continuing Excellence Award" in both 2007 and 2009 for our voluntary measures to reduce methane releases. These measures include capturing and injecting natural gas back into our natural gas system while performing maintenance on our pipelines, replacing components and implementing best management practices to reduce venting. In 2015, these efforts helped reduce methane emissions by 177,310 Mcf. This is a voluntary initiative that reduces Scope 1 and Scope 3 emissions.								
Fugitive emissions reductions	Our Enhanced Infrastructure Replacement Program (EIRP) targets higher risk distribution and transmission piping to be replaced. Through this effort, in 2015 we reduced potential methane emissions by 11,809 Mcf. This is a voluntary initiative that reduces Scope 2 emissions.	644	Scope 2 (market-based)	Voluntary	47236	107009878	21-25 years	Ongoing	This initiative is not restricted to the reporting year only and is expected to reduce greenhouse gas emissions annually. Therefore this initiative is considered to be continuous.

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. These calculations include an assumed price of carbon emissions.
Internal price of carbon		The estimated cost of carbon may be incorporated into financial investment decisions.
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.

CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

Further Information

Page: CC4. Communication

CC4.1

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	Status	Page/Section reference	Attach the document	Comment
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Publication	Status	Page/Section reference	Attach the document	Comment
In voluntary communications	Complete	Air Quality Webpage	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC4.1/Air Quality _ Consumers Energy.pdf	
In voluntary communications	Complete	Climate Change Webpage	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC4.1/Climate Change _ Consumers Energy.pdf	
In other regulatory filings	Complete	CMS Energy Annual Report (10K)	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC4.1/a438dd29-e1d8-4b69-9871-add18b1b7311.pdf	
In voluntary communications	Complete	Consumers Energy 2015 Accountability Report	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC4.1/consumers-energy-accountability-report.pdf	

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

☐ Risks driven by changes in regulation
☐ Risks driven by changes in physical climate parameters
☐ Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	Future policy to reduce GHG emissions through cap and trade scheme with an aggressive schedule may result in emission allowance costs	Increased operational cost	3 to 6 years	Direct	About as likely as not	Medium	<p>Future cap and trade programs could have an impact on our operations and the cost of electric generation from fossil fuels due to spending on emission allowance purchases for compliance or the capital cost of additional equipment. Costs of cleaner generating units or costs of advanced controls such as carbon capture and sequestration are estimated to exceed \$1B/unit.</p>	<p>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 such as the Edison Electric Institute (EEI) and the IHS Global Inc. Climate Change and Clean Energy Forum (CERA). Another risk mitigant is related to our ability to mothball or retire select generating units and provide</p>	<p>The Company spends \$200k/yr on participating in policy and strategy development. The cost associated with mothballing or retiring units and replacing them with lower carbon generation is highly dependent upon the timing, the technology, the allowed cost recovery and the extent of any plan. In December of 2015, the Company closed on the purchase of a 540 MW combined cycle gas plant for \$155M which will better position the Company for compliance with any future cap and trade</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								energy with new technology that meets potential new requirements.	program.
Product efficiency regulations and standards	The EPA regulations over existing fossil fuel- fired units under Section 111(d) of the Clean Air Act is dependent on a state run program. These programs will require increases in generation efficiency, artificial changes in dispatch order, additional capital investment in renewable energy sources and a likely increase in energy efficiency activities	Increased operational cost	3 to 6 years	Direct	Very likely	Medium-high	Being required to substantially increase efficiency at existing plants could result in significant 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 such as the Edison Electric Institute (EEI) and the IHS Global Inc. Climate Change and Clean Energy Forum (CERA). Another risk mitigant is	The Company spends \$200k/yr on participating in policy and strategy development. The cost associated with mothballing or retiring units and replacement with lower carbon emitting generation is highly dependent upon the timing, the technology, the allowed cost recovery and the extent of any retirement plan. In December, the Company acquired the 540 MW Jackson Generating Stations combined cycle natural gas

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								related to our ability to mothball or retire select generating units and provide generation with new technology that meets any new requirements.	plant.
Product efficiency regulations and standards	Federal Regulations such as the New Source Performance Standard (NSPS) for new Electric Generating Units require a minimum performance standard for new electric generation facilities. Future capacity planning must account for costs associated with the accompanying design/performance requirements.	Increased capital cost	1 to 3 years	Direct	Very likely	Medium-high	Greenhouse Gas NSPS regulations will have a significant impact on our operations. The cost of new electric generation from fossil fuels will increase. Costs of cleaner generating units or costs of advanced and commercially unproven controls such as carbon capture and sequestration are estimated to exceed \$1B/unit	This risk is currently being managed through participation in both legislative and regulatory policy development, by strategy development, by business forecasting and by monitoring the development of control options through participation with industry research affiliations such as the Edison Electric Institute (EEI) and the	The Company spends \$200k/yr on participating in policy and strategy development. The cost associated with mothballing or retiring units and replacing them with lower carbon emitting generation is highly dependent upon the timing, the technology, the allowed cost recovery and the extent of any plan. In December 2015, the Company

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							in equipment costs as well as a parasitic load which may reach 30% of the generated electricity.	IHS Global Inc. Climate Change and Clean Energy Forum (CERA). Another risk mitigant is related to our ability to mothball or retire select generating units and provide generation with new technology that meets any new requirements.	acquired the 540 MW Jackson Generating Stations combined cycle natural gas plant.
General environmental regulations, including planning	Modifications at our existing facilities required to meet GHG regulations will likely trigger additional permitting requirements. The permitting process can be a very lengthy, litigious and cost intensive process.	Increased capital cost	3 to 6 years	Direct	Likely	High	Based on the EPA's GHG performance standards for existing electric generating units, Consumers Energy may be forced to make costly upgrades on the existing fleet and or retire certain units. These costs would vary depending	A method to manage this risk may be retiring and replacing plants with lower carbon alternatives. Additionally, we manage this risk through participation in both legislative and regulatory policy development, by strategy development,	The Company spends \$200k/yr on participating in policy and on strategy development. The cost associated with mothballing or retiring units and replacing them with lower carbon emitting generation is highly dependent upon the timing, the

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							on the timeline for compliance and the facility. These costs are estimated to be in excess of \$1 billion.	and by monitoring the development of control options through participation with industry research affiliations such as the Edison Electric Institute (EEI) and the IHS Global Inc. Climate Change and Clean Energy Forum (CERA).	technology, the allowed cost recovery and the extent of any plan. In December 2015, the Company acquired the 540 MW Jackson Generating Stations combined cycle natural gas plant.

CC5.1b

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Snow and ice	Snow and ice accumulation, coupled with strong winds	Increased operational cost	Up to 1 year	Direct	About as likely as not	Low	Damages to our infrastructure due to more frequent and severe storms may	This risk can partly be managed by smart electric	Consumers Energy's Smart Energy program, kicked off in 2007, is in the

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	from more frequent or severe storms may compromise infrastructure by damaging our distribution system equipment.						increase the Company's service restoration operations and maintenance costs. For 2015, Consumers Energy spent \$38.2 million on service restoration operating and maintenance activities. We estimate that in 2016 we will spend about \$29 million in service restoration activities.	systems that have self-healing designs. This risk is also mitigated by maintaining our infrastructure in good working order.	implementation stage. We expect to spend \$750M by 2017 on the program. In 2015, to keep our electric lines and substations in good working order, Consumers Energy spent over \$3.1 million on our reliability operations and maintenance program, \$40.4 million on our line clearing operations and maintenance program, and \$113.8 million on our reliability capital program.
Other physical climate drivers	Variations in Great Lakes water level may result in increased dredging activities as well as more frequent unloading of coal due to reduced cargo capacity.	Increased operational cost	>6 years	Direct	About as likely as not	Low	Changes in the level of the Great Lakes and its tributaries could have a significant financial impact on our generating fleet due to increased dredging or greater fuel costs due to operation of coal barges at less than capacity to meet requirements of shallower channels. Dredging would result in significant	The Company is currently managing this risk by monitoring lake levels at our generating plants and also relies on the United States Army Corps of Engineers Detroit District's water level reports and forecasts.	There is virtually no cost (\$0) associated with the monitoring of lake levels at our generating plants. The Company also utilizes the United States Army Corps of Engineers Detroit District's water level reports and forecasts at no cost.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							costs (~\$2M per site/yr.). Water level changes are predicted to occur over a very long period and existing generating assets could likely be mothballed, retired or replaced by that time. Additionally, recent, and upcoming changes in other EPA regulations are expected to require changes to be made at our existing water structures. Any changes would evaluate the best data on expected lake levels.		

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	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.	Reduced stock price (market valuation)	>6 years	Direct	Unlikely	Low	There is a growing concern for investing in companies that address environmental issues such as climate change. Approximately 50% of our common stock is owned by signatories of the United Nation's Principles for Responsible Investing which represents about \$4.7 billion. It is important for our Company that investors are confident in our business now and in the future.	To manage this risk the Company communicates its efforts surrounding climate change through public reporting. The Company uses its Corporate Social Responsibility website as a tool to inform the public about its environmental efforts regarding climate change. Additionally, the Company discloses climate change information through its Form 10-K annual report as well as this response to the Carbon Disclosure Project (CDP) and our annual Sustainability Report.	There are no additional costs (\$0) associated with disclosing our efforts on climate change on the Company website or in its SEC Form 10-K annual report. Additionally, we do not pay to disclose information through the CDP.
Fluctuating socio-economic conditions	Regulatory, physical, and other risks driven by climate change have the	Reduced demand for goods/services	>6 years	Direct	More likely than not	Low	Higher energy costs could result in more households not being able to afford their energy	To help reduce the amount of uncollectible payments the Company provided funds to	In 2015, the Company provided \$3.75M to non-profit agencies as matching energy

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	potential to impact the economy driving costs up for our business and our customers and consequently driving the demand for our goods and services down.						bills. In 2015, the Company's uncollectible expense was \$48M.	non-profit agencies and secured grants and other energy assistance from its customers through the MPSC.	assistance funds as well as \$1.5M to the Salvation Army for energy assistance. Additionally, Consumers Energy secured a \$15.7M grant from the the State of Michigan's Agency for Energy (MAE) to which it added another \$4.5M Company contribution to implement the 20,000 customers Consumers Affordable Resource for Energy CARE program. Overall, Consumers Energy customers received \$77M of energy assistance from different government and non-profit agencies together with Company contributions. In collaboration with community stakeholder,

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
									Consumers Energy promotes the availability and customer connections to access energy assistance.

CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information**Page: CC6. Climate Change Opportunities**

CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

Opportunities driven by changes in regulation

Opportunities driven by changes in physical climate parameters

Opportunities driven by changes in other climate-related developments

CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Cap and trade schemes	The Company has participated in an EPA acid rain cap and trade program by selling emission allowances accrued from	Reduced operational costs	3 to 6 years	Direct	About as likely as not	Low-medium	Astute management of cap & trade schemes delivers good customer value and can increase our competitive position in the	We have identified opportunities to be competitive in a cap and trade schedule including negative cost of abatement opportunities	The capital invested depends upon the stringency of the policy.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	operational changes which reduced emissions. The Company has profited from these sales. There may be opportunities to capitalize on emission allowance sales from future cap and trade schemes targeting GHG emissions.						market. At this time, it is not possible to quantify the scope of financial implications due to the lack of known operating parameters of a yet to be developed trading program.	such as plant efficiency, electric transmission line loss reductions and energy efficiency for our customers.	
Cap and trade schemes	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, we recover a rate of return on investments in	Investment opportunities	Unknown	Direct	Very likely	Low-medium	The potential impact of product efficiency opportunities is dependent upon the stringency of the policy. Moderate efficiency standards will promote investment in current assets (~\$5M/yr) while stringent standards will require new generating units	Our Clean Energy Plan is a living process that looks at policy, load, technology and fuel prices to name a few variables, several times per year, providing a picture of the most cost effective way to serve load.	Changes in carbon regulation will not result in any additional costs (\$0) to our strategic modelling processes.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	infrastructure which includes required emission control equipment or new generation equipment.						(~\$3B/unit based on advanced coal technology).		
General environmental regulations, including planning	There are potential opportunities for our natural gas utility business. EPA regulations could drive the need for new natural gas infrastructure to support more gas fired EGUs. Investments in our natural gas distribution network may realize profit if infrastructure is needed.	Investment opportunities	3 to 6 years	Direct	Very likely	Medium	Investments in the existing natural gas distribution system could increase the Company's assets. If new natural gas-fired electrical generation facilities come on-line in our service territory we will have the opportunity to invest in new natural gas infrastructure. In 2015, the Company increased revenues an estimated \$1M from new customers for natural gas distribution.	We manage this opportunity through our Customer Attachment Program (CAP) and through our Gas Asset Management Department.	In 2015, we spent \$41.2 million on gas capital new business which includes the Company's efforts to connect new customers with mains, meters, services and augment mains. This includes both traditional and proactive recruitment through our CAP program.

CC6.1b

Please describe the inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Change in weather can affect electric or gas load. Warmer winters result in a decreased demand for gas and conversely warmer summers mean an increase in demand for electricity.	Increased demand for existing products/services	Up to 1 year	Direct	About as likely as not	Low-medium	An increase in electricity or natural gas demand allows us to expand our supply and distribution systems. Our investment opportunity is dependent upon the magnitude of the change in temperature and could be as much as \$1B	We are supportive of revenue decoupling on both the electric and gas sides of the business, which effectively mitigate weather risk by trueing up projected sales with actual sales and giving customers refunds or collecting more revenue accordingly. We are authorized to do this on the gas side, but need new legislation to do so on the electric side.	There is no additional cost (\$0) to manage this opportunity through our current business processes.
Snow and ice	Snow and ice from more frequent or severe storms	New products/business services	>6 years	Direct	About as likely as not	Medium-high	More frequent and severe storms may provide	At the current time, we are investing in our infrastructure to	In 2015, to keep our electric lines and substations in good working

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	may compromise infrastructure by damaging our distribution system equipment. There may be new investment opportunities associated with the solutions to these problems.						investment opportunities including the deployment of underground distribution lines and self-healing electric systems. Costs are estimated to be up to \$30B for a complete electric underground distribution system and \$1B for a self-healing electric system. Costs are estimated using ~ 57,000 miles of electric underground lines. Investment in an underground distribution system of any magnitude would be cost-prohibitive.	assure the reliable supply of electricity and natural gas.	order, Consumers Energy spent \$3.1 million on our reliability operations and maintenance program, \$40.4 million on our line clearing operations and maintenance program, and \$113.8 million on our reliability capital program.

CC6.1c

Please describe the inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Positive perceptions driven by our response to climate change may increase the appeal of our business in the investment community.	Increase in capital availability	Unknown	Direct	Likely	Low	There is a growing concern for investing in companies that address environmental issues such as climate change. Approximately 50% of our common stock is owned by signatories of the United Nation's Principles for Responsible Investing which represents about \$4.7 billion. It is important for our Company that investors are confident in our business now and in the future.	The Company manages this risk with its efforts around reducing its carbon through building efficiency, electric vehicle incentives, transitioning our generation fleet to a lower carbon intensity rating, behavioral change support, and energy efficiency processes. Additionally, the Company reports out on these efforts through our Corporate Social Responsibility Webpage, SEC Form 10K Annual Report, and the CDP to communicate them to the investment community.	There are no additional costs (\$0) associated with disclosing our efforts on climate change on the Company's website. Additionally, we do not pay to disclose information through the CDP. The carbon reducing initiatives for CY 2015 included Energy efficiency facility projects, upgrading alternative fleet vehicles, the installation of low carbon energy generation, and reduction of natural gas losses in our infrastructure. Lifetime costs associated with these projects exceed \$580 million.
Changing	Customers	Increased	Up to 1	Direct	More likely	Low	Our Green	The Company	In 2015, the

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
consumer behaviour	may perceive their energy usage as a contributor to climate change. This perception may cause our customers to demand new lower carbon products and services.	demand for existing products/services	year		than not		Generation® program offers our customers the opportunity to make contributions towards the purchases of renewable energy. Customers can either make purchases that match their kilowatt-hour usage at the 100% level, or can purchase in blocks of 150 kilowatt-hours. At the end of 2015, there were 19,618 customers enrolled in the Green Generation program which generated about \$756,000 in revenue in 2015.	manages this opportunity by marketing the program to our customers. We communicate with these customers through a number of different methods, including direct mail, email, radio and television, and web banner ads. The Green Generation direct mail marketing efforts are generally focused on residential customers – particularly those whom demonstrate an interest in renewable energy and the environment – as these customers are more likely to sign up for the Green Generation program.	Company spent about \$17.5M on marketing, administration and supply for this program.

CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

Further Information

Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading

Page: CC7. Emissions Methodology

CC7.1

Please provide your base year and base year emissions (Scopes 1 and 2)

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Thu 01 Jan 2009 - Sat 31 Jan 2009	18196261
Scope 2 (location-based)	Thu 01 Jan 2009 - Sat 31 Jan 2009	44330
Scope 2 (market-based)		

CC7.2

Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

Please select the published methodologies that you use

The Greenhouse Gas Protocol: Public Sector Standard
US EPA Mandatory Greenhouse Gas Reporting Rule

CC7.2a

If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions

CC7.3

Please give the source for the global warming potentials you have used

Gas	Reference
CH4	Other: 40 CFR Part 98, Subpart A
Other: N2O	Other: 40 CFR Part 98, Subpart A
CO2	Other: 40 CFR Part 98, Subpart A

CC7.4

Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	53.02	Other: kg CO2 / MMBtu	40 CFR Part 98 Subpart C
Natural gas	1	Other: 10 ⁻³ kg CH4 / MMBtu	40 CFR Part 98 Subpart C
Natural gas	1	Other: 10 ⁻⁴ kg N2O / MMBtu	40 CFR Part 98 Subpart C
Distillate fuel oil No 2	73.96	Other: kg CO2 / MMBtu	40 CFR Part 98 Subpart C
Distillate fuel oil No 2	3	Other: 10 ⁻³ kg CH4 / MMBtu	40 CFR Part 98 Subpart C
Distillate fuel oil No 2	6	Other: 10 ⁻⁴ kg N2O / MMBtu	40 CFR Part 98 Subpart C
Sub bituminous coal	1.1	Other: 10 ⁻² kg CH4 / MMBtu	40 CFR Part 98 Subpart C

Fuel/Material/Energy	Emission Factor	Unit	Reference
Sub bituminous coal	1.6	Other: 10 ⁻³ kg N ₂ O / MMBtu	40 CFR Part 98 Subpart C
Bituminous coal	1.1	Other: 10 ⁻² kg CH ₄ / MMBtu	40 CFR Part 98 Subpart C
Bituminous coal	1.6	Other: 10 ⁻³ kg N ₂ O / MMBtu	40 CFR Part 98 Subpart C
Motor gasoline	70.22	Other: kg CO ₂ / MMBtu	40 CFR Part 98 Subpart C
Motor gasoline	3	Other: 10 ⁻³ kg CH ₄ / MMBtu	40 CFR Part 98 Subpart C
Motor gasoline	6	Other: 10 ⁻⁴ kg N ₂ O / MMBtu	40 CFR Part 98 Subpart C

Further Information

Page: CC8. Emissions Data - (1 Jan 2015 - 31 Dec 2015)

CC8.1

Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory

Financial control

CC8.2

Please provide your gross global Scope 1 emissions figures in metric tonnes CO₂e

18146077

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

No

CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
42001		

CC8.4

Are there are 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

CC8.4a

Please 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	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Refrigerant Leaks	Emissions are not relevant	No emissions excluded		GHGs associated with refrigerant usage are contained in closed loop applications. Any leakage associated with closed loop refrigerant systems is de minimus and not required to be reported via regulation.

CC8.5

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 2% but less than or equal to 5%	Other: Published emissions factors	The majority of Scope 1 emissions are quantified by continuous emission monitors (CEMS) which are accurate. The Scope 1 uncertainty derives from the use of EPA 40 CFR Part 98 emission factors.
Scope 2 (location-based)	More than 5% but less than or equal to 10%	Data Gaps	Some building and facility energy usage is not captured by meters. Where this occurs, assumptions based on actual metered data are used to fill those gaps.
Scope 2 (market-based)			

CC8.6

Please indicate the verification/assurance status that applies to your reported Scope 1 emissions

No third party verification or assurance – regulatory CEMS required

CC8.6a

Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)

CC8.6b

Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emissions Monitoring Systems (CEMS)

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_7EA.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_LM1.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_LM2.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_LM3.pdf

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_LM4.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_LM5.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/EM_Feedback_Report_JXN_LM6.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/GHG Summary Report_BCC.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/GHG Summary Report_JHC.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/GHG Summary Report_JRW.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/GHG Summary Report_KW.pdf
CFR 40 Part 75	99	Thu 01 Jan 2015 - Thu 31 Dec 2015	https://www.cdp.net/sites/2016/38/3538/Climate Change 2016/Shared Documents/Attachments/CC8.6b/GHG Summary Report_ZLD.pdf

CC8.7

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

No third party verification or assurance

CC8.7a

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
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CC8.8

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

Additional data points verified	Comment
No additional data verified	As a regulated utility, our activities are subject to scrutiny by the MPSC. In some cases, this requires third party verification.

CC8.9

Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?

No

CC8.9a

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

Further Information

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC9.1

Do you have Scope 1 emissions sources in more than one country?

No

CC9.1a

Please break down your total gross global Scope 1 emissions by country/region

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)

By business division
By facility
By GHG type

CC9.2a

Please break down your total gross global Scope 1 emissions by business division

Business division	Scope 1 emissions (metric tonnes CO2e)
Electric Generation	18022525.5
Natural Gas Storage and Distribution	11084.4
Business Services	12767.1

CC9.2b

Please break down your total gross global Scope 1 emissions by facility

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
JH Campbell Generating Facility	8905196	42.913	-86.203
BC Cobb Generating Facility	1742683	43.255	-86.242
DE Karn/JC Weadock Generating Facility	3921554	43.644	-83.84
JR Whiting Generating Facility	1927696	41.792	-83.449
Zeeland Generating Facility	1465256	42.821	-86.001
Gaylord Combustion Turbine	3	43.064	-84.715
Morrow Combustion Turbine	0	42.28	-85.493
Patterson Avenue	0	42.903	-85.548
Straits Combustion Turbine	1	45.782	-84.769
Thetford Combustion Turbine	513	43.157	-83.629
Freedom Compressor Station	8454	42.208	-83.968

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Muskegon River Compressor Station	15092	44.081	-85.022
Northville Compressor Station	3867	42.721	-82.717
Overisel Compressor Station	16367	42.698	-85.95
Ray Compressor Station	23862	42.811	-82.866
St. Clair Compressor Station	14348	42.721	-82.717
White Pigeon Compressor Station	28794	41.802	-85.586
Ludington Pumped Storage Facility	149	43.894	-86.445
Jackson Generating System	59473	42.248	-84.376
Business Miles	3126		
Service centers' natural gas combustion	9641		

CC9.2c

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	18055115.1
CH4	205.6
N2O	281.4

CC9.2d

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)

Further Information

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

CC10.1

Do you have Scope 2 emissions sources in more than one country?

No

CC10.1a

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)

CC10.2

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

By business division

CC10.2a

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Consumers Energy Office Facilities	42001	

CC10.2b

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)

CC10.2c

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
----------	-----------------------------------------------------------	---------------------------------------------------------

Further Information

Scope 2 emissions are calculated using a regional electric grid emission factor for CO2 emissions only. Energy usage from 48 individual facilities are quantified in the Scope 2 calculations.

Page: CC11. Energy

CC11.1

What percentage of your total operational spend in the reporting year was on energy?

More than 0% but less than or equal to 5%

CC11.2

Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year

Energy type	Energy purchased and consumed (MWh)
Heat	53205
Steam	
Cooling	54468

CC11.3

Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year

53205

CC11.3a

Please complete the table by breaking down the total "Fuel" figure entered above by fuel type

Fuels	MWh
Natural gas	58107
Sub bituminous coal	37038
Other:	10894

CC11.4

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	Consumers Energy does not specifically spend money on low carbon resources to run its own operations. Rather, the Company's energy consumption is characterized by that which is supplied to the grid.

CC11.5

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
54468		20304000	870000		The majority of Consumers Energy's facilities use energy directly from the grid so our usage would reflect the grid's current fuel mix. The usage number presented is reflective of our office building and does not contain electricity consumed during energy production.

Further Information

The energy consumed reported in this section includes the electricity and natural gas usage from our building facilities. Energy used to generate electricity or for natural gas compression is not quantified. For purposes of this section it was assumed that the grid electric portfolio was 68% coal/oil, 9% natural gas, 7% renewable/hydro & 13% nuclear (these are actual performance ratios, not nameplate capacity, for the MISO region in 2012). "Sub bituminous coal" response in 12.3 is calculated from an assumed percentage of coal in the generating portfolio. This would include the small amount of bituminous coal still used. There was no option for coal blends in the drop down box.

Page: CC12. Emissions Performance

CC12.1

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

Increased

CC12.1a

Please 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

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities			
Divestment			
Acquisitions	0.33	Increase	Consumers Energy purchased the natural gas fired, combined cycle Jackson Generating Facility in 2015. This increase in our asset portfolio resulted in increased emissions.
Mergers			
Change in output	0.2	Increase	There was an increase in both generation and emissions in 2015. This was primarily due to the acquisition of the Jackson Generating Facility and increased generation at our coal facilities as there were equipment outages in 2014 to incorporate environmental controls
Change in methodology	7	Increase	There are multiple reasons for this change. The foremost reasons surround the acquisition of the Jackson Generating Facility and increased generation at our coal facilities as there were equipment outages in 2014 to incorporate environmental controls. These changes increased Scope 1 emissions.
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other			

CC12.1b

Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Market-based

CC12.2

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.00282	metric tonnes CO2e		Market-based	18.7	Increase	There are multiple reasons for this change. The foremost reasons surround the acquisition of the Jackson Generating Facility and increased generation at our coal facilities as there were equipment outages in 2014 to incorporate environmental controls. These changes increased Scope 1 emissions.

CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
2331	metric tonnes CO2e	full time equivalent (FTE) employee		Market-based	5.9	Increase	There are multiple reasons for this change. The foremost reasons surround the acquisition of the Jackson Generating Facility and increased generation at our coal facilities as there were equipment outages in 2014 to incorporate environmental controls. These changes increased Scope 1 emissions.
0.91	metric tonnes	megawatt hour		Market-	3.6	Decrease	Even though our total emissions increased in 2015,

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
	CO2e	(MWh)		based			Consumers Energy saw a dramatic increase in our low/zero carbon generation. Thus the overall intensity calculation decreased.

Further Information

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

No, and we do not currently anticipate doing so in the next 2 years

CC13.1a

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

CC13.1b

What is your strategy for complying with the schemes in which you participate or anticipate participating?

CC13.2

Has your organization originated any project-based carbon credits or purchased any within the reporting period?

Yes

CC13.2a

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Hydro	Ada Dam	Other: Pursuant to State Standard	5397		Yes	Compliance
Credit purchase	Landfill gas	Adrian Energy Associates	Other: Pursuant to State Standard	16758		Yes	Compliance
Credit origination	Hydro	Alcona Hydro	Other: Pursuant to State Standard	18746		Yes	Compliance
Credit purchase	Hydro	Alverno Hydro	Other: Pursuant to State Standard	2297		Yes	Compliance
Credit purchase	Hydro	Beaverton Hydro	Other: Pursuant to State Standard	2639		Yes	Compliance
Credit purchase	Wind	Beebe	Other: Pursuant to State Standard	128521		Yes	Compliance
Credit purchase	Landfill gas	Byron Center - BC #1	Other: Pursuant to State Standard	15596		Yes	Compliance

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit purchase	Landfill gas	C & C Electric-1	Other: Pursuant to State Standard	4934		Yes	Compliance
Credit purchase	Biomass energy	Cadillac Renewable Energy LLC - Unit 2	Other: Pursuant to State Standard	152262		Yes	Compliance
Credit purchase	Hydro	Calkins Bridge Hydro	Other: Pursuant to State Standard	3498		Yes	Compliance
Credit purchase	Hydro	Cascade Dam	Other: Pursuant to State Standard	5916		Yes	Compliance
Credit origination	Hydro	Cooke Hydro	Other: Pursuant to State Standard	19104		Yes	Compliance
Credit origination	Hydro	Croton Hydro	Other: Pursuant to State Standard	26895		Yes	Compliance
Credit purchase	Solar	EARP Agg 1	Other: Pursuant to State Standard	1622		Yes	Compliance
Credit purchase	Solar	EARP Agg 2	Other: Pursuant to State Standard	371		Yes	Compliance
Credit purchase	Solar	EARP Agg 3	Other: Pursuant to State Standard	1252		Yes	Compliance
Credit purchase	Solar	EARP Agg 4	Other: Pursuant to State Standard	564		Yes	Compliance
Credit purchase	Solar	EARP Agg 5	Other: Pursuant to State Standard	413		Yes	Compliance
Credit purchase	Solar	EARP Agg 6	Other: Pursuant to State Standard	25		Yes	Compliance
Credit purchase	Hydro	Elk Rapids Hydro	Other: Pursuant to State Standard	2093		Yes	Compliance
Credit purchase	Hydro	Fallasburg Dam	Other: Pursuant to State Standard	3664		Yes	Compliance
Credit origination	Hydro	Five Channels Hydro	Other: Pursuant to State Standard	18092		Yes	Compliance
Credit	Hydro	Foote Hydro	Other: Pursuant to	21584		Yes	Compliance

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
origination			State Standard				
Credit purchase	Biomass energy	Fremont Community Digester	Other: Pursuant to State Standard	3107		Yes	Compliance
Credit purchase	Wind	Garden Wind Farm - 20.0 MW	Other: Pursuant to State Standard	33675		Yes	Compliance
Credit purchase	Biomass energy	Genesee Power Station	Other: Pursuant to State Standard	100886		Yes	Compliance
Credit purchase	Landfill gas	Grand Blanc Facility #1	Other: Pursuant to State Standard	20848		Yes	Compliance
Credit purchase	Biomass energy	Grayling Generating Station	Other: Pursuant to State Standard	151858		Yes	Compliance
Credit purchase	Hydro	Grenfell - Belding Hydro	Other: Pursuant to State Standard	1382		Yes	Compliance
Credit origination	Hydro	Hardy Hydro	Other: Pursuant to State Standard	83098		Yes	Compliance
Credit purchase	Wind	Harvest II - Wind Farm	Other: Pursuant to State Standard	123690		Yes	Compliance
Credit purchase	Biomass energy	Hillman Power Co	Other: Pursuant to State Standard	109186		Yes	Compliance
Credit origination	Hydro	Hodenpyl Hydro	Other: Pursuant to State Standard	36765		Yes	Compliance
Credit purchase	Hydro	Irving Hydro	Other: Pursuant to State Standard	1692		Yes	Compliance
Credit purchase	Other: Municipal solid waste	Kent County Plant - Mass Burn	Other: Pursuant to State Standard	92025		Yes	Compliance
Credit purchase	Hydro	LaBarge Hydro	Other: Pursuant to State Standard	2993		Yes	Compliance
Credit purchase	Landfill gas	Lennon Generating	Other: Pursuant to State Standard	11573		Yes	Compliance
Credit origination	Hydro	Loud Hydro	Other: Pursuant to State Standard	13356		Yes	Compliance

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
Credit origination	Wind	LWEP - Lake Winds Energy Park	Other: Pursuant to State Standard	239075		Yes	Compliance
Credit purchase	Hydro	Michiana Hydro	Other: Pursuant to State Standard	121		Yes	Compliance
Credit purchase	Wind	Michigan Wind 1	Other: Pursuant to State Standard	86609		Yes	Compliance
Credit purchase	Wind	Michigan Wind 2	Other: Pursuant to State Standard	143929		Yes	Compliance
Credit origination	Hydro	Middleville Hydro	Other: Pursuant to State Standard	1185		Yes	Compliance
Credit purchase	Hydro	Mio Hydro	Other: Pursuant to State Standard	10680		Yes	Compliance
Credit purchase	Hydro	Morrow Dam	Other: Pursuant to State Standard	3590		Yes	Compliance
Credit purchase	Landfill gas	Northern Oaks Landfill Plant	Other: Pursuant to State Standard	8898		Yes	Compliance
Credit purchase	Landfill gas	Ottawa - #2	Other: Pursuant to State Standard	5488		Yes	Compliance
Credit purchase	Landfill gas	Ottawa - OT #1	Other: Pursuant to State Standard	30441		Yes	Compliance
Credit purchase	Landfill gas	Peoples Generating	Other: Pursuant to State Standard	20454		Yes	Compliance
Credit purchase	Landfill gas	Pinconning - PI #1	Other: Pursuant to State Standard	15001		Yes	Compliance
Credit purchase	Landfill gas	Pine Tree Acres	Other: Pursuant to State Standard	64427		Yes	Compliance
Credit purchase	Landfill gas	Rathbun Generating	Other: Pursuant to State Standard	6213		Yes	Compliance
Credit origination	Hydro	Rogers Hydro	Other: Pursuant to State Standard	19146		Yes	Compliance
Credit	Wind	Stoney Corners Wind Farm	Other: Pursuant to	26902		Yes	Compliance

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	Purpose, e.g. compliance
purchase		12.25 MW	State Standard				
Credit purchase	Wind	Stoney Corners Wind Farm 8.35 MW	Other: Pursuant to State Standard	17715		Yes	Compliance
Credit purchase	Biomass energy	SVD - Fenville	Other: Pursuant to State Standard	2235		Yes	Compliance
Credit purchase	Biomass energy	SVD - Freeport	Other: Pursuant to State Standard	4104		Yes	Compliance
Credit purchase	Biomass energy	TES Filer City Station	Other: Pursuant to State Standard	26856		Yes	Compliance
Credit origination	Hydro	Tippy Hydro	Other: Pursuant to State Standard	53791		Yes	Compliance
Credit purchase	Landfill gas	Venice Park - NANR Generating	Other: Pursuant to State Standard	21778		Yes	Compliance
Credit purchase	Landfill gas	Venice Resources Gas Recovery	Other: Pursuant to State Standard	10388		Yes	Compliance
Credit purchase	Biomass energy	Viking Energy - Lincoln	Other: Pursuant to State Standard	117630		Yes	Compliance
Credit purchase	Biomass energy	Viking Energy - McBain	Other: Pursuant to State Standard	111620		Yes	Compliance
Credit origination	Hydro	Webber Hydro	Other: Pursuant to State Standard	7284		Yes	Compliance
Credit purchase	Hydro	White's Bridge Hydro	Other: Pursuant to State Standard	2332		Yes	Compliance
Credit purchase	Landfill gas	Zeeland Farm Services - Plant 2	Other: Pursuant to State Standard	8373		Yes	Compliance

Further Information

CC14.1

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, calculated	16162785	Emissions are calculated based on the distribution and sale of natural gas to customers. Calculations were based on 40 CFR Part 98 emission factors.	0%	Because the calculated carbon emissions resulting from customers' use of delivered natural gas will make up the overwhelming majority of total carbon emissions, it was deemed not prudent to audit all of the Company's natural gas suppliers for their value chain impact.
Capital goods	Relevant, calculated	6827	Emission associated with calculated leaks in our natural gas distribution network. Emissions calculations are taken from the Company's 40 CFR Part 98 subpart W greenhouse gas report.	0%	Because the calculated carbon emissions resulting from customers' use of delivered natural gas will make up the overwhelming majority of total carbon emissions, it was deemed not prudent to audit all of the Company's natural gas suppliers for their value chain impact.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided			0%	All fuel and energy related activities are either captured as purchased goods and services, capital goods or upstream transportation and distribution.
Upstream transportation and distribution	Relevant, not yet calculated			0%	Because the calculated carbon emissions resulting from customers' use of delivered natural gas will make up the overwhelming majority of total carbon emissions, it was deemed not prudent to audit all of the Company's natural gas suppliers for their value chain impact.
Waste generated in operations	Relevant, not yet calculated			0%	
Business travel	Relevant,	6926	Emissions are calculated based on	0%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
	calculated		business mileage associated with employees driving vehicles for work related purposes. Calculations were based on 40 CFR Part 98 emission factors.		
Employee commuting	Not relevant, explanation provided			0%	Employee commuting is currently outside of the Company's influence.
Upstream leased assets	Not relevant, explanation provided			0%	Not applicable to our business model.
Downstream transportation and distribution	Not relevant, explanation provided			0%	Captured in disclosed scope 3 emissions from Capital Goods.
Processing of sold products	Not relevant, explanation provided			0%	The life cycle of GHG emissions associated with the use of our sold products are captured in the purchased goods and services category.
Use of sold products	Not relevant, explanation provided			0%	The life cycle of GHG emissions associated with the use of our sold products are captured in the purchased goods and services category.
End of life treatment of sold products	Not relevant, explanation provided			0%	The life cycle of GHG emissions associated with the use of our sold products are captured in the purchased goods and services category.
Downstream leased assets	Not relevant, explanation provided			0%	Not applicable to our business model.
Franchises	Not relevant, explanation provided			0%	The franchise business model is not applicable to a regulated utility.
Investments	Not relevant, explanation			0%	Not applicable to our business model.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
	provided				
Other (upstream)	Relevant, not yet calculated			0%	
Other (downstream)	Relevant, not yet calculated			0%	

CC14.2

Please indicate the verification/assurance status that applies to your reported Scope 3 emissions

No third party verification or assurance

CC14.2a

Please provide further details of the verification/assurance undertaken, and attach the relevant statements

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)

CC14.3

Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?

Yes

CC14.3a

Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Purchased goods & services	Other:	11	Decrease	Consumers Energy purchases natural gas from producers (we are not a natural gas production company) and sell/distribute to our customers. These Scope 3 emissions represent less gas used by our customers in 2015 versus 2014.
Capital goods	Emissions reduction activities	125	Decrease	This decrease in Scope 3 emissions resulted from increased investments in our natural gas infrastructure. Modernizing our infrastructure reduces fugitive emissions from distribution.

CC14.4

Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)

Yes, our customers

CC14.4a

Please give details of methods of engagement, your strategy for prioritizing engagement and measures of success

Consumers Energy uses an integrated marketing approach to engage customers in our Energy Efficiency Programs. We have prioritized customer engagement due to its inherent business and societal value. This engagement reduces carbon emissions while creating business value through new products and services. Additionally, our energy efficiency programs save our customers money.

Radio and television ads build broad awareness of our energy efficiency programs, and are evaluated via both proprietary awareness surveys and JD Power awareness scores. Print, online, and outdoor ads are used to promote efficiency program offers, and to engage customers to visit our website. Those efforts are evaluated by tracking unique web visits to the Company's energy efficiency web pages. Direct mail and email are used to promote specific energy efficiency offers to specific customers, and are evaluated by the response rates to those offers. Additional engagement efforts include participation in community events, newsletters, and earned media via public relations activities. Consumers Energy is also increasing its use of social media to engage customers.

Ultimately, our engagement efforts are evaluated by the achievement of savings goals for both electricity and natural gas. In 2015, the goals were 331,877 MWh and 1,915,363 MCF.

Renewable Energy- Consumers Energy offers a Green Generation program, a Net Metering program, and an Experimental Advanced Renewable Energy program. These are voluntary programs promoting customer usage of renewable energy at three different levels. We have prioritized engaging with our customers because of the business and societal value it brings.

The Green Generation Program offers customers the opportunity to make contributions towards the purchases of renewable energy from our suppliers. Customers can either match their kilowatt-hour usage at the 100% level, or can purchase in blocks of 150 kilowatt-hours.

Net Metering is a program that allows customers to use renewable resources and offset their energy usage. Excess energy is purchased by the Company. Since 2009, approximately 410 customers have enrolled in net metering installing ~3.9 MW of renewable energy. Using a capacity factor of 13% for solar energy and 38% for wind energy, the estimated electric generation is 5,913 MWh.

The Experimental Advanced Renewable Energy Program (EARP) is a feed-in-tariff program where customers that installed solar energy can enter into long term contracts with the Company to sell their solar energy. The program has ~4.7 MW of installed capacity (~380 participants enrolled including incomplete projects) and 7 MW of awarded capacity that is not yet operational. Using a capacity factor of 13% for solar energy, the estimated electric generation is 5,352 MWh from the installed capacity.

Our marketing efforts are generally focused on residential customers. Success is measured through increased enrollments, sale of renewable energy supply and program awareness. Program awareness is measured through JD Power scores.

The Consumers Energy Smart Energy program kicked off in 2007 with the purpose of improving energy efficiency via the installation of intelligent metering and communication devices throughout the distribution system. Smart meters will be able to provide near real-time updates to inform customers on energy usage, day-ahead changes in electric costs, and the availability of money-saving programs. This near real-time data will allow customers to make informed decisions on their usage. We have prioritized customer engagement due to its inherent business and societal value.

Our Smart Energy Program includes years of testing and assessing equipment. The success of the program will initially be measured by a better meter read accuracy and less estimated bills. As the program matures, customers will be able to better understand individual energy usage patterns and make wise energy choices. Approximately 870,000 upgraded meters were installed by the end of 2015.

CC14.4b

To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent

Number of suppliers	% of total spend (direct and indirect)	Comment
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CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
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CC14.4d

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Linda Hilbert	Executive Director of Environmental and Laboratory Services	

Further Information

Module: Electric utilities

Page: EU0. Reference Dates

EU0.1

Please enter the dates for the periods for which you will be providing data. The years given as column headings in subsequent tables correspond to the "year ending" dates selected below. It is requested that you report emissions for: (i) the current reporting year; (ii) one other year of historical data (i.e. before the current reporting year); and, (iii) one year of forecasted data (beyond 2020 if possible).

Year ending	Date range
2013	Tue 01 Jan 2013 - Tue 31 Dec 2013
2014	Wed 01 Jan 2014 - Wed 31 Dec 2014
2015	Thu 01 Jan 2015 - Thu 31 Dec 2015

Further Information

Page: EU1. Global Totals by Year

EU1.1

In each column, please give a total figure for all the countries for which you will be providing data for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emission intensity (metric tonnes CO ₂ e/MWh)
2013	6072	17703	17096160	.97
2014	6109	18144	16782891	.92
2015	6261	20092	18327265	.91

Further Information

Page: EU2. Individual Country Profiles - United States of America

EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Coal - hard
Oil & gas (excluding CCGT)
CCGT
Hydro
Other renewables

EU2.1a

Coal - hard

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2013	2799	15951	16473808	1.03
2014	2783	15849	15945626	1.02
2015	2771	15833	16454104	1.04

EU2.1b

Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1c

Oil & gas (excluding CCGT)

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2013	1624	210	116265	0.55
2014	1562	165	113830	0.69
2015	1682	1	22327	0.91

EU2.1d

CCGT

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2013	519	1209	506087	0.42
2014	520	1847	772279	0.42
2015	527	3388	1850824	0.41

EU2.1e

Nuclear

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)

EU2.1f

Waste

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1g

Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2013	1029	261
2014	1032	291
2015	1069	241

EU2.1h

Other renewables

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2013	101	261
2014	212	291
2015	212	629

EU2.1i**Other**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1j**Solid biomass**

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2013	0	0	0	0
2014	0	0	0	0
2015	0	0	0	0

EU2.1k

Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2013	4942	17370	17096160	0.98
2014	4865	17696	16831735	0.95
2015	4980	19222	18327265	0.95

EU2.1l

Total figures for this country

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2013	6072	17703	17096160	0.94
2014	6109	18144	16782891	0.92
2015	6261	20092	18327265	0.91

Further Information

Page: EU3. Renewable Electricity Sourcing Regulations

EU3.1

In certain countries, e.g. Italy, the UK, the USA, electricity suppliers are required by regulation to incorporate a certain amount of renewable electricity in their energy mix. Is your organization subject to such regulatory requirements?

Yes

EU3.1a

Please provide the scheme name, the regulatory obligation in terms of the percentage of renewable electricity sourced (both current and future obligations) and give your position in relation to meeting the required percentages

Scheme name	Current % obligation	Future % obligation	Date of future obligation	Position in relation to meeting obligations
USA state scheme – Michigan	10%	10%		The State of Michigan had a renewable energy standard mature at the end of 2015. Consumers Energy fulfilled its statutory obligation under this legislation.

Further Information

Page: EU4. Renewable Electricity Development

EU4.1

Please give the contribution of renewable electricity to your organization's EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization) in the current reporting year in either monetary terms or as a percentage

Please give:	Monetary figure	%	Comment
Renewable electricity's contribution to EBITDA	83000000	4.5%	

EU4.2

Please give the projected contribution of renewable electricity to your organization's EBITDA at a given point in the future in either monetary terms or as a percentage

Please give:	Monetary figure	%	Year ending	Comment
Renewable electricity's contribution to EBITDA	64000000	2.8%	2018	

EU4.3

Please give the capital expenditure (capex) planned for the development of renewable electricity capacity in monetary terms and as a percentage of total capex planned for power generation in the current capex plan

Please give:	Monetary figure	%	End year of capex plan	Comment
Capex planned for renewable electricity development	1000000	0.1%	2019	

Further Information

CDP 2016 Climate Change 2016 Information Request