Based in Milwaukee, Wisconsin, WEC Energy Group is one of the nation's premier energy holding companies, with subsidiaries serving energy customers in Wisconsin, Illinois, Minnesota and Michigan.

At WEC Energy Group, we embrace our responsibility to provide safe, reliable and affordable energy in an environmentally sustainable manner. We set our strategies and run our operations with an emphasis on continuous improvement and a vision to deliver a cleaner energy future.

As we make progress on our environmental efforts, we provide information to a number of environmental, social and governance organizations and ratings firms to continually enhance transparency and encourage dialogue with stakeholders.

We have disclosed information regarding our operations and climate-related risks and opportunities to CDP for more than a decade.

Our responses in this report contain forward-looking information. For cautionary statements regarding forward-looking information, please go to http://www.wecenergygroup.com/home/terms.htm.

Welcome to your CDP Climate Change Questionnaire 2021

C0. Introduction

C0.1

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

We were incorporated in the state of Wisconsin in 1981 and became a diversified holding company in 1986. We maintain our principal executive offices in Milwaukee, Wisconsin. Our wholly owned utility subsidiaries provide regulated natural gas and electricity to customers in Wisconsin, Illinois, Michigan and Minnesota. We also have non-utility energy infrastructure operations that, among other things, hold majority ownership interests in several wind generating facilities. In addition, we own an approximate 60% equity interest in American Transmission Co. (an electric transmission company operating in Illinois, Michigan, Minnesota and Wisconsin) and an approximate 75% equity interest in ATC Holdco LLC, a separate entity formed to invest in transmission-related projects outside of American Transmission Co.'s traditional footprint.

Wisconsin Electric Power Co. (Wisconsin Electric), which is the largest electric utility in the state of Wisconsin, generates and distributes electric energy to customers located in southeastern Wisconsin (including the metropolitan Milwaukee area), east central Wisconsin, and northern Wisconsin. Wisconsin Public Service Corp. (Wisconsin Public Service) generates and distributes electric energy to customers located in northeastern Wisconsin. Upper Michigan Energy Resources Corp. (UMERC) generates and distributes electric energy to customers located in the Upper Peninsula of Michigan.

We own the largest natural gas distribution utilities in Wisconsin (Wisconsin Electric, Wisconsin Public Service and Wisconsin Gas LLC), and we operate throughout the state, including the city of Milwaukee and surrounding areas, northeastern Wisconsin, and large areas of both central and western Wisconsin. In addition, Wisconsin Electric has a steam utility that generates, distributes and sells steam to customers in metropolitan Milwaukee for use in processing, space heating, domestic hot water and humidification. Our Illinois natural gas utilities, The Peoples Gas Light and Coke Co. and North Shore Gas Co., serve customers in Chicago and the northern suburbs of Chicago, respectively. Our other natural gas utilities include Minnesota Energy Resources Corp., serving customers in various cities and communities throughout Minnesota, and Michigan Gas Utilities Corp., serving customers in the southern portion of lower Michigan. UMERC serves natural gas customers in the Upper Peninsula of Michigan. Our non-utility operations include W.E. Power LLC, which designed and built certain electric generating units that it now leases to Wisconsin Electric; Bluewater Natural Gas Holding LLC, which owns

natural gas storage facilities in Michigan that provide approximately one-third of the current storage needs for our Wisconsin natural gas utilities; WEC Infrastructure LLC, which holds majority ownership interests in non-utility wind generating facilities; and Wispark LLC, which develops and invests in real estate.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2020	December 31, 2020	No

C0.3

(C0.3) Select the countries/areas for which you will be supplying data.

United States of America

C0.4

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

USD

C0.5

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

Other, please specify

Equity share of consolidated companies and equity share of non-utility wind.

C-EU0.7

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

Row 1

Electric utilities value chain

Electricity generation

Distribution

Other divisions

Gas storage, transmission and distribution

C1. Governance

C1.1

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

Yes

C1.1a

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

Position of individual(s)	Please explain
Board Chair	While the chairman of the board of directors has ultimate responsibility for coordinating the board's oversight of climate-related issues, the full board has collective responsibility for executing its oversight responsibilities in this regard. This includes strategic contemplation of the risks associated with the possible impact of climate change on the utility sector, and review and approval of significant capital projects and investments, such as those that will enable the company to meet its emission reduction goals.

C1.1b

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

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding major plans of action Reviewing and guiding risk management policies Reviewing and guiding annual budgets Reviewing and guiding business plans Setting performance objectives	Throughout the year, the board engages in substantive discussions with management about the company's long-term strategy, which the board must evaluate within the context of the many risks and opportunities facing the utility sector, including those related to climate change. Management routinely reports to the board on both high-level and narrowly focused risks, which serve as important input as the directors evaluate the impact of strategic alternatives. While the board delegates specified duties to its committees, the board retains collective responsibility for comprehensive risk oversight, including short-term and long-term critical risks that could impact the company's sustainability. The board believes that

	Monitoring implementation and performance of objectives Overseeing major capital expenditures, acquisitions and divestitures Monitoring and overseeing progress against goals and targets for addressing climate-related issues	certain risks should be contemplated by the full board, such as oversight of environmental and social risks, including the potential impact of climate change on the utility sector as a whole and the company in particular, and review and approval of significant capital projects and investments, including those projects and investments that will enable the company to meet its carbon and methane emission reduction goals. The full board also reviews the company's Corporate Responsibility Report each year before it is published as a mechanism to affirm that management has appropriately captured the tone and essence of the company's commitment to sustainable decision-making.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Other, please specify Climate risk committee	Both assessing and managing climate-related risks and opportunities	Quarterly

C1.2a

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

Management's enterprise-wide approach to managing risk and compliance is facilitated through our Enterprise Risk Steering Committee (ERSC), which consists of senior-level management leaders. ERSC members regularly review the company's key risk areas and provide input into the development and implementation of effective compliance and risk management practices.

The separate Climate Risk Committee brings together senior-level officers responsible for aspects of overall corporate strategy to ensure more focused, executive-level attention on this area of enterprise risk. Our Environmental team provides reports at the committee meetings, which occur at least quarterly, to discuss trends, goals and initiatives that involve climate-related risks and opportunities.

C1.3

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

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	The Board oversees an executive compensation program that assesses management's performance in achieving long-term strategic sustainability goals through its capital spending plan, which is comprised of multiyear projects tied to strategic objectives including significant investments in low- and no- carbon generation and modernization of the company's natural gas infrastructure, actions specifically aimed at helping reduce the emission of GHGs (carbon and methane). The company's ability to fund this capital plan without issuing additional equity has been directly linked with the company's ability to deliver on its financial plan, including meeting the financial metrics used in the executive compensation program. These financial measures are key performance indicators underlying our executives' incentive compensation, linking long-term strategy through a focus on short-term priorities.

C1.3a

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

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Management group	Monetary reward	Other (please specify) On-time, on-budget completion of capital spending projects, which include those aimed at reducing the emission of greenhouse gas (carbon and methane), resulting in the company's ability to deliver on its financial plan.	Management regularly updates the board on its capital spending plans, which underpin the company's most significant strategic objectives and are prepared in five-year increments, and refreshed annually with the board's oversight. An important aspect of the board's oversight responsibilities is to hold the executive management team accountable for achieving the company's goals and objectives. This includes oversight of executive compensation. The board's Compensation Committee has a long track record of providing an executive

			compensation program that incentivizes the achievement of both the company's long-term strategies and short-term objectives. Delivering a cleaner energy future is one of the fundamentals of our business and a major focus of our capital plan. The Compensation Committee assesses management's performance in achieving the tenets of the company's long-term strategic sustainability goals through the execution of its capital spending plan, which is comprised of multiyear projects tied to strategic objectives. Management annually refreshes the capital plan, which includes a preview of anticipated capital spending over five years, and discloses it publicly during the fourth quarter each year. In November 2020, the company unveiled its five-year (2021-2025), $16.1 billion ESG Progress Plan detailing its significant investments in low- and no-carbon generation and modernization of its natural gas infrastructure, actions that are specifically aimed at helping to reduce the emission of GHGs (carbon and methane). The company's ability to fund this substantial capital plan without issuing additional equity has been directly linked with the company's ability to consistently deliver on its financial plan, including meeting the financial metrics used in the company's compensation program. These financial measures are key performance indicators underlying our executives' incentive compensation, thus linking management's pathway to achieving our long-term strategy through its focus on short-term priorities.

C2. Risks and opportunities

C2.1

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

Yes

C2.1a

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

	From (years)	To (years)	Comment
Short-term	1	3	The horizon for assessing climate-related risks and opportunities is aligned with other business practices time horizons.
Medium-term	3	6	The horizon for assessing climate-related risks and opportunities is aligned with other business practices time horizons.
Long-term	6	30	The horizon for assessing climate-related risks and opportunities is aligned with other business practices time horizons.

C2.1b

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

WEC Energy Group defines a substantive impact as any change in the determination of investors in buying, holding or selling its securities. The indicator of “substantive change” is whether or not a reasonable investor would find the impact in question to be material to his or her investment decision. Any event that could have a material impact on our electric generation and/or electric and natural gas distribution operations, or result in a significant reputational and/or financial consequence, could cause a substantive financial or strategic impact. WEC Energy Group’s strategic planning processes enable its companies to continuously evaluate uncertainties and risks in the context of maintaining reliable, affordable energy supplies for their customers that follow the environmental improvement trajectory that management has set. Examples of climate-related risks are identified in WEC Energy Group’s 2020 Annual Report on Form 10-K as severe weather, fires, earthquakes, tornadoes, floods, droughts and significant changes in water levels in waterways. Any of these events could lead to substantial financial losses. WEC Energy Group considers information to be “material” based on thresholds defined by the Securities and Exchange Commission (SEC) for the companies’ financial reporting.

C2.2

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

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Our company has a formal process in place to provide regular updates regarding discrete environmental matters, some of which relate to climate-related risks, to the Audit and Oversight Committee of the board via a quarterly report from the vice president-environmental, who also provides an annual presentation to the committee. The chief executive officer and other members of executive management provide the board with more frequent updates on this subject as necessary. The Audit and Oversight Committee assists the board of directors in carrying out its oversight responsibility of the company's compliance with legal and regulatory requirements and various risk exposures. The committee is responsible for discussing, among other things, the company's major, discrete environmental risk exposures and the steps management has taken to monitor and control such exposures. We continuously monitor our assets as well as the legislative, regulatory and legal developments in this area. In addition, we are members of, and actively participate in, several industry organizations, including the Edison Electric Institute and the American Gas Association, which are very involved in the legislative and regulatory process.
Broader environmental risk oversight remains the responsibility of the full board. Throughout the year, the board engages in substantive discussions with management about the company's long-term strategy, which the board must evaluate within the context of the many risks and opportunities facing the utility sector, including those related to climate change.
While the board delegates specified duties to its committees, the board retains collective responsibility for comprehensive risk oversight, including short-term and long-term critical risks that could impact the company's sustainability. The board believes that certain risks should be contemplated by the full board, such as oversight of environmental and social risks, including the potential impact of climate change on the utility sector as a whole and the company in particular, and review and approval of significant capital projects and investments, including those projects and investments that will enable the company to meet its carbon and methane emission reduction goals.

Management routinely reports to the board on both high-level and narrowly focused risks, which serve as important input as the directors evaluate the impact of strategic alternatives. The full board also reviews the company's annual Corporate Responsibility Report before it is published, and reviewed the company's Climate Reports issued in 2019 and 2021 as well, all as a mechanism to affirm that management has appropriately captured the tone and essence of its commitment to sustainable decision making.
Management's enterprise-wide approach to identifying, assessing and managing risk and compliance is facilitated through our Enterprise Risk Steering Committee (ERSC), which consists of leaders of senior level management. ERSC members regularly review the company's key risk areas and provide input into the development and implementation of effective compliance and risk management practices.
The separate Climate Risk Committee brings together senior-level officers responsible for aspects of overall corporate strategy. Our Environmental team provides reports at the committee meetings, which occur at least quarterly, to discuss goals and initiatives that involve climate-related risks and opportunities. Assessing risks/opportunities is part of the mission of the Climate Risk Committee.

C2.2a

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	We are continuing to analyze the GHG emission profile of our electric generation and electric and natural gas distribution system resources. Throughout the company, our regulatory, environmental and government affairs teams scrutinize proposals at all levels of government. We also are engaged with Wisconsin agencies, organizations and other stakeholders as participants on the Governor's Task Force on Climate Change.
Emerging regulation	Relevant, always included	Potential future regulation at either the federal or state level may impact how we operate our facilities. We are working with other stakeholders to determine the potential impacts to our operations of future legislation or regulation that may be adopted. Any future regulations that may be adopted may cause our environmental compliance spending to differ materially from the amounts currently estimated, and there is no guarantee we will be allowed to fully recover costs incurred to comply with future federal regulations or that cost recovery will not be delayed or otherwise conditioned. We monitor the regulatory environment closely, and consider changes and trends as we develop and execute strategic plans.
Technology	Relevant, always included	Advances in technology could make some of our facilities uneconomic to maintain or operate, and could affect unit retirement and replacement decisions. In addition, we consider current technology and

		expected technology advancements in developing our strategies and goals.
Legal	Relevant, always included	Legal risk is considered in our organization's climate-related risk assessments and is one of the company's identified risk exposures. The company's compliance with legal and regulatory requirements in environmental and other matters requires management's continuous monitoring and control of our assets and related legislative, regulatory and legal developments. Some types of legal matters could potentially affect our ability to operate electric generating units and/or our natural gas distribution businesses economically.
Market	Relevant, always included	Changes in fuel markets could make some of our electric generating units uneconomic to maintain or operate, and could affect unit retirement and replacement decisions. We also continue to monitor changes in fuel markets for potential impacts on our natural gas businesses.
Reputation	Relevant, always included	Impairment of the company's reputation could adversely affect the desirability of the company's stock and consequently its price, and could also impact our standing in our communities, which could affect our ability to attract and retain employees, among other things.
Acute physical	Relevant, always included	Our financial performance depends on the successful operation of our electric generation and natural gas and electric distribution facilities. The operation of these facilities involves many risks, including the breakdown or failure of equipment or processes. Potential breakdown or failure may occur due to severe weather; catastrophic events (i.e., fires, earthquakes, explosions, tornadoes, floods, droughts, pandemic health events, etc.); significant changes in water levels in waterways; or operating limitations that may be imposed by environmental or other regulatory requirements. Because our electric generation facilities are interconnected with third-party transmission facilities, the operation of our facilities could also be adversely affected by events impacting their systems. Any of the described events could lead to substantial financial losses. Unplanned outages at our power plants may reduce our revenues or cause us to incur significant costs if we are required to operate our higher cost electric generators or purchase replacement power to satisfy our obligations, and could result in additional maintenance expenses.
Chronic physical	Relevant, always included	Our operations are subject to various conditions that can result in fluctuations in energy sales to customers, including varying weather conditions. Our results of operations and cash flows are affected by the demand for electricity and natural gas, which can vary greatly based upon weather conditions. Our overall results may fluctuate substantially on a seasonal basis. Milder temperatures during the summer cooling season and during the

		winter heating season may result in lower revenues and net income. Our electric reliability and planning area evaluates potential impacts of risks associated with weather events on system availability and reliability. Their well-established processes are expected to reduce the magnitude of energy generation and delivery risks associated with weather events over the next one to three years. We perform economic analyses of weather and energy use to establish historical relationships that are used for generation, financial and strategic planning. These analyses include long- and short-term forecasts of sales revenues and demand. The forecasts are supported by load research which identifies who uses what energy. This analysis drives the cost of service studies used in price setting and market research areas of the company. This planning process is expected to reduce the magnitude of risks associated with changes in customer demand over the next one to three years.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Acute physical

Increased severity and frequency of extreme weather events such as cyclones and floods

Primary potential financial impact

Increased direct costs

Company-specific description

Our financial performance depends on the successful operation of our electric generation and natural gas and electric distribution facilities. The operation of these facilities involves many risks, including the breakdown or failure of equipment or processes. Potential breakdown or failure may occur due to severe weather;

catastrophic events (i.e., fires, earthquakes, explosions, tornadoes, floods, droughts, pandemic health events, etc.); significant changes in water levels in waterways; or operating limitations that may be imposed by environmental or other regulatory requirements. Because our energy distribution facilities are interconnected with third-party transmission facilities, the operation of our facilities also could be adversely affected by events impacting their systems.
Any of the described events could lead to substantial financial losses. Unplanned outages at our power plants may reduce our revenues or cause us to incur significant costs if we are required to operate our higher-cost electric generators or purchase replacement power to satisfy our obligations, and could result in additional maintenance expenses.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

10,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

We budget approximately $10 million per year for storm restoration, and actual costs can vary dramatically based upon weather.

Cost of response to risk

10,000,000

Description of response and explanation of cost calculation

Our electric reliability and planning area evaluates potential impacts of risks associated with weather events on system availability and reliability. Their well-established processes are expected to reduce the magnitude of energy generation and delivery risks associated with weather events over the next one to three years.
Wisconsin Public Service's System Modernization and Reliability Project is a multiyear initiative focused on modernizing parts of its electricity distribution system by burying or upgrading lines. Wisconsin Public Service received the 2019 ReliabilityOne Award for Outstanding Midsize Utility, and in 2020, for the tenth year in a row, We Energies

received the ReliabilityOne Award for Outstanding Reliability Performance in the Midwest. These awards are given annually to utilities that have excelled in delivering dependable electric service to their customers. We Energies is upgrading its infrastructure and plans to rebuild hundreds of miles of electric distribution lines and replace thousands of poles and transformers. These investments will renew and modernize delivery networks, reduce operating costs and improve energy efficiency, and are expected to strengthen the company's position as a reliable electric service provider.
The company uses an equipment reliability index we created based on industry best practices to gauge our equipment reliability program performance, identify opportunities to improve equipment reliability, and gain the associated cost and performance benefit.
The company's Business Continuity Plan addresses risks of events such as those caused by severe weather.

Comment

We assess and adjust for weather-related risks in our daily operations in order to improve reliability and resilience, safety, and customer satisfaction.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market
Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Our operations are subject to various conditions that can result in fluctuations in energy sales to customers, including varying weather conditions. Our results of operations and cash flows are affected by the demand for electricity and natural gas, which can vary greatly based upon weather conditions.

Time horizon

Short-term

Likelihood

About as likely as not

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Our overall results may fluctuate substantially on a seasonal basis. Milder temperatures during the summer cooling season and during the winter heating season may result in lower revenues and net income. A quantitative estimate of the inherent financial impacts of the risk is not currently available.

Cost of response to risk

Description of response and explanation of cost calculation

We perform economic analyses of weather and energy use in order to establish historical relationships that are used for generation, financial and strategic planning. These analyses include long- and short-term forecasts of sales revenues and demand. The forecasts are supported by load research that identifies who uses what energy. This analysis drives the cost-of-service studies used in price setting and market research areas of the company.

Long-term sales and demand forecasts (1 year and beyond) take into account the most recent historical data available when the forecast is prepared along with forecasts of key drivers (e.g., economic/demographic variables and energy prices). Management regularly evaluates the performance of the forecasts throughout the year under normal conditions. The impact of a societal or economic shock, such as the COVID-19 pandemic, may increase the frequency of these reviews and result in revised forecasts. Our planning process is expected to reduce the magnitude of risks associated with changes in customer demand over the next one to three years.

Comment

There is a potential for more tasks to be accomplished with electricity, including travel, space heating and water heating, due to the increased electrification that may result from transition to a low-carbon society. Today, however, electric heat pumps are four to five times more costly than natural gas heating in cold climate regions. The company takes into consideration known and measurable information about current and future customer owned generation plans in the forecasting process. The forecasting methodology can accommodate the potential impact of future electrification (such as the market penetration of electric vehicles in our electric service territories) assuming that its impact is large enough to be distinguished from other drivers (weather, customer growth, energy efficiency, etc.). Daily and seasonal demand for electricity may fundamentally change, increasing the impacts of seasonal variations and higher peak demand, particularly in winter seasons.

We have not calculated the cost of management.

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Our customers' use of electricity and natural gas has decreased as a result of individual conservation efforts, including the use of more energy efficient technologies. These conservation efforts, which may be driven in part by climate concerns, could continue. Customers could also voluntarily reduce their consumption of energy in response to decreases in their disposable income and increases in energy prices. Conservation of energy can be influenced by certain federal and state programs that are intended to influence how consumers use energy. In addition, several states, including Wisconsin and Michigan, have adopted energy efficiency targets to reduce energy consumption by certain dates. Advances in technology could change the channels through which our electric customers purchase or use power, which could reduce our sales and revenues or increase our expenses.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Any of the described matters, as well as any regulatory delay in adjusting rates as a result of reduced sales from effective conservation measures or the adoption of new technologies, could adversely impact our results of operations and financial condition. A quantitative estimate of the inherent financial impacts of the risk is not currently available.

Cost of response to risk

Description of response and explanation of cost calculation

As part of our planning process, we estimate the impacts of changes in customer growth and customer energy conservation efforts. This planning process is expected to reduce the magnitude of risks associated with changes in customer demand over the next one to three years.

Comment

Increased electrification that may result from transition to a low-carbon society could affect daily and seasonal demand for electricity. In Wisconsin, and the Midwest, demand for electricity typically peaks in the summer, when the use of energy-intensive air conditioners is high. With the electrification of multiple end uses, Wisconsin could transition to a winter-peaking system. Electric demand would rise significantly in the coldest months of the year, driven by heat pumps and the fact that electric vehicles would need more charge time to travel an equivalent distance in cold conditions. Today, however, electric heat pumps are four to five times more costly than natural gas heating in our region. We have not calculated the cost of management.

Identifier

Risk 4

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Company-specific description

We are continuing to analyze the GHG emission profile of our electric generation resources and to work with other stakeholders to determine the potential impacts to our operations of future legislation or regulation that may be adopted. Throughout the company, our regulatory, environmental and government affairs teams scrutinize proposals at all levels of government. We also are engaged with Wisconsin agencies, organizations and other stakeholders as participants on the Governor's Task Force on Climate Change.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Future legislation or regulation that may be adopted may impact how we operate our existing fossil-fueled power plants and biomass facility. We are currently evaluating the financial impacts of the risk.

Cost of response to risk

1,900,000,000

Description of response and explanation of cost calculation

We continue to evaluate opportunities and actions that ensure reliability, preserve fuel diversity, lower costs for our customers, and contribute toward long-term GHG reductions.

By the end of 2020, we were able to reduce carbon dioxide emissions more than 50 percent below 2005 levels. By making operating refinements, retiring less efficient generating units, and executing our capital plan, we were committed to a 55 percent reduction in carbon emissions below 2005 levels by 2025 and a 70 percent reduction by the end of 2030. (Note that we announced more aggressive carbon reduction goals in 2021: a 60% reduction in carbon emissions by 2025 from its electric generation fleet and an 80% reduction by the end of 2030.) Over the longer term, the target for our generation fleet is net-zero carbon emissions by 2050.

We have implemented and continue to evaluate numerous options to meet our carbon reduction goals. Options considered include increased use of existing natural gas combined cycle units, co-firing or switching to natural gas in existing coal-fired units, reduced operation or retirement of existing coal-fired units, addition of renewable energy resources (wind, solar), and supply- and demand-side energy efficiency and distributed generation.

Since 2018, we have retired more than 1,800 MW of nameplate coal capacity and by 2025 we will have retired two-thirds of total nameplate coal capacity. In accordance with

our five-year capital plan (2021-2025), we plan to invest $1.9 billion to increase the amount of renewable generation in our Wisconsin utility system through our regulated utilities, and retire an incremental 1,400 MW of fossil-fueled generation. In addition, we are evaluating possible subsequent actions with respect to national and international efforts to reduce GHG emissions. Our goals are in alignment with the Paris Accord. WEC Energy Group continues to reduce methane emissions by improving our natural gas distribution system. Our 2030 goal called for a 30 percent reduction in methane emissions from a 2011 baseline. (Note that we announced a more aggressive methane reduction goal in 2021: net-zero methane emissions from our natural gas distribution by 2030.)

Comment

Recent and planned investments in renewable energy (referred to above), air quality control systems, power grid upgrades, natural gas distribution system modernization (see C4.3c) and other environmental protection technologies position our energy companies well for the future.

Identifier

Risk 5

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Company-specific description

There is no guarantee that we will be allowed to fully recover costs incurred to comply with federal or state GHG regulations, or that cost recovery will not be delayed or otherwise conditioned.

Increased costs to shareholders could make our stock less attractive to investors and, ultimately, impact our ability to fund initiatives and operations.

Time horizon

Medium-term

Likelihood

Unknown

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

GHG regulations that may be adopted in the future, at either the federal or state level, may cause our environmental compliance spending to differ materially from the amounts currently estimated. A quantitative estimate of the inherent financial impacts of the risk is not currently available.

Cost of response to risk

Description of response and explanation of cost calculation

Governance and project approval measures are in place to ensure that costs to comply with environmental regulations are prudently incurred. These measures are expected to reduce the likelihood and/or magnitude of this cost recovery risk over the next three to six years.

Comment

Current GHG emissions regulation, as well as future legislation or regulation that may be adopted, carries with it a wide range of possible effects on our energy business; therefore, we strive for the flexibility to react to this variety of potential outcomes while ensuring a secure, low-cost and reliable supply of fuel for generating needs. Our electric energy companies build flexibility into fuel supply and transportation contracting strategies to account for potential climate-change regulation. We have not calculated the cost of management.

Identifier

Risk 6

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology

Transitioning to lower emissions technology

Primary potential financial impact

Increased capital expenditures

Company-specific description

The timing of our investments in low-emitting technologies may impact and/or be impacted by the timing of other elements of our ESG Progress Plan, which could affect overall costs.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

This transition risk could adversely affect our future results of operations, cash flows and financial condition. A quantitative estimate of the inherent financial impacts of the risk is not currently available.

Cost of response to risk

Description of response and explanation of cost calculation

Our generation planning processes evaluate potential impacts of renewable energy penetration, changes in the fuel markets and advances in technology, in part to support decisions regarding unit retirement and replacement. These processes are expected to reduce the magnitude of unexpected adverse impacts of increased renewable energy penetration risk over the next three to six years. Examples of the mitigation of potential adverse impacts of increased renewable energy penetration risk include availability of utility-scale energy storage systems, transmission system upgrades and expansions to accommodate the transfer of electricity across the region and to accommodate the changing resource mix, and a mix of renewable generation resources that is available to serve peak demand.

Comment

We have not calculated the cost of management.

Identifier

Risk 7

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation

Mandates on and regulation of existing products and services

Primary potential financial impact

Increased direct costs

Company-specific description

Our natural gas delivery systems and natural gas storage fields may generate fugitive gas as a result of normal operations and as a result of excavation, construction, and repair. Fugitive gas typically vents to the atmosphere and consists primarily of methane. CO2 also is a byproduct of natural gas consumption. Future regulation of GHG emissions could increase the price of natural gas; a significant increase in the price of natural gas may increase rates for our natural gas customers, which could reduce natural gas demand.

Time horizon

Medium-term

Likelihood

About as likely as not

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Future regulation of GHG emissions could increase the price of natural gas, restrict the use of natural gas, and adversely affect our ability to operate our natural gas facilities. A quantitative estimate of the inherent financial impacts of the risk is not currently available.

Cost of response to risk

Description of response and explanation of cost calculation

Our load forecasting and fuel procurement processes evaluate potential impacts of changes in fuel prices on customer demand. These processes are expected to reduce the magnitude of unanticipated natural gas price risk over the next three to six years.

Comment

Our scenario analyses conducted for our Climate Report are helping us better understand how the region's economy and our own carbon profile could evolve under a wide range of assumptions around GHG reduction targets, natural gas and other fuel prices, technology availability and costs, and other variables. We have not calculated the cost of management.

Identifier

Risk 8

Where in the value chain does the risk driver occur?

Downstream

Risk type & Primary climate-related risk driver

Market

Changing customer behavior

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Company-specific description

Customer-owned generation installations have increased in recent years, reducing demand for electricity.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Customer-owned generation installations could continue to increase, resulting in further erosion of market share. Advances in technology could change the channels through which our electric customers purchase or use power, which could reduce our revenues and/or increase our expenses. A quantitative estimate of the inherent financial impacts of the risk is not currently available.

Cost of response to risk

Description of response and explanation of cost calculation

Our load forecasting processes evaluate potential impacts of changes in customer demand. These processes are expected to reduce the magnitude of unanticipated customer demand risk over the next three to six years.

Comment

By researching and investing in local generation, we aim to provide electricity close to the point of use and improve power system resiliency. We are striving to effectively integrate local generation with a focus on renewable energy, while building on the availability and reliability of the existing power grid in a compatible and interactive way. We have not calculated the cost of management.

C2.4

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

Yes

C2.4a

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

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of lower-emission sources of energy

Primary potential financial impact

Returns on investment in low-emission technology

Company-specific description

Expanding the presence of zero-carbon resources in our utility fleet (wind and solar), our infrastructure wind facilities, and customer solar pilot programs creates new investment opportunities and reduces our exposure to potential future climate regulations. Generation planning and project approval measures are in place to help identify potential opportunities for cost-effective renewable and other programs (evaluation of the use of carbon capture, utilization and storage, energy storage, and offsets) over the next one to six years.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4,100,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Management rolled out our ESG Progress Plan: A Road Map for Investment in Efficiency, Sustainability and Growth, the company's five-year (2021-2025), $16.1 billion capital plan. The plan is designed to help the company achieve its long-term emissions reduction targets. Part of that plan includes increasing our investments in zero-carbon resources. By 2025, we plan to invest $1.9 billion to increase the amount of renewable generation in our Wisconsin utility system through our regulated utilities and another $2.2 billion through our WEC Infrastructure subsidiary.

Cost to realize opportunity

4,100,000,000

Strategy to realize opportunity and explanation of cost calculation

We expect to spend $1.9 billion in planned utility renewable investments and $2.2 billion in non-utility infrastructure portfolio investments in a number of wind generating facilities in the Midwest between 2021 and 2025. Generation planning and project approval

measures are in place to help identify potential opportunities for cost-effective renewable energy resource projects over the next one to six years.

Comment

Although our largest electric utilities met Wisconsin's renewable portfolio standard well in advance of the state deadline, our goals go further.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Development and/or expansion of low emission goods and services

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

The electrification of transportation and buildings could create new demand for electricity. Today, however, heat pumps are four to five times more costly than natural gas heating, and also less efficient, in cold climate region, but research we support continues to show promise to allow strategic electrification.
New market opportunities could emerge from working with customers to meet their clean energy and sustainability goals -- our customer solar pilot programs are one example. Investment opportunities to modernize and harden electric distribution equipment are helping us improve reliability and meet our customers' expectations.
We have initiated an EV pilot program for our internal fleet with the goal of electrifying 40% of all storeroom equipment by 2025 and 75% by 2030, as well as 35% of all Cars/SUVs & 25% of Class 3 truck purchases by 2025.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

35,000,000

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

The estimate is associated with investment required for our residential and commercial electric vehicle (EV) pilot programs, approved by the Public Service Commission of Wisconsin. Our We Energies and WPS utilities will install EV charging equipment and supporting electric distribution infrastructure for our EV charging pilot programs for residential and commercial customers in our Wisconsin electric service territories through 2026.

Cost to realize opportunity

35,000,000

Strategy to realize opportunity and explanation of cost calculation

We monitor developments in the following areas to determine if action should be taken:
Financial incentives for alternative energy technologies
Electric vehicle models offered by car manufacturers
Sales of electric vehicles and percent of new car sales
Number of public charging stations
Customer opinions about electric vehicle options
Behind-the-meter solar energy systems
Heat pump installations

Comment

We estimate that the residential and commercial EV pilots will result in about $35 million of additional investment in EV charging equipment and related infrastructure over the next five years.

Identifier

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Other, please specify

Increased reliability of supply chain and ability to operate under various conditions

Primary potential financial impact

Increased revenues resulting from increased production capacity

Company-specific description

Investment opportunities in distribution projects could help us deliver clean energy to market while improving customer affordability and efficiency. Investment opportunities to modernize and harden electric distribution equipment are helping us improve reliability and meet our customers' expectations. System modernization and replacement efforts are reducing methane emissions while enhancing safety and reliability in our natural gas operations.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

Potential financial impact figure – maximum (currency)

Explanation of financial impact figure

Management rolled out our ESG Progress Plan: A Road Map for Investment in Efficiency, Sustainability and Growth, the company’s five-year (2021-2025) capital plan. The plan is designed to help the company achieve its long-term emissions reduction targets.

Cost to realize opportunity

8,000,000,000

Strategy to realize opportunity and explanation of cost calculation

In order to adequately assess potential changes needed to our electric distribution system, we monitor developments in import capacity for the state of Wisconsin; new transmission proposals; and wind and solar capacity additions in the Midcontinent Independent System Operator region. We continue our system modernization and replacement efforts which are reducing methane emissions while enhancing safety and reliability in our natural gas operations. By 2025, we plan to invest $6.3 billion to increase utility grid and fleet reliability and another $1.7 billion for grid and fleet modernization in our utility system.

Comment

C3. Business Strategy

C3.1

(C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

C3.1a

(C3.1a) Is your organization's low-carbon transition plan a scheduled resolution item at Annual General Meetings (AGMs)?

	Is your low-carbon transition plan a scheduled resolution item at AGMs?	Comment
Row 1	No, and we do not intend it to become a scheduled resolution item within the next two years	

C3.2

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

Yes, qualitative and quantitative

C3.2a

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

Climate-related scenarios and models applied	Details
Other, please specify Industry-specific research from EPRI and global emissions scenarios used by the Intergovernmental Panel on Climate Change.	We engaged in research with the Electric Power Research Institute (EPRI) to refine our planning process for achieving our long-term GHG reduction goal. These research projects will help us assess economic and technological trends and conduct scenario analysis for our companies, evaluating potential GHG reduction trajectories in the context of the Paris Agreement's goal of limiting global temperature rise to below 2 degrees Celsius. The 2015 United Nations climate change conference resulted in the Paris Agreement, which aims to keep global average temperature rise this century to less than 2 degrees Celsius above pre-industrial levels. The International Energy Association (IEA) performed analyses and modeling that forecast a global pathway to that goal.

	To assess the period after 2030 and minimize speculation to the extent possible, we collaborated with EPRI and other industry members on a project evaluating potential GHG reduction pathways for our electric companies, taking into account IEA's 2-degree scenario and other publicly available data. The project provided insights and identification of issues related to characterizing scientific understanding and identifying technical issues for decision-making; helped identify risks and opportunities associated with potential impacts of global efforts to manage climate change on company investments and operations; developed a technical foundation for informed public dialogue and decisions on climate scenarios and targets to improve understanding of issues and technical needs; developed consistent analytical frameworks; and enabled ongoing communication efforts. A second EPRI study focused on the State of Wisconsin from 2020 to 2050, developing a vision of how the economy and our carbon profile could change under various assumptions associated with GHG reduction targets, natural gas and other energy prices, and technology availability and costs, identifying cost-effective and resilient strategies to produce and use clean energy to realize a greater potential for efficient electrification and GHG emission reduction for our electric companies. These research projects helped to inform the preparation of our initial climate report, Pathway to a Cleaner Energy Future, in which we describe the risks and opportunities associated with transitioning to a low-carbon economy, based upon the modeling of dozens of potential emission reduction pathways. It incorporates industry-specific research from EPRI and global emissions scenarios used by the Intergovernmental Panel on Climate Change. Our discussion and analysis were framed in accordance with the recommendations of the Financial Stability Board's Task Force on Climate-Related Financial Disclosures. Our analysis considered a number of variables that will influence the path we take to achieving our climate-related goals. We supply electricity and natural gas to more than 4.6 million customers throughout the Midwest. It's imperative that we maintain a system that can respond reliably and consistently in the face of severe weather events and other emergencies. We also need to comply with an evolving regulatory environment that could affect our capital investments and customer costs. Developments in alternative energy technologies, such as electric vehicles, also could influence electric demand and change the playing field. Our analysis is not an end in itself, but one step in our ongoing

	mission to provide affordable, reliable, and clean energy – for today's customers and generations to come.

C3.3

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

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Our economic analyses of weather and energy use have established historical relationships that are used for generation, financial and strategic planning, price setting and market research. Estimates of the impacts of changes in customer growth and customer energy conservation efforts have helped assess changes in customer demand.
Supply chain and/or value chain	Yes	We have a diverse generation mix and manage fuel procurement risk by establishing a portfolio of fuel procurement contracts negotiated over a period of time with multiple suppliers, terms, and volumes.
Investment in R&D	Yes	Research and development projects involving renewable energy have become more relevant and cost-justified. Research can also enable us to increase our understanding of our risks and opportunities on a region-specific basis. Renewable energy costs have reduced over time.
Operations	Yes	Our generation planning processes evaluate potential impacts of renewable energy penetration, changes in the fuel markets and advances in technology to support decisions regarding unit retirement and replacement. We are upgrading our infrastructure, rebuilding hundreds of miles of electric distribution lines, replacing thousands of poles and transformers, and replacing hundreds of miles of cast iron gas distribution pipes. We also are investing in utility solar and customer solar pilot programs. These investments will renew and modernize delivery networks, reduce operating costs, enhance generating facility diversity, and improve energy efficiency - all of which is expected to strengthen our position as a reliable electric and natural gas service provider. Our electric reliability and planning area evaluates potential impacts of weather events on system availability and reliability, and the company's equipment reliability index

		gauges our equipment reliability program performance, identifying opportunities to improve equipment reliability and gain the associated cost and performance benefits.

C3.4

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

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues	Our economic analyses of weather and energy use have established historical relationships, which are used for generation, financial and strategic planning, price setting, and market research. Estimates of the impacts of changes in customer growth and customer energy conservation efforts have helped assess changes in customer demand. Our load forecasting and fuel procurement processes evaluate potential impacts of changes in fuel prices on customer demand to reduce the magnitude of unanticipated natural gas price risk.

C3.4a

(C3.4a) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

Our 2020 annual report to the SEC disclosed that the company continues to monitor the financial and operational feasibility of taking more aggressive action to further reduce GHG emissions in order to limit future global temperature increases. Our strategy and financial planning processes take into account the potential for such efforts to impact how we operate our electric generating units and natural gas facilities, potentially leading to increased competition and regulation.

C4. Targets and performance

C4.1

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

Absolute target

C4.1a

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

Target reference number

Abs 1

Year target was set

2016

Target coverage

Business activity

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO2e)

35,700,000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

40

Covered emissions in target year (metric tons CO2e) [auto-calculated]

21,420,000

Covered emissions in reporting year (metric tons CO2e)

19,471,000

% of target achieved [auto-calculated]

113.6484593838

Target status in reporting year

Achieved

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

2°C aligned

Please explain (including target coverage)

In 2019, over a decade early, we achieved our initial goal to reduce CO2 emissions from our electric generation by 40% below 2005 levels by 2030. Since 2018, we have retired more than 1,800 MW of nameplate coal capacity and by 2025 we will have retired two-thirds of total nameplate coal capacity. These retirements have lowered operating costs by approximately $100 million on an annual basis and eliminated more than 10 million tons of CO2 emissions per year from these sources.

Target reference number

Abs 2

Year target was set

2020

Target coverage

Business activity

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO2e)

35,700,000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2025

Targeted reduction from base year (%)

55

Covered emissions in target year (metric tons CO2e) [auto-calculated]

16,065,000

Covered emissions in reporting year (metric tons CO2e)

19,471,000

% of target achieved [auto-calculated]

82.6534250064

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

To ensure we remain on track to meet our new long-term goal, we set an interim target to reduce CO2 emissions from our electric generation by 55% below 2005 levels by 2025. (Note that we announced more aggressive carbon reduction goals in 2021, including a 60% reduction in carbon emissions by 2025.)

Target reference number

Abs 3

Year target was set

2020

Target coverage

Business activity

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO2e)

35,700,000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2030

Targeted reduction from base year (%)

70

Covered emissions in target year (metric tons CO2e) [auto-calculated]

10,710,000

Covered emissions in reporting year (metric tons CO2e)

19,471,000

% of target achieved [auto-calculated]

64.9419767907

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

In 2020, in light of achieving our previous 2030 emission reduction goal in 2019, we revised our 2030 carbon reduction goal to a 70% reduction for our electric generation. (Note that we announced more aggressive carbon reduction goals in 2021, including an 80% reduction by the end of 2030.)

Target reference number

Abs 4

Year target was set

2020

Target coverage

Business activity

Scope(s) (or Scope 3 category)

Scope 1

Base year

2005

Covered emissions in base year (metric tons CO2e)

35,700,000

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

Target year

2050

Targeted reduction from base year (%)

100

Covered emissions in target year (metric tons CO2e) [auto-calculated]

0

Covered emissions in reporting year (metric tons CO2e)

19,471,000

% of target achieved [auto-calculated]

45.4593837535

Target status in reporting year

Underway

Is this a science-based target?

Yes, we consider this a science-based target, but it has not been approved by the Science-Based Targets initiative

Target ambition

Well-below 2°C aligned

Please explain (including target coverage)

Our 2050 goal is to be net carbon neutral.
Scope 1 emissions for this calculation include all of WEC Energy Group's owned fossil fuel generation units. Biogenic mass is not included. For other reporting purposes, we include the CO2 associated with energy used to meet our native load in our calculation of our progress toward our CO2 reduction goals. By the end of 2020, we were able to reduce carbon dioxide emissions more than 50 percent below 2005 levels for our goal.

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to reduce methane emissions

C4.2b

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

Target reference number

Oth 1

Year target was set

2018

Target coverage

Business activity

Target type: absolute or intensity

Intensity

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

Methane reduction target

Other, please specify

metric ton of methane emissions

Target denominator (intensity targets only)

Other, please specify

mile of natural gas distribution lines

Base year

2011

Figure or percentage in base year

100

Target year

2030

Figure or percentage in target year

70

Figure or percentage in reporting year

% of target achieved [auto-calculated]

Target status in reporting year

Is this target part of an emissions target?

No, this is a standalone target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

Target was a decrease in the rate of methane emissions from the natural gas distribution lines in our network of 30% per mile by the year 2030 from a 2011 baseline. At the end of 2020, we were more than halfway toward achieving that goal. (Note that we announced a more aggressive methane reduction goal in 2021: net-zero methane emissions from our natural gas distribution by 2030.)

C4.3

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

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	0	0
Implementation commenced*	1	6,000
Implemented*	0	0
Not to be implemented	0	0

C4.3b

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

Initiative category & Initiative type

Fugitive emissions reductions

Oil/natural gas methane leak capture/prevention

Estimated annual CO2e savings (metric tonnes CO2e)

6,000

Scope(s)

Scope 1

Voluntary/Mandatory

Voluntary

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

0

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

290,000,000

Payback period

>25 years

Estimated lifetime of the initiative

16-20 years

Comment

Our natural gas utility subsidiary, The Peoples Gas Light and Coke Co., is engaged in its System Modernization Program, which involves replacing cast and ductile iron natural gas mains with modern polyethylene pipes on the Peoples Gas natural gas distribution system in Chicago, Illinois. Under the EPA's Methane Challenge, Peoples Gas has committed to replace its remaining iron natural gas mains at an annual rate of at least 2% for five years beginning in 2017. Fugitive methane emissions will continue to decrease as we replace more mains each year.
In addition to continuous operational improvements and equipment upgrades, we plan to utilize renewable natural gas throughout our utility systems to achieve methane reductions. This consists of blending renewable natural gas from dairy farms and other sources with conventional natural gas, reducing the carbon intensity of natural gas supplies. It suits our business especially well due to the strong dairy industry in our region.

C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	We are continuing to analyze the GHG emission profile of our electric generation resources and to work with other stakeholders to determine the potential impacts to our operations of future legislation or regulation that may be adopted.
Other	We currently are implementing actions (e.g., power plant fuel and operational choices; investment in utility-scale renewables) that preserve fuel diversity, reduce costs to customers, and reduce long-term greenhouse gas emissions, independent of greenhouse gas regulatory requirements/standards, all as part of our commitment to provide affordable, reliable and clean energy to our customers.

C4.5

(C4.5) 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

C4.5a

(C4.5a) 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

Group of products

Description of product/Group of products

Wisconsin Electric Power Company's Dedicated Renewable Energy Resource pilot; Wisconsin Solar Now pilot program; and Energy for Tomorrow® and NatureWise®, two successful “green pricing” renewable energy programs.

Are these low-carbon product(s) or do they enable avoided emissions?

Low-carbon product and avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify

Midwest Renewable Energy Tracking System program

% revenue from low carbon product(s) in the reporting year

Comment

Under the Solar Now program, We Energies pays commercial, industrial, government and nonprofit customers to host solar panels on their roofs and property. We Energies handles installation, maintenance and operation of the solar equipment – providing a turnkey solution to customers wanting to participate in renewable generation.

Renewable Energy Credits (RECs) from both Energy for Tomorrow® and NatureWise® “green pricing” renewable energy programs are tracked and retired using the Midwest Renewable Energy Tracking System program. Energy for Tomorrow® is accredited by the Center for Resource Solutions and is Green-e Energy certified.

C-EU4.6

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

See our response to C4.2 where our methane reduction goal is described: Our goal was to reduce the rate of methane emissions from our natural gas distribution lines by 30% per mile below 2011 levels by 2030. (Note that we announced a more aggressive methane reduction goal in 2021: net-zero methane emissions from our natural gas distribution by 2030.)
In addition, we operate our generating facilities as efficiently as possible to minimize methane resulting from combustion of fossil fuels.

C5. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO2e)

35,700,000

Comment

The value represents emissions associated with electricity to meet customer demand, including power purchases that were used to meet demand that exceeded generating capability.

Scope 2 (location-based)

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO2e)

0

Comment

WEC Energy Group did not calculate Scope 2 emissions in the base year. The only "purchased or acquired electricity, steam, heat or cooling consumed by the reporting company" would be from system losses associated with power purchases. Those amounts are assumed to have been de minimis in the base year.

Scope 2 (market-based)

Base year start

January 1, 2005

Base year end

December 31, 2005

Base year emissions (metric tons CO2e)

0

Comment

WEC Energy Group did not calculate Scope 2 emissions in the base year. The only "purchased or acquired electricity, steam, heat or cooling consumed by the reporting company" would be from system losses associated with power purchases. Those amounts are assumed to have been de minimis in the base year.

C5.2

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

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

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

20,167,000

Comment

The total includes:
19,466,400 metric tons CO2e from company-owned fossil generation
298,600 metric tons CO2e from biogenic carbon
402,000 metric tons CO2e from natural gas distribution lines and natural gas storage

C6.2

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

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Emissions are from estimated distribution line losses associated with power purchased from emitting sources.

C6.3

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

Reporting year

Scope 2, location-based

74,000

Scope 2, market-based (if applicable)

74,000

Comment

Emissions are from estimated distribution line losses associated with power purchased from emitting sources.

C6.4

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

No

C6.5

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

Purchased goods and services

Evaluation status

Relevant, not yet calculated

Please explain

The company does not yet have a system in place to track the information needed to estimate Scope 3 emissions due to purchased goods and services. We are currently working on this with our Supply Chain Department.

Capital goods

Evaluation status

Relevant, not yet calculated

Please explain

The company does not yet have a system in place to track the information needed to estimate Scope 3 emissions due to capital goods.

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

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2,766,000

Emissions calculation methodology

Emissions from purchased power: Most of our power purchases are from non-emitting sources - nuclear and renewable energy.
In 2020, purchases with estimated emissions came from:
- A facility for which emissions were available from the US Environmental Protection Agency data base, and
- The power market, for which emissions were estimated using a regional average rate.

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

14

Please explain

Actual fuel characteristics of purchased electricity are used where available. For remaining purchases, a rate is used that reflects regional average fuel mix data from Michigan, Illinois, Indiana, Ohio and Wisconsin as a proxy.

Extensive evaluation and usage tracking was performed to determine the most effective method to provide fuel to our vehicle fleet. Locations, mileage, costs, and patterns of driver fill-ups were analyzed, resulting in decisions to decommission various bulk fuel locations. Carbon emissions or emissions reductions associated with this activity has not been specifically tracked or estimated.

Upstream transportation and distribution

Evaluation status

Relevant, not yet calculated

Please explain

The company is in the process of evaluating potential methods of calculating estimates of Scope 3 emissions due to upstream transportation and distribution.

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Please explain

The company is in the process of evaluating potential methods of calculating estimates of Scope 3 emissions due to waste generated in operations.

Business travel

Evaluation status

Relevant, not yet calculated

Please explain

A tool used by our travel agency to book and track travel of employees provides reports of carbon associated with our employees' air travel. The agency is rolling out a new reporting platform that will provide information related to our CO2 emissions compared

to other organizations with similar spend.
The Fleet organization provides vehicles to the company in support of field services and other business area needs. A new Fleet Electrification program includes plans to convert a portion of the existing fleet to electric vehicles. WEC Energy's goal is to electrify 40% of all Storeroom equipment by 2025 and 75% by 2030, as well as 35% of all Cars/SUVs & 25% of Class 3 truck purchases by 2025.
Tracking of the carbon emissions reduction will be an important element of this program.
Concerns regarding range ability have been evaluated and are being addressed. A study of range from a full charge of the vehicle shows that the most common user of vehicles drives fewer miles per day than a charge can accommodate, thus demonstrating that the electric vehicles' charge range will be sufficient.
Challenges are being identified and monitored. Larger companies such as Amazon and IKEA have already pre-purchased large quantities of vehicles (Amazon ordered 100,000) creating delays for other buyers in the near future. Though this presents an availability challenge, it is also a situation WEC will use to monitor the success rate of those vehicles.
Additionally, electric heavy duty vehicles are not currently widely available, and are being built now.
WEC is working closely with automotive manufacturers to remain aware of vehicle manufacturing status and availability.
The Peoples Gas territory is well equipped with charging stations, with the exception of the southern territory, which has installation of 30 stations planned.
Fleet is working with the WEC Infrastructure and Fuels department to begin tracking the amount of gas/diesel that will be displaced by converting the fleet to electric vehicles.
Future reporting will likely require technology enhancements, which are also currently being investigated.

Employee commuting

Evaluation status

Relevant, not yet calculated

Please explain

The company has not yet developed a methodology to estimate Scope 3 emissions associated with employee commuting.

Upstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

The company has no upstream leased assets that produce Scope 3 emissions.

Downstream transportation and distribution

Evaluation status

Not relevant, explanation provided

Please explain

The company does not yet have a system in place to track the information needed to estimate Scope 3 emissions due to downstream transportation and distribution.

Processing of sold products

Evaluation status

Relevant, not yet calculated

Please explain

Beneficial use of coal combustion products sold can result in avoidance of carbon dioxide emissions. However, the CDP reporting system does not permit reporting of reductions due to avoided emissions. The estimated amount of avoided emissions is 220,000 metric tons of CO2e.

Use of sold products

Evaluation status

Relevant, calculated

Metric tonnes CO2e

26,632,000

Emissions calculation methodology

Following the requirements of CFR 40 Part 98, Subpart NN, the company reports the potential CO2 quantities associated with natural gas received by end-users that receive less than 460,000 mscf (thousand standard cubic feet) of natural gas per year at a single meter from the company.

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

0

Please explain

Billing records support the information reported under U.S. EPA's Mandatory Greenhouse Gas Reporting Program. Natural gas distribution companies must report the carbon dioxide emissions that would result from the complete combustion or oxidation of the annual volumes of natural gas provided to end-users that receive less than 460,000 mscf (thousand standard cubic feet) of natural gas per year at a single meter from the company.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

Electricity and natural gas products do not have a conventional useful life.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

The company has no downstream leased assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

The company has no franchises that produce Scope 3 emissions.

Investments

Evaluation status

Relevant, not yet calculated

Please explain

The company does not yet have a system in place to track the information needed to estimate Scope 3 emissions due to investments.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Please explain

The company has no other upstream sources of Scope 3 emissions.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Please explain

The company has no other downstream sources of Scope 3 emissions.

C6.7

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

Yes

C6.7a

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

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	295,000	Emissions from biomass used at Rothschild Biomass Cogeneration Plant.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

2.8

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

20,241,000

Metric denominator

unit total revenue

Metric denominator: Unit total

7,241,700

Scope 2 figure used

Location-based

% change from previous year

5

Direction of change

Decreased

Reason for change

Decrease in emissions due to transition to cleaner energy sources.

Intensity figure

0.49

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

20,241,000

Metric denominator

megawatt hour generated (MWh)

Metric denominator: Unit total

41,439,000

Scope 2 figure used

Location-based

% change from previous year

10

Direction of change

Decreased

Reason for change

Decrease in emissions due to transition to cleaner energy sources.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	19,725,000	IPCC Third Assessment Report (TAR - 100 year)
CH4	368,000	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	74,000	IPCC Fourth Assessment Report (AR4 - 100 year)

C-EU7.1b

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

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment

Fugitives	5,000	14,440	0	366,000	Emissions from natural gas distribution lines
Combustion (Electric utilities)	19,389,000	252	0	19,466,400	Emissions from owned fossil generation; also 240 metric tons N2O or 71,500 metric tons CO2e from N2O
Combustion (Gas utilities)	36,000	0	0	36,000	Emissions from combustion at natural gas storage facility
Combustion (Other)	295,000	24	0	298,600	Emissions from owned biomass generation; also 10 metric tons N2O or 3,000 metric tons CO2e from N2O
Emissions not elsewhere classified	0	0	0	0	

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	20,167,000

C7.3

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

By facility

C7.3b

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

Facility	Scope 1 emissions (metric tons CO2e)	Latitude	Longitude
Concord Generating Station	67,000	43.1669	-88.69
Germantown Power Plant	11,000	43.1952	-88.1496

Oak Creek Power Plant	3,241,000	42.8457	-87.8294
Paris Generating Station	49,000	42.6658	-88.0131
Port Washington Generating Station	3,110,000	43.3842	-87.8689
Valley Power Plant	441,000	43.0303	-87.9233
Rothschild Biomass Generating Plant	337,000	44.8878	-89.62978
Weston Generating Station	2,869,000	44.867778	-89.658889
J.P. Pulliam Generating Station	41,000	44.543889	-88.013889
Columbia Energy Center	1,670,000	43.488333	-89.422778
Fox Energy Center	1,573,000	44.322778	-88.214722
De Pere Energy Center	72,000	44.459167	-88.0775
West Marinette	13,000	45.089167	-87.691389
F. D. Kuester	262,000	46.513589	-87.510576
A. J. Mihm	123,000	46.79381	-88.616514
Elm Road Generating Station	5,886,000	42.8457	-87.8294

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

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Electric utility activities	19,765,600	This amount represents CO2e from generation by company-owned facilities and includes 298,600 metric tons of CO2e from combustion of biomass fuel.

C7.9

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

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	Change in renewable energy consumption had no impact on our Scope 1 and Scope 2 emissions in 2020.
Other emissions reduction activities	1,936,000	Decreased	9	Emissions from increased natural gas generation were more than offset by reductions from decreased coal generation during 2020.
Divestment	0	No change	0	We did not make a divestment in 2020.
Acquisitions	0	No change	0	There are no emissions associated with acquisitions made in 2020.
Mergers	0	No change	0	There was no merger in 2020.
Change in output	0	No change	0	Changes in output are reflected in other emissions reduction activities above.
Change in methodology	0	No change	0	There were no changes in methodology in 2020.
Change in boundary	0	No change		There was no change in boundary in 2020.
Change in physical operating conditions	0	No change	0	There were no significant changes in physical operating conditions in 2020.

Unidentified	0	No change	0	There were no significant changes from unidentified factors in 2020.
Other	0	No change	0	There were no significant changes from other factors in 2020.

C7.9b

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

Market-based

C8. Energy

C8.1

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

More than 15% but less than or equal to 20%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	880,000	84,211,000	85,091,000
Consumption of purchased or acquired electricity		0	0	0
Consumption of self-generated non-fuel renewable energy		0		0
Total energy consumption		880,000	84,211,000	85,091,000

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

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

C8.2c

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

Fuels (excluding feedstocks)

Subbituminous Coal

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

38,000,000

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

97.17

Unit

kg CO2 per million Btu

Emissions factor source

40 CFR Part 98 Table C-1

Comment

The default emission factor from U.S. EPA Part 98 is appropriate.

Fuels (excluding feedstocks)

Bituminous Coal

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

3,200,000

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

93.28

Unit

kg CO2 per million Btu

Emissions factor source

40 CFR Part 98 Table C-1

Comment

The default emission factor from U.S. EPA Part 98 is appropriate.

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

43,000,000

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

53.06

Unit

kg CO2 per million Btu

Emissions factor source

40 CFR Part 98 Table C-1

Comment

The default emission factor from U.S. EPA Part 98 is appropriate.

Fuels (excluding feedstocks)

Fuel Oil Number 2

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

11,000

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

Emission factor

73.96

Unit
kg CO2 per million Btu

Emissions factor source
40 CFR Part 98 Table C-1

Comment
The default emission factor from U.S. EPA Part 98 is appropriate.

Fuels (excluding feedstocks)
Wood Waste

Heating value
HHV (higher heating value)

Total fuel MWh consumed by the organization
880,000

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

Emission factor
93.8

Unit
kg CO2 per million Btu

Emissions factor source
40 CFR Part 98 Table C-1

Comment
The default emission factor from U.S. EPA Part 98 is appropriate.

C-EU8.2d

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

Coal – hard

Nameplate capacity (MW)
3,548

Gross electricity generation (GWh)
16,043

Net electricity generation (GWh)

14,315

Absolute scope 1 emissions (metric tons CO2e)

13,665,000

Scope 1 emissions intensity (metric tons CO2e per GWh)

852

Comment

No coal nameplate capacity was retired in 2020.

Lignite

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

None of our facilities use lignite.

Oil

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

None of our facilities use oil as the primary fuel.

Gas

Nameplate capacity (MW)

3,946

Gross electricity generation (GWh)

14,881

Net electricity generation (GWh)

14,373

Absolute scope 1 emissions (metric tons CO2e)

5,763,000

Scope 1 emissions intensity (metric tons CO2e per GWh)

387

Comment

No natural gas combustion facilities were added during 2020.

Biomass

Nameplate capacity (MW)

58

Gross electricity generation (GWh)

64

Net electricity generation (GWh)

64

Absolute scope 1 emissions (metric tons CO2e)

337,000

Scope 1 emissions intensity (metric tons CO2e per GWh)

5,266

Comment

Approximately 88% of the emissions from our Rothschild Biomass Cogeneration Plant were from the use of wood waste, and 12% were due to the use of natural gas.

Waste (non-biomass)

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

None of our facilities use waste for fuel.

Nuclear

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

We own no nuclear generating facilities.

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

We currently own no fossil-fuel plants fitted with CCS.

Geothermal

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

We currently own no geothermal generating facilities.

Hydropower

Nameplate capacity (MW)

157

Gross electricity generation (GWh)

1,010

Net electricity generation (GWh)

1,007

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

There are no CO2 emissions from our hydroelectric generation facilities.

Wind

Nameplate capacity (MW)

1,217

Gross electricity generation (GWh)

2,688

Net electricity generation (GWh)

2,686

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

There are no CO2 emissions from our wind generation facilities.

Solar

Nameplate capacity (MW)

111

Gross electricity generation (GWh)

29

Net electricity generation (GWh)

29

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

There are no CO2 emissions from our solar generation facilities.

Marine

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

We do not own any marine generating facilities.

Other renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Our renewable generating facilities are reported in the previous categories.

Other non-renewable

Nameplate capacity (MW)

0

Gross electricity generation (GWh)

0

Net electricity generation (GWh)

0

Absolute scope 1 emissions (metric tons CO2e)

0

Scope 1 emissions intensity (metric tons CO2e per GWh)

0

Comment

Our non-renewable generating facilities are reported in the previous categories.

Total

Nameplate capacity (MW)

9,037

Gross electricity generation (GWh)

34,715

Net electricity generation (GWh)

32,474

Absolute scope 1 emissions (metric tons CO2e)

19,765,000

Scope 1 emissions intensity (metric tons CO2e per GWh)

569

Comment

Our transition to lower- and no-carbon generation has contributed to the 9% reduction in our Scope 1 emissions intensity compared with 2019. Our Scope 1 emissions intensity including our long-term carbon-free power purchase from a nuclear generating facility is 470 metric tons CO2e per GWh.

C-EU8.4

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

Yes

C-EU8.4a

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

Country/Region

United States of America

Voltage level

Distribution (low voltage)

Annual load (GWh)

45,855

Annual energy losses (% of annual load)

2.5

Scope where emissions from energy losses are accounted for

Scope 2 (location-based)

Emissions from energy losses (metric tons CO2e)

74,000

Length of network (km)

114,000

Number of connections

0

Area covered (km2)

51,700

Comment

There is no feasible method of determining the number of connections on our distribution system.

C9. Additional metrics

C9.1

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

Description

Other, please specify

Combustion products produced

Metric value

496,300

Metric numerator

Metric tons of combustion products produced

Metric denominator (intensity metric only)

Metric is not an intensity metric

% change from previous year

19

Direction of change

Decreased

Please explain

Metric tons of combustion products produced decreased due to lower coal generation in 2020. The company beneficially used 95% of combustion products produced in 2020.

C-EU9.5a

(C-EU9.5a) Break down, by source, your total planned CAPEX in your current CAPEX plan for power generation.

Primary power generation source	CAPEX planned for power generation from this source	Percentage of total CAPEX planned for power generation	End year of CAPEX plan	Comment
Wind	2,200,000,000	42	2025	We plan non-utility infrastructure portfolio investments in a number of wind generating facilities in the Midwest.
Wind	140,000,000	3	2025	Planned investments announced to date in our Wisconsin utility system.

Solar	1,060,000,000	20	2025	Planned investments announced to date in our Wisconsin utility system
Other, please specify Battery storage	440,000,000	8	2025	Planned investments announced to date in our Wisconsin utility system.
Other, please specify Other regulated renewables	260,000,000	5	2025	Further planned investments in zero-carbon generation in our Wisconsin utility system, including solar, wind and battery storage.
Gas	350,000,000	7	2025	Investment in new gas generation.

C-EU9.5b

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

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Other, please specify Technology enhancements	Advanced metering and customer information systems	1,000,000,000	100	2025

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

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

	Investment in low-carbon R&D	Comment
Row 1	Yes	We are members of the Electric Power Research Institute (EPRI) and the Gas Technology Institute (GTI). We invest in a number of research and development initiatives, including low-carbon programs. In 2020, we joined the Low-Carbon Resources Initiative (LCRI), a joint partnership between EPRI and GTI, which will focus on large-scale deployment of low-carbon technologies.

		The five-year initiative will: 1. Identify and accelerate development of promising technologies, including hydrogen, bioenergy, CCUS and renewable natural gas. 2. Demonstrate and assess the performance of key technologies and processes and identify possible improvements. 3. Inform key stakeholders and the public about technology options and potential pathways to a low-carbon future. This research and development effort will help to inform our longer-term strategy to address the emissions from our natural gas-fueled power plants.

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

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

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (optional)	Comment
Renewable energy	Applied research and development	≤20%		We are investing in solar energy research and projects, including Wisconsin's first large-scale solar facility, which began generating electricity in late 2020.
Infrastructure	Applied research and development	≤20%		Peoples Gas invests in projects to reduce methane releases. For 2020 these projects included: • Mitigating methane Emissions from Residential and Commercial End Use Equipment • High Efficiency Low Emission Commercial Baking Oven Field Demonstration • Compressed Natural Gas Station Methane Release Measurement and Investigations
Infrastructure	Applied research and development	81-100%		We are members of the Electric Power Research Institute (EPRI) and the Gas Technology Institute (GTI). We invest in a number of research and development initiatives, including low-carbon

				programs. In 2020, we joined the Low-Carbon Resources Initiative (LCRI), a joint partnership between EPRI and GTI, which will focus on large-scale deployment of low-carbon technologies. The five-year initiative will: 1. Identify and accelerate development of promising technologies, including hydrogen, bioenergy, CCUS and renewable natural gas. 2. Demonstrate and assess the performance of key technologies and processes and identify possible improvements. 3. Inform key stakeholders and the public about technology options and potential pathways to a low-carbon future. This research and development effort will help to inform our longer-term strategy to address the emissions from our natural gas-fueled power plants.

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	No third-party verification or assurance
Scope 2 (location-based or market-based)	No third-party verification or assurance
Scope 3	No third-party verification or assurance

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

No, we do not verify any other climate-related information reported in our CDP disclosure

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, and we do not anticipate being regulated in the next three years

C11.2

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

No

C11.3

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

Yes

C11.3a

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

Objective for implementing an internal carbon price

Other, please specify

Sensitivity scenarios associated with power generation projects

GHG Scope

Scope 1

Application

We use a shadow price of $20 per metric ton of CO2 in internal analyses of power generation projects in sensitivity scenarios.

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

20

Variance of price(s) used

We use a shadow price of $20 per metric ton of CO2.

Type of internal carbon price

Shadow price

Impact & implication

Using a shadow price on carbon provides a more robust analysis of power generation alternatives and decisions.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our customers

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Share information about your products and relevant certification schemes (i.e. Energy STAR)

% of customers by number

0

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

30

Please explain the rationale for selecting this group of customers and scope of engagement

We provide our large customers with estimates of GHG emissions from their use of the natural gas we supply and are required to report to the U.S. EPA under 40 CFR 98.
● Rationale for customer selection: Customers targeted for outreach are those taking delivery of natural gas above a threshold level during the reporting year.
● Scope of engagement: Our key account managers reach out to large customers during the first quarter of the following year to provide information needed to estimate GHG emissions associated with the natural gas delivered to our customers during the reporting year. We provide this information to any customer upon request, as well as monthly high heating values of natural gas by company for customers to calculate their carbon footprint based upon billing information.

Impact of engagement, including measures of success

Customers have expressed appreciation for receiving consistent greenhouse gas reporting information for their use, including the ability to investigate occasional inconsistencies.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?

Direct engagement with policy makers
Trade associations
Funding research organizations
Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Mandatory carbon reporting	Support	Participating in regulatory process	Not applicable
Energy efficiency	Support	Participating in regulatory process	Not applicable
Adaptation or resilience	Support	Participating in regulatory process	Not applicable
Clean energy generation	Support	Participating in regulatory process	Not applicable

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?

Yes

C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

Trade association

Edison Electric Institute

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Global climate change presents one of the biggest energy and environmental policy challenges this country has ever faced. EEI member companies are committed to addressing the challenge of climate change and have undertaken a wide range of

initiatives over the last 30 years to reduce, avoid or sequester GHG emissions. Policies to address climate change should seek to minimize impacts on consumers and avoid harm to U.S. industry and the economy. As of the end of 2019, electric power sector CO2 emissions had declined 33% from 2005 levels, driven in part by low natural gas prices, increased deployment of renewable generation and customer demands.

(From http://www.eei.org/issuesandpolicy/environment/climate/Pages/default.aspx)

How have you influenced, or are you attempting to influence their position?

We attend meetings and discussions of the Edison Electric Institute regarding policy matters, including climate change, and provide input to ensure that the company's perspectives are considered.

Trade association

American Gas Association

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Natural gas provides environmental benefits: Increased use of natural gas can help address several environmental concerns simultaneously, including smog, acid rain and greenhouse gas emissions.

Natural gas is an important tool in the suite of greenhouse gas emissions reduction options available to the United States. Natural gas will continue to benefit our nation as states move to further reduce carbon dioxide emissions created in electric power generation.

Greater direct use of natural gas for heating and cooling, water heating, cooking and clothes drying can cut carbon emissions nearly in half. That is because natural gas appliances and the network that delivers the energy to your home are extraordinarily efficient.

Electric system losses account for half the energy consumed in the U.S. residential sector. When you factor in energy use and emissions along the full fuel cycle, households with natural gas versus all-electric appliances produce 37% lower greenhouse gas emissions.

When natural gas is used directly, then from the place where it is extracted from the ground, to appliances in the home, natural gas achieves 92% energy efficiency.

(From https://www.aga.org/natural-gas/clean-energy/)

How have you influenced, or are you attempting to influence their position?

We attend meetings and discussions of the American Gas Association regarding policy matters, including climate change, and provide input to ensure that the company's perspectives are considered.

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

C12.3e

(C12.3e) Provide details of the other engagement activities that you undertake.

We engage with various stakeholders such as the U.S. Environmental Protection Agency, Wisconsin Department of Natural Resources, Public Service Commission of Wisconsin, Michigan Department of Environmental Quality, other state regulators, other electric utilities, various environmental groups, and other stakeholders to discuss issues related to the development of greenhouse gas new source performance standards for new and existing fossil-fueled power plants.

C12.3f

(C12.3f) 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?

Senior management has primary responsibility for managing risk across the corporation. The team addresses this responsibility using a multifaceted approach that seeks input from internal resources and industry experts. The company's vice president — environmental, in collaboration with members of her team, takes the lead on analyzing the climate-related impacts of our strategies and related tactics. The WEC Infrastructure and Fuels team and Environmental team engage with other functional areas of the company to identify cost-effective options for reducing carbon dioxide and other emissions. The vice president — environmental provides regular updates on environmental issues, including regulatory matters, to the Audit and Oversight Committee of our board of directors through formal quarterly reports. The Audit and Oversight Committee assists the board of directors in overseeing our strategy and compliance with legal and regulatory requirements. The committee's efforts include reviewing and providing oversight of environmental compliance matters and risks to ensure appropriate management attention. Broader environmental risk oversight remains the responsibility of the full board. Our Environmental team also provides reports at meetings of the Climate Risk Committee, which brings together senior-level officers responsible for overall corporate strategy. The committee meets at least quarterly to discuss goals and initiatives that involve climate-related risks and opportunities. Working with external organizations and our internal staff, Environmental leadership anticipates and prepares for policy developments at various levels. Leadership further engages with policymakers and other stakeholders to improve transparency and results. These efforts help us identify opportunities for research, development, demonstration, collaboration, investment and piloting. We actively participate in industry organizations that are involved in the legislative and regulatory processes focusing on climate change and other environmental matters, including the Edison Electric Institute, American Gas Association and affiliated organizations. We also collaborate on scientific and technical work with organizations such as the Electric Power Research Institute and Gas Technology Institute to inform company planning, risk management and operations. We also

are engaged with Wisconsin agencies, organizations and other stakeholders as participants on the Governor's Task Force on Climate Change.

C12.4

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

Publication

In voluntary sustainability report

Status

Complete

Attach the document

WEC-Corporate-Responsibility-Report-2020.pdf
WEC Pathway to a Cleaner Energy Future - 2021 Climate Report.pdf

Page/Section reference

Pathway to a Cleaner Energy Future - All
WEC 2020 Corporate Responsibility Report - pages 21-43

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
Other, please specify
Environmental policy statement

Comment

Our publications also describe our environmental partnerships and stewardship activities in the communities we serve.

Publication

In mainstream reports

Status

Complete

Attach the document

Notice of 2021 Annual Meeting and Proxy Statement-WEC Energy Group.pdf

2020 Annual Report- WEC Energy Group.pdf

Page/Section reference

2020 Annual Report- Pages 1-2
Proxy Statement - Pages 10, 24-25

Content elements

Strategy
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

June 2021 Investor Update - WEC Energy Group.pdf

Page/Section reference

Monthly Investor Update (June 2021 attached as example) - Slides 7-11, 15, 17-19

Content elements

Strategy
Emissions figures
Emission targets

Comment

C15. Signoff

C-FI

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

On May 4, 2021, WEC Energy Group unveiled aggressive new carbon dioxide and methane reduction goals. The company is committing to a 60% reduction in carbon emissions by 2025 from its electric generation fleet and an 80% reduction by the end of 2030, and to have a net-zero electric generation fleet by 2050. The company also announced its goal to achieve net-zero methane emissions from its natural gas distribution system by the end of 2030.

The goals are detailed in the company's reports:
- 2021 Climate Report at https://www.wecenergygroup.com/csr/climate-report2021.pdf
- Corporate Responsibility Report at https://www.wecenergygroup.com/csr/cr2020/wec-corporate-responsibility-report-2020.pdf#pagemode=bookmarks.

We also have set sustainability goals for our vehicle fleet across WEC Energy Group. By 2025, we will aim for 35% of car and SUV purchases and 25% of Class 3 truck purchases to be plug-in electric vehicles, and will aim to electrify 40% of our storeroom equipment, increasing this share to 75% by 2030. To date, we have installed 58 charging stations with 114 charging ports across our service territory, including 50 charging ports available for public use.

WEC Pathway to a Cleaner Energy Future - 2021 Climate Report.pdf

C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Senior Executive Vice President and Chief Operating Officer	Chief Operating Officer (COO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

WEC Energy Group works with consultants, engineers and other suppliers to develop methods that are adopted to improve the efficiency and heat rates of our generating facilities, thereby lowering our emissions.

We are considering becoming a future participating supplier in CDP's Action Exchange initiative.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	7,241,700,000

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

No

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

Requesting member

AT&T Inc.

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

0

Uncertainty (±%)

0

Major sources of emissions

WEC Energy Group's Scope 1 greenhouse gas emissions that are applicable to this customer are from fossil-fueled electric generating facilities. Scope 3 emissions associated with customers' purchase and use of natural gas from WEC Energy Group are assumed not to be applicable to this customer.

Verified

No

Allocation method

Other, please specify

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Most of WEC Energy Group's carbon dioxide emissions are from our fossil-fueled energy generating facilities. These facilities are identified by and reported on under the U.S. EPA Part 98 Mandatory Reporting of Greenhouse Gases rule, and there are no

limitations or assumptions associated with the identification of these sources. The allocation method mentions that the emission rates provided reflect regional average fuel mix data from Michigan, Illinois, Indiana, Ohio and Wisconsin as a proxy for the actual fuel mix of certain electricity purchased by our electric utilities because the actual fuel mix characteristics of that purchased electricity could not be discerned.

Requesting member

Senior Plc

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

0

Uncertainty (±%)

0

Major sources of emissions

WEC Energy Group's Scope 1 greenhouse gas emissions that are applicable to this customer are from fossil-fueled electric generating facilities. Scope 3 emissions associated with customers' purchase and use of natural gas from WEC Energy Group are assumed not to be applicable to this customer.

Verified

No

Allocation method

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Most of WEC Energy Group's carbon dioxide emissions are from our fossil-fueled energy generating facilities. These facilities are identified by and reported on under the U.S. EPA Part 98 Mandatory Reporting of Greenhouse Gases rule, and there are no limitations or assumptions associated with the identification of these sources. The allocation method mentions that the emission rates provided reflect regional average fuel mix data from Michigan, Illinois, Indiana, Ohio and Wisconsin as a proxy for the actual fuel mix of certain electricity purchased by our electric utilities because the actual fuel mix characteristics of that purchased electricity could not be discerned.

Requesting member

U.S. General Services Administration - OMB ICR #3090-0319

Scope of emissions

Scope 1

Allocation level

Company wide

Allocation level detail

Emissions in metric tonnes of CO2e

0

Uncertainty (±%)

0

Major sources of emissions

WEC Energy Group's Scope 1 greenhouse gas emissions that are applicable to this customer are from fossil-fueled electric generating facilities. Scope 3 emissions associated with customers' purchase and use of natural gas from WEC Energy Group are assumed not to be applicable to this customer.

Verified

Allocation method

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

Most of WEC Energy Group's carbon dioxide emissions are from our fossil-fueled energy generating facilities. These facilities are identified by and reported on under the U.S. EPA Part 98 Mandatory Reporting of Greenhouse Gases rule, and there are no limitations or assumptions associated with the identification of these sources. The allocation method mentions that the emission rates provided reflect regional average fuel mix data from Michigan, Illinois, Indiana, Ohio and Wisconsin as a proxy for the actual fuel mix of certain electricity purchased by our electric utilities because the actual fuel mix characteristics of that purchased electricity could not be discerned.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

System GHG intensity (metric tons/MWh) is published on page 24 of the WEC Energy Group 2020 Corporate Responsibility Report, found at https://www.wecenergygroup.com/csr/cr2020/wec-corporate-responsibility-report-2020.pdf#pagemode=bookmarks.

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges
Other, please specify Market power purchase emissions unknown	WEC Energy Group uses regional average fuel mix data from Michigan, Illinois, Indiana, Ohio and Wisconsin as a proxy for the actual fuel mix of electricity purchased from energy markets by our electric utilities. We plan to use this proxy until a more representative proxy for characteristics of electricity purchased from energy markets is available.
Customer base is too large and diverse to accurately track emissions to the customer level	No method currently exists to identify and aggregate all purchases by these customers' various locations in order to apply an emission rate for calculating the emission values requested in SC1.1.

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

Our current method is to provide greenhouse gas emission rates for customers to apply to their aggregate energy use in our service areas. No method currently exists to identify and aggregate all purchases by customers' various locations in order for us to apply an emission rate for calculating their total greenhouse gas emissions.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

Requesting member

Group type of project

Other, please specify

Provide EEI CO2 emissions and resource mix reporting template to customers.

Type of project

Other, please specify

Provide EEI CO2 emissions and resource mix reporting template to customers that is comparable across geographic areas.

Emissions targeted

Other, please specify

Information for completing carbon footprint analyses to support reduction activities.

Estimated timeframe for carbon reductions to be realized

Other, please specify

Depends on customer reduction activities.

Estimated lifetime CO2e savings

0

Estimated payback

Other, please specify

Depends on customer reduction activities.

Details of proposal

The EEI CO2 emissions and resource mix reporting template provides information for customers who are completing carbon footprint analyses to support reduction activities across geographic areas.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to	Public or Non-Public Submission
I am submitting my response		Public

Please confirm below