

Pathway to a Cleaner Energy Future

2021 CLIMATE REPORT





Gale Klappa
Executive Chairman

Kevin Fletcher
President and
Chief Executive Officer

Message from **Company Leadership**

In 2019, we published our first climate report — covering climate-related risk management, governance and analyses of potential pathways for carbon reduction. We outlined our goals and described opportunities to invest in a clean energy future.

In the two years since that report, we have found new opportunities for sustainable growth and made great progress in transforming our electric generation fleet — so much so that we have set new, industry-leading targets for lower emissions.

Where We Stand: Where We're Headed.

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 are committing to a 60 percent reduction in carbon emissions by 2025 and an 80 percent reduction by the end of 2030.

Over the longer term, the target for our generation fleet is net-zero carbon emissions by 2050.

In addition, we continue to reduce methane emissions by improving our natural gas distribution system. Our initial 2030 goal called for a 30 percent reduction in methane emissions from a 2011 baseline. Given advancements with renewable natural gas and the advantages that come with serving America's Dairyland, we are setting a new target across our natural gas distribution operations to achieve net-zero methane emissions by the end of 2030.

In setting these aggressive targets, we are keeping customer affordability and reliability at the forefront of our mission. Throughout the following pages, you will find more details on our planning and risk management, grounded, as always, in thorough research and analysis.

We are committing to a 60 percent reduction in carbon emissions by 2025 and an 80 percent reduction by the end of 2030.

We believe we can achieve our 2025 and 2030 goals without any new technological developments. Our current capital plan puts us on track, as we expect to retire approximately 1,800 megawatts of older, fossil-fueled generating capacity. By 2025, that capacity will be replaced by zero-carbon-emitting renewables and clean natural gas-fueled generation. The affordability and efficiency of wind and solar energy, as well as battery storage, have improved rapidly in recent years, making renewable investments beneficial to both the environment and our customers. Our capital plan also supports needed improvements in natural gas infrastructure through our System Modernization Program, which is significantly reducing methane emissions in Chicago.

Looking beyond 2030, our ability to achieve net-zero carbon will depend on a variety of factors — regulatory, economic, technological, to name a few. We see considerable potential for innovation in energy storage, carbon capture and other technologies, especially with the support of public policy.

Our mission is clear. Deliver energy that is affordable, reliable, and clean. Energy our customers can depend on — today and throughout the transition to a low-carbon future.



Gale E. Klappa
Executive Chairman



J. Kevin Fletcher
President and Chief Executive Officer

May 4, 2021



Maintaining reliability while advancing climate strategy

Service reliability and resiliency remain paramount as we work to transition to a net-zero carbon generating fleet. Over the last decade, we have maintained award-winning electric reliability while reducing our greenhouse gas intensity. At the same time, cases of extreme weather in our service area — and recent widespread outages in Texas — have demonstrated the imperative of resilient infrastructure and a diverse generation mix. As we work to integrate renewable resources and pursue greater climate action, we will continue to manage risks across our system while at the same time investing in modern infrastructure.

An energy industry leader

WEC Energy Group is one of the nation's leading energy companies, with the operational expertise and financial resources to meet the needs of 4.6 million customers across the Midwest.

WEC Energy Group by the numbers

as of Dec. 31, 2020

\$29.0 billion
market cap

60% ownership
of American Transmission Co.

7,700 megawatts
of power capacity

1.6 million
electric customers

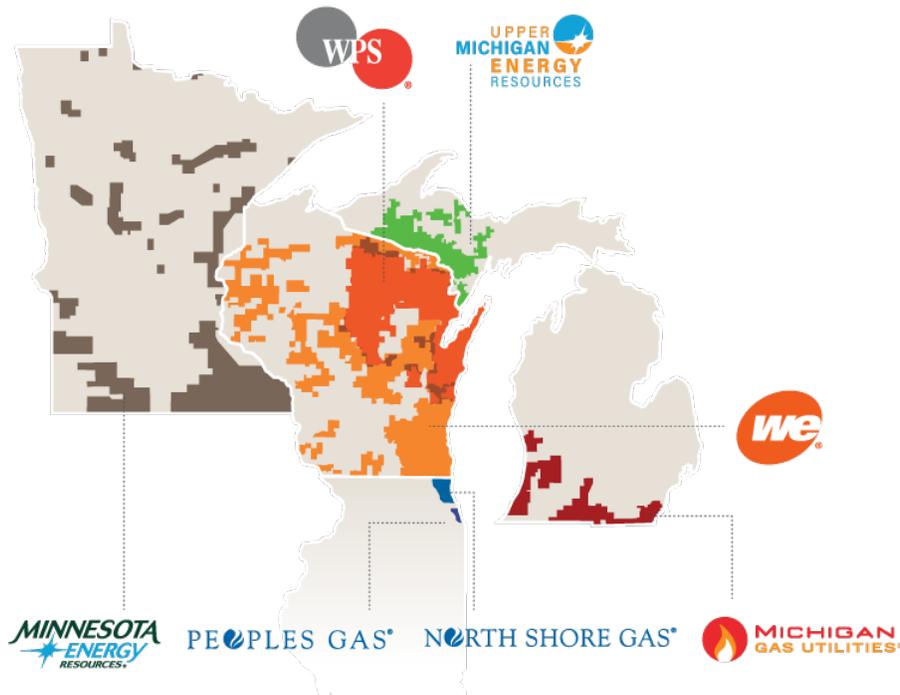
71,000 miles
of electric distribution

\$22.8 billion
of asset base

3.0 million
natural gas customers

51,400 miles
of natural gas distribution
and transmission

98%
regulated



Our subsidiaries focus on delivering safe and reliable energy with a commitment to customer satisfaction. Together, we provide energy services to customers throughout Wisconsin, Illinois, Michigan and Minnesota. We understand that our energy infrastructure must be designed not only to endure but also to support the environment and our region's economy.

Executive summary

This updated report illustrates the approach we are taking to reduce greenhouse gas (GHG) emissions and presents an analysis of factors that could affect our future decision-making. It was prepared in collaboration with M.J. Bradley & Associates (MJB&A) and reflects previous research and input from the Electric Power Research Institute (EPRI).

MJB&A, an ERM Group company, is known for analytical expertise and strategic consulting services to address energy and environmental issues. The organization engages with a variety of stakeholder groups, combining private sector strategy with public policy in energy, climate change, energy efficiency, renewable energy and advanced technologies.

EPRI is a nonprofit, scientific research organization with a public benefit mandate. For many years, EPRI has demonstrated technical capabilities in assessing and modeling potential futures, identifying key assumptions, capturing and quantifying uncertainties, and engaging subject matter experts from many diverse, climate-related fields. Due to its work as lead authors for the Intergovernmental Panel on Climate Change, EPRI offers unique perspectives on global climate matters. EPRI research and modeling were key to our initial assessment of potential transitions through 2050, published in our 2019 climate report.

Our report follows the recommendations of the Financial Stability Board's Task Force on Climate-Related Financial Disclosures (TCFD). TCFD suggests a logical method for framing climate issues, starting with general strategies and moving to specific tactics, while encouraging transparency and organizational engagement. Using this framework enables interested parties to compare our results to other reporting entities.

The TCFD recommendations guide the structure of this report:

➤ **Governance** (Page 4)

In this section, we describe how our governance structure supports and provides oversight for our short- and long-term corporate strategy.

➤ **Business and climate strategy** (Page 6)

This section describes the actual and potential impacts of climate-related risks and opportunities on our businesses, strategy and financial planning, informed by climate scenario analyses.

➤ **Risk management** (Page 22)

This section outlines the processes we use to identify, assess and manage climate-related risks.

➤ **Metrics and targets** (Page 25)

In this section, we provide an overview of our goals for managing GHG emissions and information on our environmental assessments and reporting.

Addressing climate change is an integral component of our strategy, which we are committed to achieve while we also fulfill our obligation to provide reliable, affordable energy to customers.

The analysis in this report supports our current emissions reduction trajectory, while demonstrating the importance of technological and market innovation in the years ahead. We see the potential for economywide emissions reduction through electrification, which our electric companies could help facilitate.

Recent and planned investments in renewable energy, air quality control systems, power grid upgrades, natural gas distribution system modernization and other environmental protection technologies position WEC Energy Group well for the future.

Governance

Our governance structure drives corporate accountability and is supported by policies and management systems to anticipate, plan for and manage corporate initiatives and risks, including those related to climate change. We believe that effective corporate governance is an essential driver of stockholder value and a key component of sustainability.

Our board of directors is responsible for providing oversight with respect to our major strategic initiatives — including GHG goal-setting and execution thereof — which requires meaningful dialogue with our senior management team about opportunities and risks, analysis of scenarios and strategies that flow therefrom, and the processes through which senior management maintains focus on the organization's key financial and business objectives, corporate policies, and overall economic, environmental and social performance. Senior management, in turn, is responsible for effective planning and execution of daily operations. Success requires a cohesive system for timely identification and evaluation of relevant information.

Oversight by the board of directors

Our board of directors fulfills its oversight responsibilities through sound principles that align with governance best practices. Each director is elected annually using a one-share, one-vote, majority-vote standard in uncontested elections. Our Corporate Governance Guidelines provide that the board will consist of at least a two-thirds majority of independent directors at all times. Current board members possess a diversity of knowledge and skills, including expertise in the utility industry and on environmental, social and governance topics.

Our board of directors oversees the company's risk environment and associated management practices as part of its evaluation of the company's ongoing operations and strategic direction. To carry out its oversight function, the board is organized into five standing committees with specific duties and risk-monitoring responsibilities: Audit and Oversight, Compensation, Corporate Governance, Executive, and Finance.

With the exception of the Executive Committee, the board and each of its committees meet regularly throughout the year, and receive regular briefings prepared by management and outside advisers on specific areas of current and emerging risks to the enterprise. The committees routinely report to the full board on matters that fall within designated areas of responsibility as described in their charters.

For example, the Audit and Oversight Committee assists the board in overseeing legal and regulatory compliance, including matters pertaining to environmental, litigation, and ethics and compliance programs; electric reliability standards compliance; and data privacy and security including cyber, physical and operating technology. With respect to environmental matters, the company's vice president — environmental provides the committee with regular reports throughout the year that highlight significant regulatory and compliance activities, as well as updates on initiatives aimed at achieving company priorities, including the reduction of GHG emissions.

While the board delegates specified duties to its committees, the board retains collective responsibility for comprehensive risk oversight, including short- and long-term critical risks that could impact the company's sustainability. The board believes that certain matters must be contemplated principally by the diverse perspective of its full membership. This includes oversight of risks that have the potential to result in

Board of directors

- Provides oversight of company's major strategic initiatives — including GHG goal-setting — and overall risk environment
- Delegates certain duties and risk-monitoring activities to board committees
- Retains oversight responsibility of risks that have the potential to result in significant financial, operational or reputational consequences, including potential impacts of climate change

Board committees

- Maintain four standing committees that meet regularly — Audit and Oversight, Compensation, Corporate Governance, Finance; convene Executive Committee as needed
- Receive regular management and outside adviser briefings on specific areas of current and emerging risks pertinent to each committee's charter
- Report committee findings to full board

Management

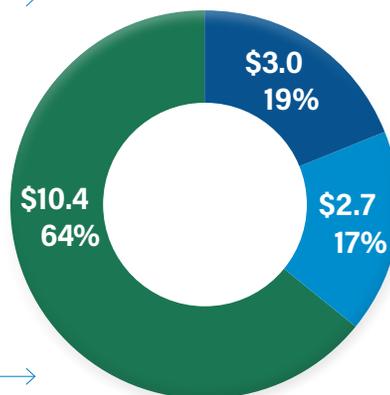
- Designs and operates risk management program, including risk identification, assessment and prioritization
- Conducts regular, executive-level committee review of key risk areas, including those related to climate change
- Engages with board and committee chairs on areas of assigned risk oversight

Investing
\$16.1 billion
 between 2021-2025

Sustainability

\$4.1 Renewables
\$6.3 Grid and fleet reliability

(in billions)



Growth

\$1.6 Gas distribution
\$1.4 Electric generation, transmission and distribution

Efficiency

\$1.0 Technology
\$1.7 Grid and fleet modernization

significant financial or reputational consequences, such as 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 emissions reduction goals.

Throughout the year, the board engages in substantive discussions with management about the company's long-term strategy. Factored into its oversight responsibilities, the board must include within its evaluation an understanding of the primary mandates of an investor-owned utility and the many risks and opportunities broadly facing the utility sector, including opportunities and risks 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 range and impact of strategic alternatives. Management also provides significant educational opportunities for the board to better understand the external environment within which the company operates, including briefings and presentations provided by outside advisers, large institutional investors and other stakeholders. In addition, the full board reviews the company's Corporate Responsibility Report each year before it is published to verify that it appropriately communicates the company's view of corporate citizenship, including environmental stewardship.

Support for strategic objectives

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.

Beginning in October 2020, management reviewed with the board its "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. Management and the board engaged in lengthy discussions on the rationale for the proposed \$16.1 billion in investments over five years, which are designed to help the

company achieve its long-term emissions reduction targets. Management and the board discussed the underlying business need for the plan, regulatory environment, the plan's financial implications and the technological advancements that will be needed to achieve the company's long-term goals, including net-zero carbon emissions from its electric generation by 2050.

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 composed 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. As noted above, the company's ESG Progress Plan details 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.

Business and climate strategy

We are committed to ensuring customers have the energy they need and that we operate in an environmentally responsible manner, making renewable energy a key part of our energy mix. Our commitment to addressing climate change is exemplified in our ambitious goal to become net carbon neutral by 2050.

Climate change has become an integral part of our business strategy. A priority sustainability issue assessment, completed in 2020, highlighted its continuing importance to our business and our stakeholders. Building on our 2019 Climate Report and its scenario analyses, through which we assessed the strengths and weaknesses of our strategy, we continue to evaluate physical and transition risks and opportunities presented by GHG emissions management and climate adaptation.

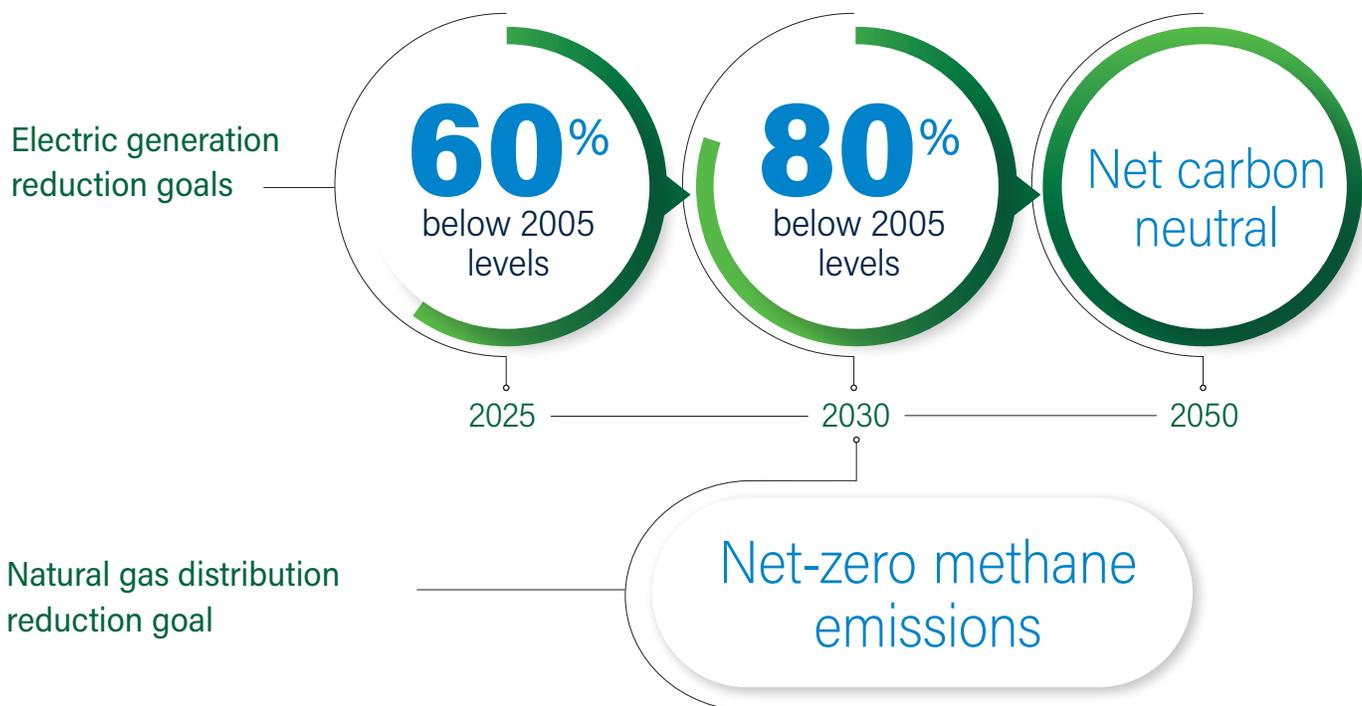
Based on our assessments, and in support of our GHG goals, we are transforming our portfolio of electric generation facilities and modernizing our infrastructure to improve environmental performance. As we continue to reduce our environmental footprint, we are committed to maintaining the affordability, reliability and resiliency that are the cornerstones of our business model.

Our role in transitioning to a low-carbon economy goes well beyond our own system. As a utility company, we have a responsibility to provide affordable and sustainable energy that will power our customers' homes, businesses and motor vehicles, facilitating emissions reduction throughout the economy. We have integrated that responsibility further into our planning and operations by setting aggressive goals for emissions reduction.

In 2019, over a decade early, we achieved our initial goal to reduce CO₂ emissions 40% below 2005 levels by 2030. That is why, in 2020, we re-evaluated our portfolio and set an ambitious goal for our electric generation fleet to be net carbon neutral by 2050. Our prior long-term goal was to reduce our CO₂ emissions 80% below 2005 levels by 2050. To ensure we remain on track to meet our new long-term goal, we have also set interim targets to reduce CO₂ emissions by 60% by 2025 and 80% by 2030, both below 2005 levels. We are well on our way to achieving these targets and will continue to report on our progress.

In addition, for our natural gas delivery operations, we have set a target of net-zero methane emissions by 2030. We adopted this more ambitious goal in light of ongoing infrastructure improvements and the potential benefits of renewable natural gas.

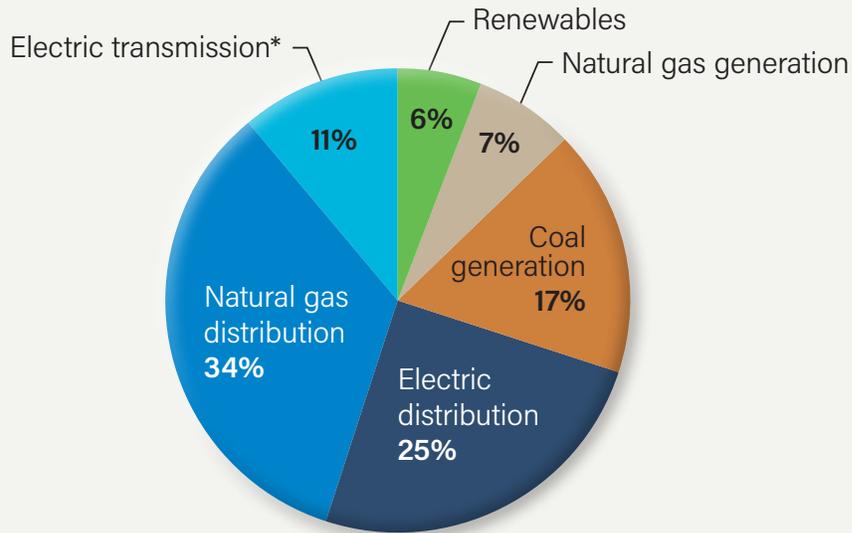
Demonstrating our commitment to progress, we expect to invest more than \$16 billion across our company between 2021 and 2025 — reducing our GHG emissions, maintaining superior reliability, lowering operating costs and growing our investment in the future of energy.



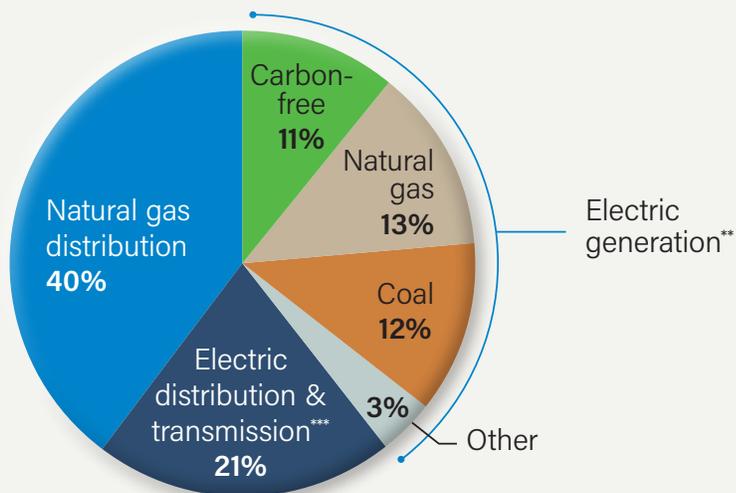
An evolving business model

Our coal-based revenue declined 43% between 2017 and 2020. We expect the percentage of our revenue and asset base that is tied to coal will be less than 10% at the end of 2025.

2020 assets by business type



2020 revenue contribution by source



* ATC is accounted for using the equity method; this represents WEC Energy Group's portion of the asset base.

** Includes purchased power.

*** Represents transmission expense that we are authorized to collect in rates.

Our stockholders and customers have made it clear that together we must transition to a low-carbon future. Through our actions, we will not only deliver cleaner energy to our customers, but also fortify and modernize our electricity grid and distribution services.



Our goal

Continue to build and sustain long-term value for our stockholders and customers by focusing on the fundamentals of our business: safety, reliability, operating efficiency, financial discipline, customer care and environmental stewardship.



Our approach

We remain focused on delivering exceptional customer care every day.

We strive to provide the best value for our customers by embracing constructive change, demonstrating personal responsibility for results, leveraging our capabilities and expertise, and using creative solutions to meet or exceed our customers' expectations.

Electricity generation supply

As our generation mix continues to evolve, we will focus on maintaining the fuel diversity needed to produce reliable, safe and affordable power while reducing our carbon footprint.

We supply energy to our utility customers from generation facilities we own, representing approximately 7,700 megawatts (MW) of power capacity in 2020, and purchased power. Power purchases represent about one-third of the electricity we deliver, and approximately two-thirds of that purchased power comes from zero-carbon sources (e.g., renewables and nuclear). We expect purchased power from the Point Beach Nuclear Plant to supply 20% of the electricity we provide to our utility customers over the next decade. In addition, through our WEC Infrastructure subsidiary, we own majority shares in wind farms outside our traditional footprint.

In pursuit of our goal to achieve a carbon neutral generating fleet by 2050, we are evaluating a range of approaches and investments that will help to reduce and mitigate our GHG emissions. As part of our climate strategy, we have dramatically reduced our reliance on coal-fueled generation since 2005. We have built cost-effective, state-of-the-art natural gas-fueled generation and zero-carbon generation. Since 2018, we have retired more than 1,800 MW of 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.

Renewable energy portfolio

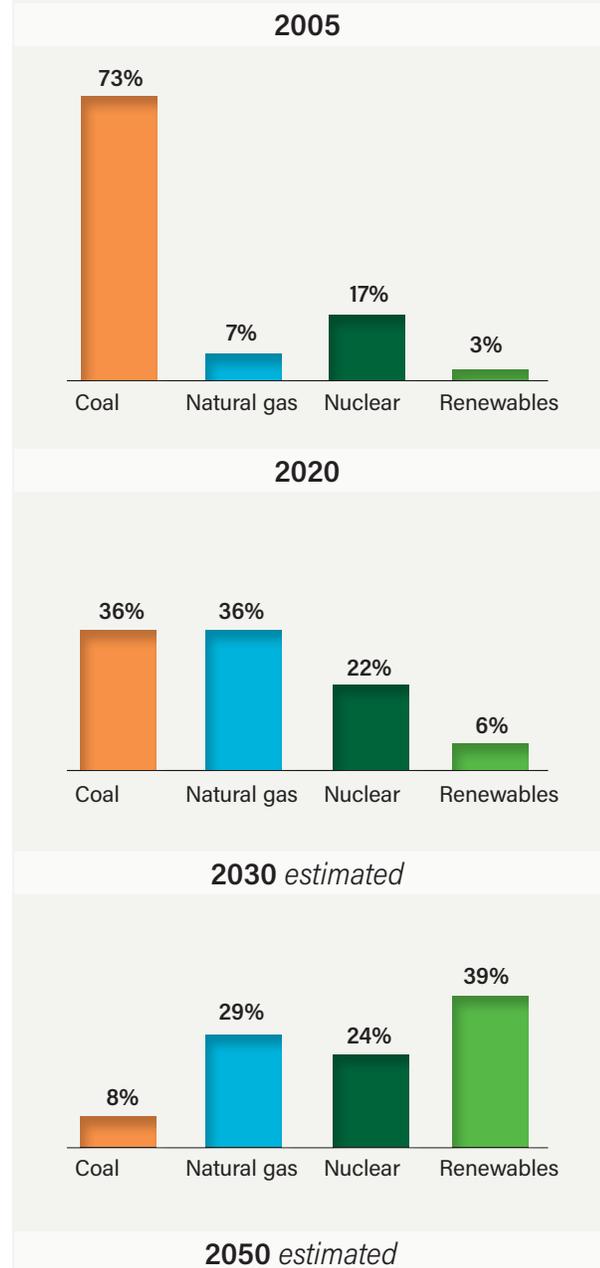
The following table lists the utility and non-utility renewable energy assets in our portfolio.

Facilities (as of Dec. 31, 2020)	Capacity (MW) ¹	Serving
30 hydroelectric plants	100	Utility customers
1 biomass plant	45	Utility customers
5 wind turbine facilities	498	Utility customers
1 solar facility	100	Utility customers
5 wind turbine facilities	836 ²	Infrastructure customers
Total renewable capacity	1,579	

1 In line with our reports to the Securities and Exchange Commission, this table uses nameplate capacity for our solar and wind facilities, and rated capacity for other energy sources.

2 Includes total nameplate capacity of jointly owned infrastructure wind projects.

Electricity supply by fuel type
(megawatt-hours delivered to regulated utility customers)



Net carbon neutral

WEC Infrastructure wind facilities



Recent opportunities to invest in energy infrastructure outside of our regulated utilities have helped our business grow in a sustainable way. We have committed \$2.2 billion in our 2021-2025 capital expenditure plan to increase renewable energy generation in the Midwest. This investment will build upon the \$1.2 billion that WEC Infrastructure invested through 2020 in wind farm development. We have acquired or agreed to acquire majority interests in seven wind farms across Illinois, Kansas, Nebraska and South Dakota. Together, these resources are capable of providing over 1,300 MW of carbon-free energy and represent long-term agreements to serve investment-grade customers outside our traditional service areas.



ESG Progress Plan

As part of our five-year capital plan, we expect to retire approximately 1,800 MW of nameplate fossil-fueled generating capacity between 2021 and 2025, providing further economic and environmental advantages. Included in these planned retirements are 1,100 MW from Oak Creek Power Plant, approximately 300 MW from our owned portion of Columbia Energy Center, and 400 MW of older natural gas-fueled generation.

As our generation mix continues to evolve, we will be 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.



Renewable investments represent approximately 25% of our planned capital spending from 2021 through 2025.

These utility investments will add 1,800 MW of renewable capacity to our portfolio. Included in this are plans to build 600 MW of battery storage to balance intermittent renewable resources and meet peak energy demand. In early 2021, we filed with the Public Service Commission of Wisconsin for approval to take major steps toward this goal: building two new solar and battery storage projects in Wisconsin by 2023. If approved, the facilities will feature, in total, 450 MW of solar generation and 185 MW of battery storage, with a four-hour duration, to provide “sunshine after sunset.”

The costs of renewable technology and battery storage have dropped drastically in recent years, making projects like this cost-effective for our customers.

In addition, to help replace older, less efficient fossil-fueled power plants, we plan to build 100 MW of natural gas-fueled, reciprocating internal combustion engine peaking plants, and we have an option to purchase a 200 MW share of the West Riverside natural gas plant. These flexible resources are critical for maintaining reliable service as we integrate additional renewable resources into the grid.

Long-term outlook

We will continue to replace fossil generating facilities with carbon-free or lower-carbon natural gas resources, including additional wind, solar and other renewable energy technologies. The pace of these fossil plant retirements and new plant construction will be guided by reliability and cost considerations, and public policy decisions could also influence our decision-making. Additional transmission system investments and energy storage projects may also be required to support these developments. Potential transmission system expansion will be a key factor in our capital planning.

Our newer, more efficient coal units continue to play an important role in ensuring the reliable service our utilities must provide. They are able to be dispatched during extreme weather conditions, when natural gas supply lines or renewable technology may be compromised. Elm Road units 1 and 2 are among the newest and most efficient coal-fueled generating units in the United States, having begun commercial operation in 2010 and 2011, respectively. We have an approximately 85% ownership interest in the two units. Weston 4, in which we have a 70% ownership interest, is also a new coal plant; commercial operation began in 2008. As relatively new coal units, these would be potential candidates for carbon capture, utilization and storage (CCUS) after 2030, assuming the technology is further developed. Nature-based offsets (e.g., tree planting) and agricultural offsets could also be potential options to address the limited emissions from our remaining coal units.

We are also considering options to address any remaining emissions from our natural gas-fueled power plants, combined-cycle facilities, combustion turbines and reciprocating engines. In 2020, we joined the Low-Carbon Resources Initiative (LCRI), a joint partnership between EPRI and Gas Technology Institute (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.

Reaching net-zero power generation

	2020-2030	2030-2040	2040+
<p>New carbon-free resources</p> <p>Wind, solar and other carbon-free resources will be a major area of investment for WEC Energy Group and its subsidiaries over the coming decades.</p>	<ul style="list-style-type: none"> + 100 MW of utility wind + 1,100 MW of solar + \$2.2 billion of investment in WEC Infrastructure wind between 2021 and 2025 + Further renewable additions between 2026 and 2030 		Continuing investments in wind, solar and other carbon-free resources
<p>Flexible resources</p> <p>Dispatchable resources will help us to balance the grid and maintain reliable service. This includes new natural gas-fueled generation and battery storage technologies.</p>	<ul style="list-style-type: none"> + Natural gas-fueled West Riverside Energy Center (200 MW) + 600 MW of battery storage + 100 MW of reciprocating engine natural gas-fueled generation 	Continuing investments in energy storage technology	Hydrogen, renewable natural gas or other technologies may be deployed to address the emissions from natural gas-fueled generation
<p>Carbon capture and offsets</p> <p>We will continue to investigate the development of carbon capture, utilization and storage.</p>	Potential investments in carbon capture and/or offsets		Elm Road 1-2 and Weston 4 may be candidates for carbon capture technology
<p>Retirements</p> <p>We are committed to an orderly transition of our older coal- and natural gas-fueled power plants.</p>	<ul style="list-style-type: none"> • 400 MW of natural gas-fueled generation • Oak Creek Power Plant (1,100 MW) • Columbia Energy Center (300 MW) • Further fossil-fueled generation retirements between 2026 and 2030 		Further fossil-fueled generation retirements

See the appendix for more detail on potential generation changes to achieve our 2050 goal.

Supporting communities on the path to carbon neutrality

Our planned generation changes have the potential to affect our workforce and our communities. We recognize the importance of addressing social and economic as well as environmental impacts for a just transition to a cleaner energy future. In closing power plants, we have followed the processes outlined in applicable policies, plans and collective bargaining agreements, and worked with local union leadership to relocate employees or offer severance benefits. We also have offered outplacement assistance to employees. Our charitable giving programs support communities across our service areas, and through our foundations, we have donated to economic development efforts in counties where we retired plants.

As we carry out our plan to reduce carbon emissions, we will continue to work hand in hand with our stakeholders to minimize the impact of plant retirements. We also will look to the recommendations of the "Just Transition" framework, which is focused on the well-being of workers and communities, and related climate justice efforts to inform our engagement and decision-making.

Electric innovation driving a clean energy system

To create a grid that can withstand 21st-century demands and support the transition to a clean energy system, we will use multiple strategies to improve the reliability and resiliency of the electric power system and provide our customers with opportunities to meet their own sustainability goals.

As we continue to evaluate and leverage innovative technology developments as part of our evolving climate strategy, we must keep affordability at our core, while improving our customers' experience and access to new technologies.

System modernization: Wisconsin Public Service expects to invest approximately \$430 million in total on its System Modernization and Reliability Project from its beginning in 2014 through 2022. The project focuses first and foremost on burying or upgrading the electric lines with the lowest reliability performance, primarily in heavily forested, rural areas. It will result in the installation of more than 2,000 miles of underground circuits in place of overhead lines and the addition of distribution automation equipment on 400 miles of lines. If reliance on electric power in the region increases, or if extreme weather events increase, these types of investments could be even more important.



Green pricing programs: We have offered options to electric customers who want to help strengthen the market for renewable energy for decades, having established We Energies' Energy for Tomorrow® program in 1996 and WPS' NatureWise® in 2002. When our We Energies customers enroll in the Energy for Tomorrow program at the 25%, 50% or 100% level, We Energies produces or purchases renewable energy to match that percentage of their electricity use. Energy for Tomorrow is Green-e certified and meets the environmental and consumer protection standards set by the nonprofit Center for Resource Solutions. The NatureWise program similarly offers WPS customers the opportunity to purchase specified amounts of electricity from renewable sources.

Partnering with local companies for a more sustainable future

As of April 30, 2021, We Energies has energized 16 Solar Now projects and has another four under construction, together totaling more than 19 MW. We continue to evaluate the impact of this program and other potential local generation across our electric energy companies' service areas.



A record-breaking project between We Energies and Harley-Davidson is creating renewable energy for customers across the state. Nearly 8,400 solar panels on top of Harley-Davidson's Pilgrim Road Powertrain Operations facility in Menomonee Falls, Wisconsin, went into service in November 2020, as the largest single rooftop solar panel system in the state. The project, which is part of the Solar Now program, can produce 2.25 MW — enough energy to power more than 400 homes.

Renewable energy pilot programs: Two innovative renewable energy pilot programs are providing opportunities for We Energies' commercial and industrial customers to support renewable energy generation. Participants in the Solar Now program receive monthly payments based on the capacity value of their hosted solar photovoltaic systems, while We Energies distributes the energy they produce throughout the system.

In addition, through the Dedicated Renewable Energy Resource (DRER) program, We Energies will partner with large commercial and industrial customers that have set ambitious renewable energy goals and will build specific renewable resources to help serve their commitments.



Advanced metering technologies: By increasing access to more granular customer data, advanced metering infrastructure will allow us to improve load management functions and increase customizable customer savings opportunities as we continue renewable energy and distributed energy resource integration. We are currently implementing advanced metering infrastructure across our local utility companies and making steady progress on our program to replace meter-reading equipment on both our network and customer property. An integrated system of smart meters, communication networks and data management programs enables two-way communication between our energy companies and their customers. This program enhances outage management capabilities and reduces the manual effort and cost for disconnection and reconnection. In the future, smart meters may provide customers with more usage- and demand-based billing and energy management options. At the end of 2020, 89% of our electric customers had smart meters.

Demand-side management and energy efficiency: Energy efficiency is one of the most cost-effective tools available to reduce our carbon footprint, and our customers are taking control of their energy use through a variety of programs. In Wisconsin and Michigan, the Focus on Energy and Efficiency United programs, respectively, provide customers with energy-saving rebates and incentives. The options vary by company and include discounts for Energy Star-certified appliances, smart thermostats, LED lighting, smart lighting and custom projects.

Residential customers also can participate in virtual energy audits to determine how they can make their homes more energy-efficient through no- or low-cost upgrades. Customers who participate in a full-home energy assessment can see heating and cooling energy-saving opportunities of 20% to more than 50% in some cases, reducing emissions and delivering cost savings. In addition, we provide our customers with efficiency tips to help save money on their energy bills through phone consultations, our company websites and other communications.

Our companies provide some electric business customers with energy management services, including site assessments, carbon footprint analyses, technical monitoring and consultations. Account managers work with our largest customers to facilitate technological, systems and behavioral solutions, and, where available, offer incentives related to energy efficiency, optimization and sustainability.

Electric vehicles: Increasing customer access to electric vehicles (EVs) is a priority for WEC Energy Group. To that end, We Energies and Wisconsin Public Service are proposing pilot programs to help customers charge their EVs safely, reliably and affordably. To ensure that the benefits of sustainable technologies are available across the communities we serve and that the transportation electrification transition is equitable and inclusive, we are offering potential options to support disadvantaged customers and communities in adopting EV charging. In addition, a residential pilot would make it easier and



less costly for customers to install charging equipment and would broaden the availability of "Time-of-Use" rates for EV owners, and a commercial pilot would help pay for infrastructure upgrades needed to charge larger vehicles. Pending approval by the Public Service Commission of Wisconsin, we expect to install up to \$50 million in EV charging equipment and infrastructure in Wisconsin by 2025.

As we expand our customer offerings, we also are working to electrify our own motor vehicle fleet. In August 2020, under the auspices of Edison Electric Institute (EEI), we joined our utility peers across the nation in setting 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 operations, including 50 charging ports available for public use.

Partnering with businesses to support sustainability

OSI Industries LLC, a We Energies customer in Wisconsin, wanted to address aging air pollution control devices to determine proper sizing or options for redesign. We were able to assist OSI by providing data-logging equipment and analysis to measure energy used by the existing air pollution control equipment and compare alternatives for redesign. OSI's goal was to find the most environmentally sustainable alternative.

Working with the Wisconsin Department of Natural Resources for regulatory compliance, OSI was able to retire the aging system and reroute pollution-controlled exhaust air to newer equipment, effectively reducing emissions, as well as saving energy.

OSI is projected to save 400,000 therms and 600,000 kilowatt-hours annually after completing this project in June 2020. These energy savings equate to almost 5 million pounds of avoided carbon dioxide emissions.



“A merciless cold lingers in the Midwest”

This was just one of the many news headlines in January 2019 as record-setting cold, descending from the Arctic, blanketed much of the Midwest. More recently, in February 2021, a week-long cold snap sent temperatures plummeting and raised demand for energy during an otherwise mild winter. Our people and infrastructure were put to the test and performed remarkably, even as temperatures dropped to minus 42 degrees Fahrenheit in the northern portion of our service area.

These cold weather events, which can persist for days, highlight one of the challenges the region faces as we integrate higher levels of renewable energy technologies. Moving forward with renewable resources, we need to consider extreme weather and winter peaks common to our service areas. Our natural gas peaking facilities are important to help meet our demand during the winter season. Renewable resources may not be able to generate and store enough power for the foreseeable future, so our peaking units will continue to be part of our transition to meeting our carbon goals.

We plan to continue to look at alternative options, such as battery storage, to help mitigate the need for peaking plants in the future. We also are contributing to research to address cold weather challenges of electrifying vehicles and buildings. Batteries are less efficient at low temperatures, so additional charging is required during cold winter months. Heat pumps are also less efficient in extreme cold weather, but research continues to show promise. These issues can be managed in a variety of ways, but represent one of the unique challenges in the region.

Natural gas distribution

We are focused on delivering reliable, affordable and safe natural gas service to our customers while minimizing our environmental impact.

Through multiple programs and projects, we are consistently improving our natural gas distribution system to support long-term sustainability.

Methane, a short-lived and potent GHG, is released to the atmosphere during the production and transportation of natural gas, coal and oil. Because we are a major distributor of natural gas in the Midwest, methane reduction efforts are critical to our environmental performance.

We plan to achieve our net-zero goal through an effort that includes both continuous operational improvements and equipment upgrades, as well as the use of renewable natural gas throughout our utility systems.



System Modernization Program: Peoples Gas, our subsidiary in Chicago, began its System Modernization Program in 2011. Peoples Gas expects to continue investing between \$280 million and \$300 million annually in a program to modernize approximately 2,000 miles of Chicago's aging natural gas pipeline. Dated cast and ductile iron pipes and equipment in the natural gas delivery system are being replaced with polyethylene pipes for long-term system safety, reliability and reduced methane emissions. Underscoring our commitment to preserve the environment, Peoples Gas has committed to replace iron natural gas mains at an annual rate of at least 2% per year through 2022 — a rate that is in line with the U.S. Environmental Protection Agency's (EPA's) Methane Challenge. To date, we have successfully installed more than 1,000 miles of modern natural gas main. The program also involves upgrading the system from low-pressure to medium-pressure operation to minimize the chance of explosion or fire.



Goal: To achieve net-zero methane emissions from distribution by 2030.

Energy efficiency: We extend energy efficiency assistance to our natural gas customers, as well. The Focus on Energy and Efficiency United programs in Wisconsin and Michigan support both electric and natural gas operations. For our Peoples Gas and North Shore Gas customers in Illinois, we offer energy efficiency programs that provide customers with free products, rebates, incentives, staffing grants and more comprehensive sustainability planning resources. In Minnesota, the Minnesota Energy Resources Conservation Improvement Program offers commercial/industrial and residential customers energy audits and comprehensive analyses, new construction design assistance, and energy-saving rebates.

Our path forward: Through these efforts, we aim to minimize our system and customers' impact on the environment. At the same time, extreme weather conditions in 2019 demonstrated to us that Wisconsin needs more natural gas peaking capacity on the coldest days of the year, when demand is high. To address this demand, We Energies filed an application with the Public Service Commission of Wisconsin in November 2019 for approval to build two liquefied natural gas facilities. If approved, each facility would provide 1 billion cubic feet of natural gas supply to meet peak demand without requiring the construction of additional interstate pipeline capacity. The total cost of both projects is expected to be approximately \$370 million, with commercial operation targeted for the end of 2023.

As we evaluate paths to modernize our system and the role of natural gas in a low-carbon future, we have turned to industry collaboratives and national initiatives for sharing information and best practices. As part of our Peoples Gas initiative, we have made voluntary commitments as a Founding Partner in the EPA's Methane Challenge. Additionally, Peoples Gas has partnered with GTI since 1985 and invested more than \$9 million in research, innovation and development. The research has brought technologies to the natural gas industry that have benefited customers and employees through improved safety, operational efficiencies, reduced environmental impacts and increased energy efficiency.

The industry also is looking at opportunities to blend renewable natural gas from dairy farms and other sources with conventional natural gas to reduce the carbon intensity of natural gas supplies. Hydrogen is getting increased attention as a potential longer-term strategy to reduce the carbon intensity of gas supplies. There is potential for hydrogen to be produced with zero-emission energy resources and blended with conventional natural gas. If this technology becomes a viable option for our companies, we expect our modernized natural gas system could be modified slightly to carry hydrogen fuel. Continued electrification of space and water heating may also play a role in reducing the emissions from natural gas use. Today, however, electric heat pumps are four to five times more costly than natural gas heating in our region, and the distribution system remains essential to serving our customers.

Our ongoing engagement with industry peers and research initiatives will help us apply new technologies as they become suited to our utility needs.

A global effort to address climate change

Our climate strategy continues to support the international effort to limit global temperature increases.

The December 2015 Paris climate agreement set a goal of limiting global temperature increase to well below 2 degrees Celsius (°C) above preindustrial levels. Consistent with this goal, the Intergovernmental Panel on Climate Change (IPCC) published a report on limiting global warming to 1.5°C. The report, published in October 2018, concludes that achieving “no or limited overshoot” of 1.5°C would require reducing net CO₂ emissions globally about 45% by 2030 and reaching net-zero emissions by 2050.

As outlined earlier, in light of the progress we have made in reducing our carbon emissions, WEC Energy Group is setting more ambitious targets for our electric generating fleet: to reduce CO₂ emissions by 60% and 80% below 2005 levels by 2025 and 2030, respectively, and to be net carbon neutral by 2050.

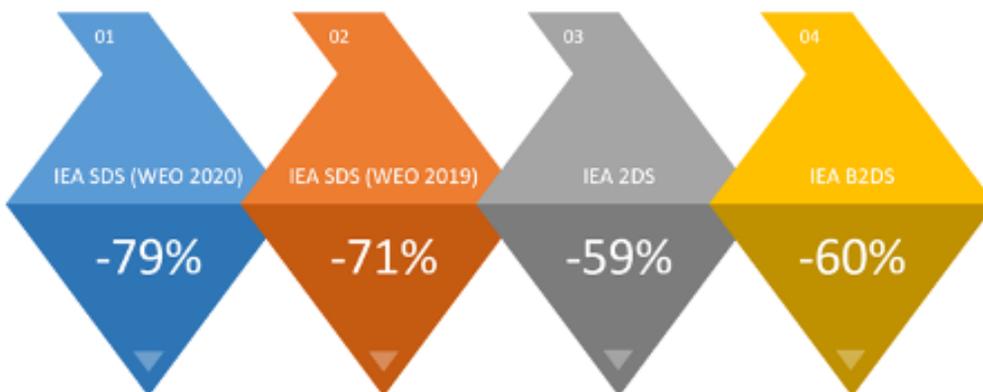
Our midterm goals exceed the global benchmark discussed in the IPCC report and is aligned with the more aggressive reduction pathways for the U.S. electric power sector embedded in global climate scenarios that are consistent with the goals of the Paris Agreement. Helpful points of reference include the International Energy Agency’s (IEA) Sustainable Development Scenario (SDS) from the World Energy Outlook, and the 2 Degree Scenario (2DS) and Beyond 2 Degree Scenario (B2DS) from the Energy Technology Perspectives (see figure).



By 2030, IEA projects that the average global carbon intensity (CO₂ emissions per megawatt-hour of electricity production) will decline to roughly 0.23 metric tons of CO₂ per megawatt-hour (metric tons/MWh) in the B2DS scenario and the 2DS scenario. By comparison, we estimate a carbon intensity of 0.17 metric tons/MWh for our operations by 2030, as we work toward our 80% reduction goal.

We continue to evaluate reduction pathways for the U.S. electric power sector in a wide range of global climate scenarios. Our companies conduct direct lobbying in support of our corporate initiatives and targets, consistent with the goals of the Paris Agreement.

Percent reductions in U.S. Power Sector CO₂ emissions (2005-2030) from the International Energy Agency’s Global Climate Scenarios – WEC Energy Group is working to achieve an 80% reduction from 2005 levels by 2030.



Note: Percent reductions from 2005 baseline

Risks and opportunities

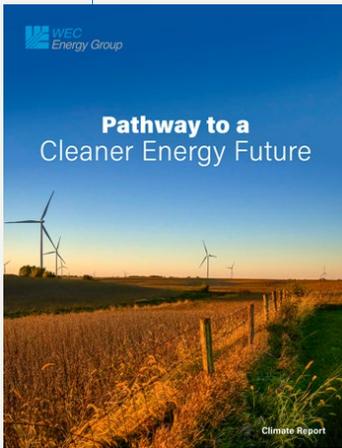
Our 2019 climate report included significant discussion and analysis of the risks and opportunities associated with climate change and the implications for our different business segments. Working with EPRI, WEC Energy Group conducted extensive analyses of long-term GHG reduction pathways for the U.S. electric sector and other parts of the economy (e.g., transportation and buildings). Informed by this analysis and ongoing work, we continue to focus on a range of risks and opportunities, including transition risks and physical risks to our infrastructure.

The following table summarizes the key climate-change risks and opportunities that we continue to factor into our long-term business planning and regulatory discussions. The table also includes the “signposts” associated with each category and highlights of actions we are taking as part of our strategy to manage climate risks and opportunities. We will continue to track market, technology and policy developments against these signposts to help inform our future business plans.

Business segment	Risks	Opportunities	Key signposts	Strategic outlook
Overarching	Transition risks	Transitioning to a low-carbon economy creates opportunities to further develop a modern, resilient energy system, enhancing our reputation and brand value. Be a leader in a low-carbon energy transition. Ensure those opportunities benefit the communities we serve by lowering GHG emissions across our service territories.	<ul style="list-style-type: none"> • Policy proposals to limit GHG support alternative technologies, or set mandatory renewable energy standards. • Financial incentives for alternative energy technologies. • Extreme weather events impacting the Midwest economy. • Public opinions about the threat of climate change. 	We have joined companies across the country in adopting a net-zero commitment. This comes as investors are asking for greater action on climate change, cities and states are adopting renewable energy policies, and customers are increasingly seeking renewable energy options. Reliability and affordability will remain of the utmost importance to us as we explore a path to net zero and prepare our systems for the physical risks of climate change.
	Climate change and climate regulations could impact the broader economy in the Midwest with implications for our business. In pursuing a net-zero future, we must rely in part on nascent technologies that require continued development and cost declines. If the development and maturation of these resources are delayed, we could be confronted with a technology risk that could hinder our progress toward long-term emissions reduction.	Expanding the presence of zero-carbon resources in our fleet creates new investment opportunities and reduces our exposure to potential future climate regulations. The electrification of transportation and buildings could create new demand for electricity. New market opportunities could emerge from working with customers to meet their energy and sustainability goals.	<ul style="list-style-type: none"> • Electricity demand and technologies. • Generation fuel mix and markets. • Planned capacity additions with low- or no-carbon resources. • Planned power plant retirements. • Falling costs of renewable energy and low-carbon energy technologies. • Breakthroughs in carbon capture and sequestration technology. • Nuclear generation constraints and opportunities. 	Capitalizing on the continued decline of renewable energy prices, as well as low natural gas prices, we expect to retire over 1,400 MW of coal-fueled generating capacity between 2021 and 2025. Going forward, we will invest in further renewable energy resources for our utilities and WEC Infrastructure business. We are expanding our low-carbon gas generation and reviewing our options with respect to nuclear generation.
Physical risks	Climate regulations and shifts in markets and technology could impact the economics of our generating facilities, resulting in the early retirement of some facilities. Deploying new technologies raises cost and performance risks.			
The increased frequency, duration or intensity of severe weather events could damage generating facilities. Prolonged drought could disrupt our generating facilities that rely on cooling water. Fuel supplies could be disrupted.				
Electric generation				

Business segment	Risks	Opportunities	Key signposts	Strategic outlook
Electric transmission	Transition risk	Investment opportunities in transmission utilization and expansion could help us deliver no- and low-carbon energy to market and maintain affordable energy supplies for our customers.	<ul style="list-style-type: none"> Increased capacity import limits for Midcontinent Independent System Operator (MISO) capacity auctions, providing beneficial flexibility during our Wisconsin generating fleet transition. New transmission proposals. Wind and solar capacity additions in the MISO region. 	WEC Infrastructure has acquired or agreed to acquire majority stakes in seven wind farms in four states. Looking ahead, we plan to invest \$2.2 billion in WEC Infrastructure and add 100 MW of utility wind between 2021 and 2025. Investments in transmission assets may be important to increase the value of these wind facilities for our customers and investors.
	Transmission expansions, efficiency improvements and improved use of assets will be critical to expanding renewable energy in the U.S. Midwest. This raises siting and permitting challenges.			
	Physical risks			
	The increased frequency, duration or intensity of severe weather events could damage transmission assets, leading to challenges with service disruptions.			
Electric distribution	Transition risks	Investment opportunities to modernize and harden electric distribution equipment are helping us improve reliability and meet our customers' expectations. New business opportunities could include vehicle chargers, distributed resources and advanced energy-management services.	<ul style="list-style-type: none"> EV models offered by car manufacturers. EV prices, performance and reliability. Sales of EVs and percent of new car sales. Number of public charging stations. Customer opinions about EV options. Behind-the-meter solar energy systems. Heat pump installations. 	Although EVs made up just over 2% of new car sales in the United States in 2020, automakers continue to bring new models to market. Additionally, lithium-ion battery pack prices have fallen almost 90% since 2010 — as prices continue to fall, these options will become more affordable. We have proposed pilot programs that would increase access to charging infrastructure in Wisconsin.
	EVs and distributed generation and storage could put new demands on the distribution system, creating operational risks and requiring upgrades and investments in the system.			
	Physical risks			
	The increased frequency, duration or intensity of severe weather events could damage distribution lines.			
Natural gas distribution and storage	Transition risks	System modernization and replacement efforts are reducing methane emissions while enhancing safety and reliability. Integrating new technologies that utilize existing natural gas systems (e.g., hydrogen, renewable natural gas) are emerging as increasingly viable resources.	<ul style="list-style-type: none"> Miles of polyethylene pipes. Falling costs of renewable and low-emitting energy technologies. 	Since 2011, Peoples Gas has installed more than 1,000 miles of modern natural gas main in Chicago. Peoples Gas is on track to meet its 2017 commitment to replace its remaining iron mains at an annual rate of at least 2% for five years. Looking ahead, Peoples Gas expects to continue investing between \$280 million and \$300 million annually for pipeline replacements. We also are exploring the roles that renewable natural gas and hydrogen can play in our system. Current efforts across the industry, including our work as a member of LCRI, are helping to assess and advance the contribution these resources can make to natural gas systems. As the technology develops, our modernized natural gas system may have the opportunity to serve the hydrogen economy as well.
	End-use efficiency, decarbonizing supply and electrification could impact the economics of our natural gas distribution and storage businesses.			
	Physical risks			
	Support for natural gas as a viable resource in a low-carbon transition could shift. Fuel supplies could be disrupted.			

Scenario analysis



Our 2019 climate report included discussion of the scenario analysis that we conducted with the support of EPRI. The modeling relied on EPRI's U.S. Regional Economy, Greenhouse Gas, and Energy Model (US-REGEN) to evaluate more than 100 scenarios for decarbonizing the U.S. electric sector and other parts of the economy (e.g., transportation and buildings). This holistic approach was important to understand the implications of transitioning to a low-carbon economy, as a growing number of companies throughout the economy are making ambitious climate commitments.

The following are some of the insights from the analysis:

- The EPRI analysis suggested multiple possible pathways to decarbonize the region's electric supply, depending on technology costs and other assumptions. The lowest-cost strategy that best serves our customers' needs will depend on future technology developments, public policy decisions and market factors, which continue to evolve over time. Also, the decisions are likely to get more difficult as we pursue the last increments of emissions reduction. The Midwest region has massive potential to generate carbon-free renewable energy; however, getting that power to market will be a major challenge. We must be prepared to adjust our approach as all of these issues come into clearer focus.
- In Wisconsin, the transportation sector accounts for nearly one-third of energy-related CO₂ emissions. With projected declines in battery costs and a low-carbon grid, the EPRI modeling showed a steady decline in light-duty vehicle emissions. Electricity could play an important role in decarbonizing transportation; however, this will depend on maintaining competitive prices for electricity and the policy incentives for reducing emissions from the transportation sector.
- Powering the region's transportation needs with electricity would create significant additional demand for electricity. Time-of-use programs can encourage EV owners to charge during off-peak hours when electricity demand is low, minimizing the impacts on the system and reducing costs. Strategic electrification could also play a role in reducing emissions from space- and water-heating in buildings.
- The EPRI modeling also found that electrification of transportation and buildings could shift Wisconsin from a summer peaking system to a winter peaking system. This means higher peak demand for electricity in the winter months, driven by heat pumps and the fact that electric vehicles would need more charge time to travel an equivalent distance in cold conditions. This scenario will have implications for the operations of the grid.

We continue to evaluate scenarios for decarbonizing our electric supply with updated assumptions and input from industry experts. Our customers rely on us to provide reliable and affordable energy services, and we will continue to apply our expertise and listen to feedback to facilitate an orderly transition to a cleaner energy future.

Risk management

Our long-term vision and strategy require disciplined processes for gathering and assessing timely and relevant information on a macro level, which in turn provides crucial perspectives used to carry out daily decision-making.

When applied day to day, year over year, this approach keeps us focused on a solid path to achieving long-term sustainability. Senior management has primary responsibility for managing risk, including the assessment of risks and opportunities associated with climate change, and they address this responsibility using a multifaceted approach that seeks out and captures input from internal resources across the organization, as well as from leading industry experts and stakeholders.

The company's vice president — environmental, in collaboration with members of her team, takes the lead in analyzing the climate-related impacts of our strategies and related tactics. The Environmental team, in primary partnership with the WEC Infrastructure and Fuels team, engage with other functional areas of the company to identify cost-effective options for reducing GHG emissions. Our Climate Risk Committee, which is facilitated by the vice president – environmental and brings together senior-level officers responsible for overall corporate strategy, meets at least quarterly to discuss goals and initiatives that involve climate-related risks and opportunities.

Working with external organizations and our internal staff, our management team 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, investment and piloting, whether alone or in collaboration with others in our industry.



We actively participate in industry organizations, including EEI and American Gas Association (AGA), that are engaged in the legislative and regulatory processes involving climate change and other environmental matters. To inform company planning, risk management and operations, we partner on scientific and technical work with organizations including EPRI and GTI. Collaborations between groups, such as EEI and AGA's voluntary reporting initiative and the LCRI effort described in our strategy section, provide further opportunities to advance energy technology and business practices. Additionally, we are involved with state organizations for the areas we serve, including Michigan Manufacturers Association, Illinois Environmental Regulatory Group, Wisconsin Manufacturers & Commerce, and Wisconsin Utilities Association.

In October 2019, we were invited to join the State of Wisconsin Governor's Task Force on Climate Change, which brought together representatives from a range of local industries and communities to address GHG emissions. We have become an active participant in the group's development and ongoing efforts to meet the state's climate goals, which align closely with our own. A December 2020 report from the task force identified 55 recommendations to the governor across multiple sectors, including the energy industry.



These various activities serve as critical inputs to our enterprisewide approach to identifying and managing risk. As a standing corporate practice, each year, the company's risk areas are systemically evaluated. Our Audit Services department conducts an annual enterprise risk assessment, whereby business leaders identify existing, new or emerging issues or changes within their business areas that could have enterprise implications. Risk areas are then mapped to create a cumulative assessment of their significance and likelihood, taking into consideration industry benchmarking information, as appropriate. The mapping also identifies lines of responsibility for managing the risks to ensure accountability and focus. Climate change and its implications are included in this assessment, as described on the following page.

Our Enterprise Risk Steering Committee (ERSC), which is chaired by the chief operating officer (COO) and consists of the CEO and other senior-level management employees, regularly reviews the company's key risk areas and provides input into the development and implementation of effective compliance and risk management practices. On a bimonthly basis, the ERSC discusses findings of

Audit Services' annual enterprise risk assessment, holds in-depth discussions with members of management on identified subjects, and tracks progress and status thereafter. Updates from these meetings are shared with the board, as described below.

The CEO provides reports to the board at each board meeting and routinely calls upon members of his staff, including the COO, chief financial officer (CFO), and the executive vice president — external affairs (EVP EA), to provide detailed updates to the board in their respective areas of responsibility, including matters of enterprise risk. The COO and CFO review with the board operational and financial aspects of the capital plan, and associated progress toward achieving carbon and methane goals, while the EVP EA provides regulatory updates, including the impact of evolving state and federal legislation and policy associated with decarbonization and electrification initiatives aimed at addressing climate change. This provides the board with regular opportunities to ask questions and seek additional information as needed to have comfort in management's approach to addressing climate matters, including allocation of sufficient financial and human resources.

Areas of focus

As outlined earlier in this report, our climate strategy is informed by ongoing analysis of risks and opportunities. We have processes in place across the organization to identify and respond to developments in key areas.

➤ Environmental laws and regulation

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 electric and natural gas operations; therefore, we monitor legislation and regulation in each of the states where we do business. Throughout the company, our regulatory, environmental and government affairs teams scrutinize proposals at all levels of government.

We strive for the flexibility to react to a variety of potential outcomes while ensuring a secure, low-cost and reliable supply of fuel for generation and distribution needs. Our electric energy companies build flexibility into fuel supply and transportation contracting strategies to account for potential climate-change regulation.

Strategic planning processes enable our companies to continuously evaluate potential regulatory changes in the context of maintaining reliable, affordable energy supplies for our customers that follow the environmental improvement trajectory we have set. Our intermediate- and longer-term GHG emissions reduction goals are consistent with national and international climate policy commitments to date, while recognizing uncertainties inherent in long-term planning.

➤ Physical infrastructure

Our power generation, electric and natural gas reliability, and planning teams evaluate potential impacts of both acute and chronic risks associated with weather events that could affect system availability and reliability. We perform economic analyses of weather and energy use in order to identify trends that are used for generation, financial and strategic planning. Through our integrity management program, we conduct risk analyses of our natural gas system annually and identify high-consequence areas for monitoring and remediation.

As part of our process for improving equipment reliability, we use an equipment reliability index we created based upon industry best practices to gauge our reliability performance, identify opportunities for improvement, evaluate potential alternatives, and gain the associated cost and performance benefits for our customers.

➤ Energy conservation and demand

In our planning, we estimate the impacts of changes in customer growth and customer energy conservation efforts. Conservation of energy can be influenced by certain federal and state programs that are intended to influence how consumers use energy. For example, the states where our utilities operate have adopted energy efficiency targets to reduce energy consumption by certain dates.

We will continue to evaluate energy efficiency initiatives, along with other demand- and supply-side options in our future GHG emissions reduction strategies, in the context of an evolving utility industry regulatory framework.



➤ Technology and market changes

Research and development activities abound for new technologies that produce or store power or reduce power consumption. 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. We also estimate the impacts of changes in customer growth, deployment of customer-owned generation and customer energy conservation efforts. Our load forecasting and fuel procurement processes evaluate potential impacts of fuel price changes on customer demand.

We have taken advantage of opportunities in this area by adopting new technologies as they become cost-effective and reliable enough to serve our utility needs. Our capital plan includes a range of investments in renewable energy, infrastructure and battery storage, and we expect further advancements to play a key role in achieving our GHG reduction goals.

Metrics and targets

As we move forward with the investments and actions that will bring us toward net-zero carbon, we understand the need for effective tracking and management of our emissions. Each year, we publish a Corporate Responsibility Report, submit responses to surveys including CDP Climate and Water, and disclose climate-related decisions in our Securities and Exchange Commission filings and investor updates.

Our disclosure is guided by industry standards, such as recommendations from the Task Force on Climate-related Financial Disclosures, as well as internal risk and priority sustainability issue assessments. We also are participating in initiatives led by EEI and AGA to promote consistency and transparency in sustainability reporting across the energy utility sector. A list of climate-related disclosures can be found on the Corporate Responsibility section of our website.

Climate metrics

	Units	2018	2019	2020
Greenhouse gases (metric tons)				
Owned generation ¹	CO ₂	26,129,000	21,169,000	19,389,000
	CO ₂ e	26,253,000	21,262,000	19,471,000
Purchased power ²	CO ₂ e	3,138,000	3,886,000	2,766,000
Opportunity sales ^{2,3}	CO ₂ e	3,634,000	2,820,000	2,686,000
Non-generation: Natural gas distribution system emissions	CO ₂ e	404,000	418,000	403,000
Emissions intensity (metric tons/net MWh, unless otherwise stated)				
Owned generation ^{1,4}	CO ₂ e/MWh	0.77	0.64	0.60
Owned generation ^{1,4} + net purchases/sales to meet customer load ³	CO ₂ e/MWh	0.53	0.47	0.42

- 1 Owned generation excludes biogenic CO₂ and is based on ownership share.
- 2 Purchased power and opportunity sales have the same CO₂ and CO₂e value.
- 3 Emissions from power sold to MISO market (subtracted from total) over that needed to meet customer load.
- 4 Includes owned generation from WEC Infrastructure wind farms for 2019 and 2020. The environmental attributes of the WEC Infrastructure renewable facilities are or may be the property of third parties. As such, these third parties are solely entitled to the reporting rights and ownership of the environmental attributes such as renewable energy credits, offsets, allowances and the avoided emissions of greenhouse gases.

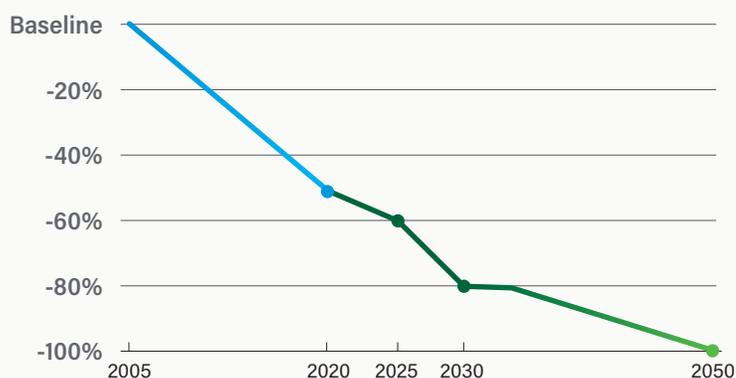
Electric generation reduction goals

60% below 2005 levels by 2025

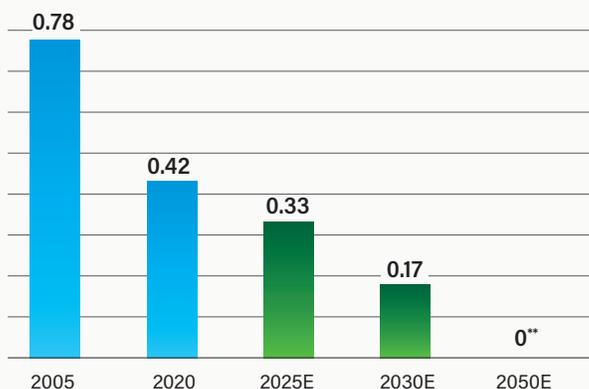
80% below 2005 levels by the end of 2030

Net carbon neutral by 2050

Achieved and anticipated CO₂ reductions (net mass)*



Greenhouse gas intensity* (metric tons CO₂e/MWh)



* Includes owned electric generation, purchased power and WEC Infrastructure. The environmental attributes of the WEC Infrastructure renewable facilities are or may be the property of third parties. As such, these third parties are solely entitled to the reporting rights and ownership of the environmental attributes such as renewable energy credits, offsets, allowances and the avoided emissions of greenhouse gases.

** Includes projection of potential carbon offsets by 2050.

Targets

For our electric generating units, we aim to reach net-zero carbon emissions by 2050. After reaching our previous 2030 goal of a 40% CO₂ reduction goal more than 10 years ahead of schedule, we are now pursuing interim targets to our net-zero long-term vision of a 60% reduction by 2025 and an 80% reduction by 2030, below 2005 levels.

On the natural gas side, we announced a goal across our companies in May 2019: reducing the rate of methane emissions from our natural gas distribution lines by 30% per mile by 2030 below a 2011 baseline. At the end of 2020, we were more than halfway toward achieving that goal.

In light of that progress, as of May 2021, we are setting a new goal to achieve net-zero methane emissions by 2030. This goal applies to emissions from WEC Energy Group natural gas distribution companies calculated in accordance with EPA's 40 Code of Federal Regulations Part 98, Subpart W reporting rule. We expect that Peoples Gas' Methane Challenge goal of replacing iron natural gas mains at an annual rate of at least 2% per year through 2022 will support achieving this target.

We provide the EPA with carbon dioxide equivalent (CO₂e) amounts resulting from our customers' natural gas use, as well as emissions due to natural gas storage and distribution system leaks.

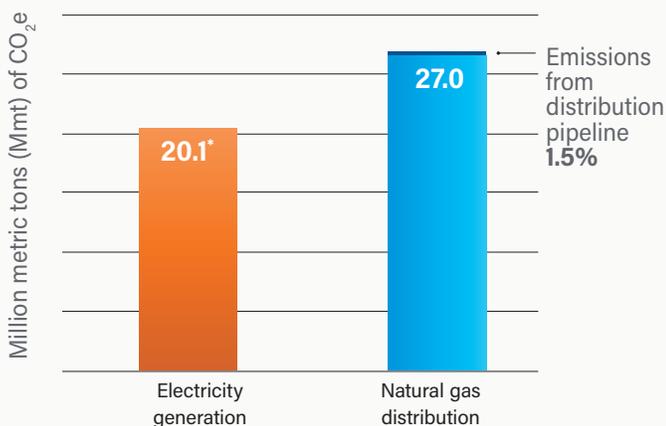
For 2020, we reported emissions of approximately 27.0 million metric tons of CO₂e to the EPA related to our natural gas distribution business, largely from customer use of the product. Emissions from the distribution pipeline represented approximately 1.5% of this amount.

As we work toward the above goals, we will continue to assess potential long-term GHG reduction pathways and uncertainties, taking into account the objectives set forth by the Paris Agreement on climate change.

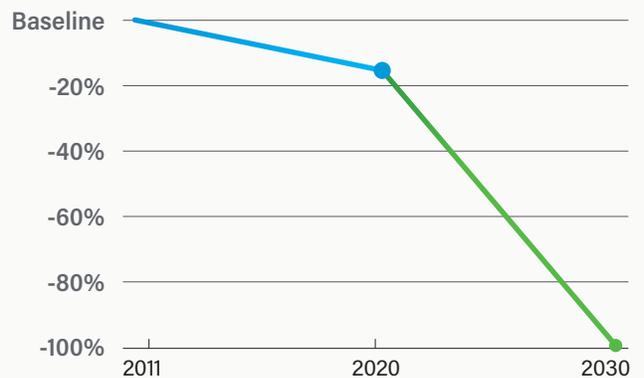
Natural gas distribution reduction goal

Net-zero methane emissions from natural gas distribution lines by 2030

2020 GHG emissions from electricity generation and natural gas distribution



Achieved and anticipated methane emissions reduction from distribution



- Represents a decrease in the rate of methane emissions, per mile, from the natural gas distribution lines in our network from a 2011 baseline.
- This goal applies to emissions from WEC Energy Group natural gas distribution companies calculated in accordance with EPA's 40 Code of Federal Regulations Part 98, Subpart W reporting rule.

Conclusion

Across WEC Energy Group, we are supporting the transition to a lower-carbon economy. Environmental considerations and evolving customer preferences are factored into our planning as well as our corporate governance activities. Through this focus, we have greatly reduced our GHG emissions while maintaining affordability and award-winning electric reliability, and we aim to achieve still more ambitious reductions over the long term.

A broad range of scenario analyses and strategic planning have indicated significant opportunities for our business, many of which will depend on continued technological development. As a result, we are investing in a diverse mix of no- and low-carbon electric generation. Meanwhile, we continue modernizing our natural gas system to support long-term reliability, safety and reduced emissions. We expect our participation in industry organizations and research to open further possibilities going forward.

Our robust risk management program and ongoing efforts to improve grid resiliency can help facilitate this transition. We will continue to communicate our efforts and plans as they evolve, and welcome input from our stakeholders.

Appendix: Options for electric generation asset transition

WEC Energy Group expectations and options

We have set goals for our electric generation fleet to reduce CO₂ emissions by approximately 80% below 2005 levels by 2030 and to be net carbon neutral by 2050. Following are our expectations and options for reshaping our generation mix to achieve our 2050 target.

1. Assumptions for fossil-fueled and nuclear power plants built before 2000:

- Replaced with carbon-free resources:
 - Coal generation.
 - Natural gas and oil simple-cycle and natural gas steam generation.
- Point Beach Nuclear Plant licenses and related power purchase agreements extended or replaced by other carbon-free resources.

2. Options for fossil-fueled power plants built after 2000:

- Elm Road units' emissions reduced or mitigated; some possible options for accomplishing this include:
 - Retrofit with carbon capture and storage (CCS) technology.
 - Mitigate using biological sequestration projects (e.g., forestry).
 - Repower with natural gas.
- Weston Unit 4 replaced with carbon-free resources or natural gas combined-cycle (NGCC) generation.
- Other less efficient NGCC generation replaced with newer, more efficient NGCC technology.

We expect any remaining CO₂ emissions in 2050 would be offset by various physical and/or financial instruments, to be clarified as those markets and products mature. Additionally, we are carefully evaluating hydrogen as a clean fuel source.

Possible options for WEC Energy Group assets as of 2050

Current asset	Current fuel	Net carbon neutral by 2050
Elm Road 1-2	Coal	With CCS, offsets*, or conversion to natural gas
Weston 3	Coal	Low- or no-carbon
Weston 4	Coal	New NGCC with CCS or offsets, or new carbon-free
Columbia 1-2	Coal	Retired and replaced with mix of carbon-free and efficient gas
South Oak Creek 5-8	Coal	Retired and replaced with mix of carbon-free and efficient gas
Valley 1-2	Natural gas	Low- or no-carbon
Combined-cycle (NGCC)	Natural gas	New NGCC with CCS or offsets, or new carbon-free
Simple-cycle	Natural gas	Low- or no-carbon
Reciprocating internal combustion engines	Natural gas	Low- or no-carbon
Point Beach**	Nuclear	Licenses extended or replaced with new carbon-free generation

*Offset examples include forestry or agricultural carbon-sequestration projects

**Units 1 and 2 licenses for this power purchase agreement expire in 2030 and 2033, respectively

Cautionary Statement Regarding Forward-Looking Information

Certain statements contained in this press release are "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements are based upon management's current expectations and are subject to risks and uncertainties that could cause our actual results to differ materially from those contemplated in the statements. Readers are cautioned not to place undue reliance on these statements. Forward-looking statements include, among other things, statements concerning future GHG emissions, environmental regulations, capital plans and expenditures, investment opportunities, corporate initiatives, purchases of renewable energy and battery storage, renewable energy programs, electric generating unit retirements, demand-side management and energy efficiency programs, and sources and costs of fuel. In some cases, forward-looking statements may be identified by reference to a future period or periods or by the use of forward-looking terminology such as "anticipates," "believes," "estimates," "expects," "forecasts," "guidance," "intends," "may," "objectives," "plans," "possible," "potential," "projects," "should," "targets," "will" or similar terms or variations of these terms.

Factors that could cause actual results to differ materially from those contemplated in any forward-looking statements include, but are not limited to: general economic conditions, including business and competitive conditions in the company's service territories; the extent, duration and impact of the COVID-19 pandemic or any future health pandemics; timing, resolution and impact of rate cases, negotiations, and other regulatory decisions, including recovery of deferred and current costs and the ability to earn a reasonable return on investment; the company's ability to continue to successfully integrate the operations of its subsidiaries; availability of the company's generating facilities and/or distribution systems; unanticipated changes in fuel and purchased power costs; key personnel changes; varying, adverse or unusually severe weather conditions; continued industry restructuring and consolidation; continued advances in, and adoption of, new technologies that produce power or reduce power consumption, and related legislation and regulation supporting the use of that technology; energy and environmental conservation efforts; the company's ability to successfully acquire and/or dispose of assets and projects; cybersecurity and terrorism threats and data security breaches; construction risks; equity and bond market fluctuations; changes in the company's and its subsidiaries' ability to access the capital markets; changes in tax legislation or our ability to use certain tax benefits and carryforwards; federal and state legislative and regulatory changes relating to the environment, including climate change, and other environmental regulations impacting generation facilities and renewable energy standards, the enforcement of these laws and regulations, changes in the interpretation of regulations or permit conditions by regulatory agencies, and the recovery of associated remediation and compliance costs; political developments; current and future litigation and regulatory investigations, proceedings or inquiries; changes in accounting standards; the financial performance of American Transmission Co. as well as projects in which the company's energy infrastructure business invests; the ability of the company to obtain additional generating capacity at competitive prices; goodwill and its possible impairment; and other factors described under the heading "Factors Affecting Results, Liquidity and Capital Resources" in Management's Discussion and Analysis of Financial Condition and Results of Operations and under the headings "Cautionary Statement Regarding Forward-Looking Information" and "Risk Factors" contained in the company's Form 10-K for the year ended Dec. 31, 2020, and in subsequent reports filed with the Securities and Exchange Commission. Except as may be required by law, the company expressly disclaims any obligation to publicly update or revise any forward-looking information.

Third-party information

Third-party scenarios discussed in this report reflect the modeling assumptions of their respective authors, not WEC Energy Group, and their use or inclusion in this report is not an endorsement by the company of their likelihood or probability.

WEC Energy Group is committed to sustainable business practices. For more information about corporate responsibility, visit www.wecenergygroup.com/csr.

