



# *Climate Change Goals and Progress*

*Bert Garvin, EVP External Affairs*

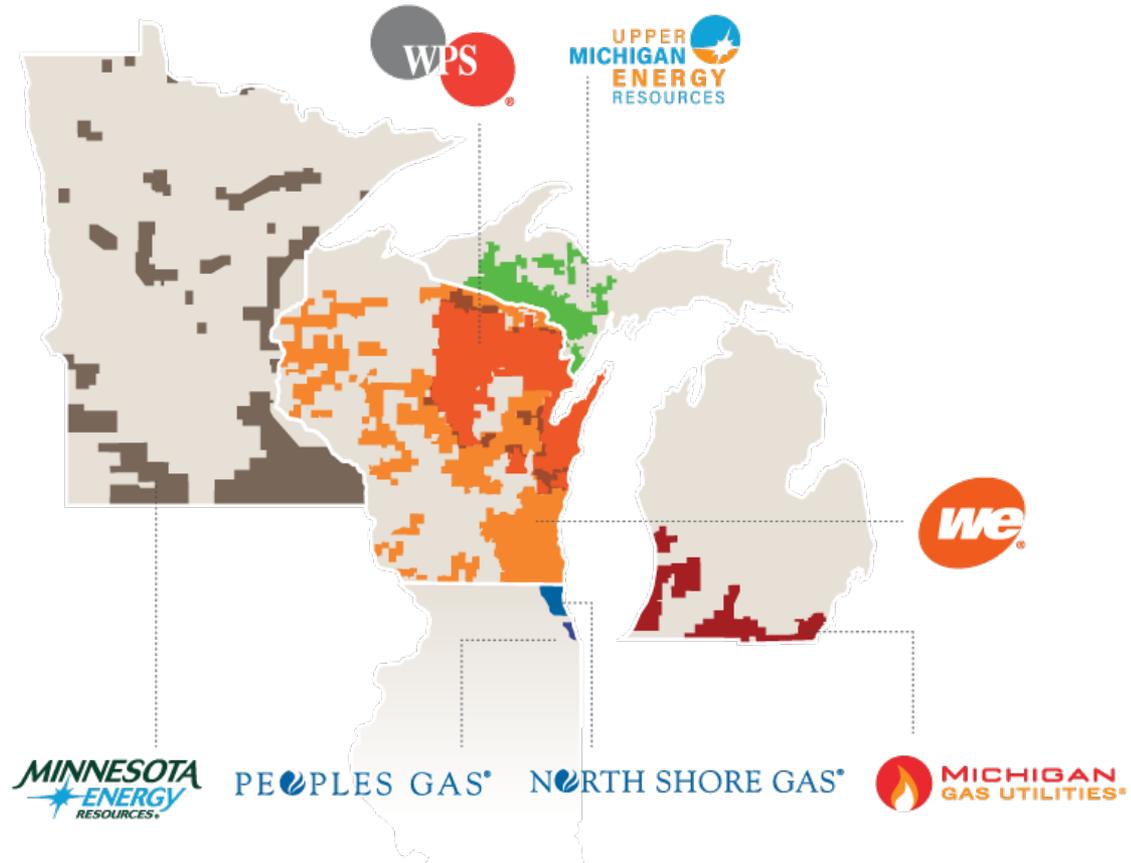
Governor's Task Force on Climate Change  
*March 10, 2020*



## About our company

- **\$29.1** billion market cap\*
- **1.6** million electric customers
- **2.9** million natural gas customers
- **60%** ownership of American Transmission Company
- **70,600** miles of electric distribution
- **49,500** miles of gas distribution
- **\$35.0** billion of assets
- **9<sup>th</sup>** largest natural gas distribution utility in U.S. based on customers
- **9<sup>th</sup>** largest publicly traded utility in U.S. measured by market value\*

\* As of 2/28/2020



# Our pathway to a cleaner energy future

Addressing climate change is a key component of our strategic planning process as we fulfill our obligation to provide reliable, affordable energy to our customers.

- We are committed to ensuring customers have the energy they need.
- We operate all of our facilities in an environmentally responsible manner.
- Renewable energy a key part of our energy mix.



# Carbon goal

In 2019, **met and exceeded** our 2030 goal of reducing carbon emissions from our power plants by 40% below 2005 levels



Progress driven by generation reshaping plan

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**Retired 40% of our coal generation since 2014**

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Given our progress, we are re-evaluating our longer-term 80% carbon reduction goal

# Balancing reliability and customer cost with environmental stewardship

Taken as a whole, changes to our generation fleet should reduce costs to customers, preserve fuel diversity and reduce carbon emissions.

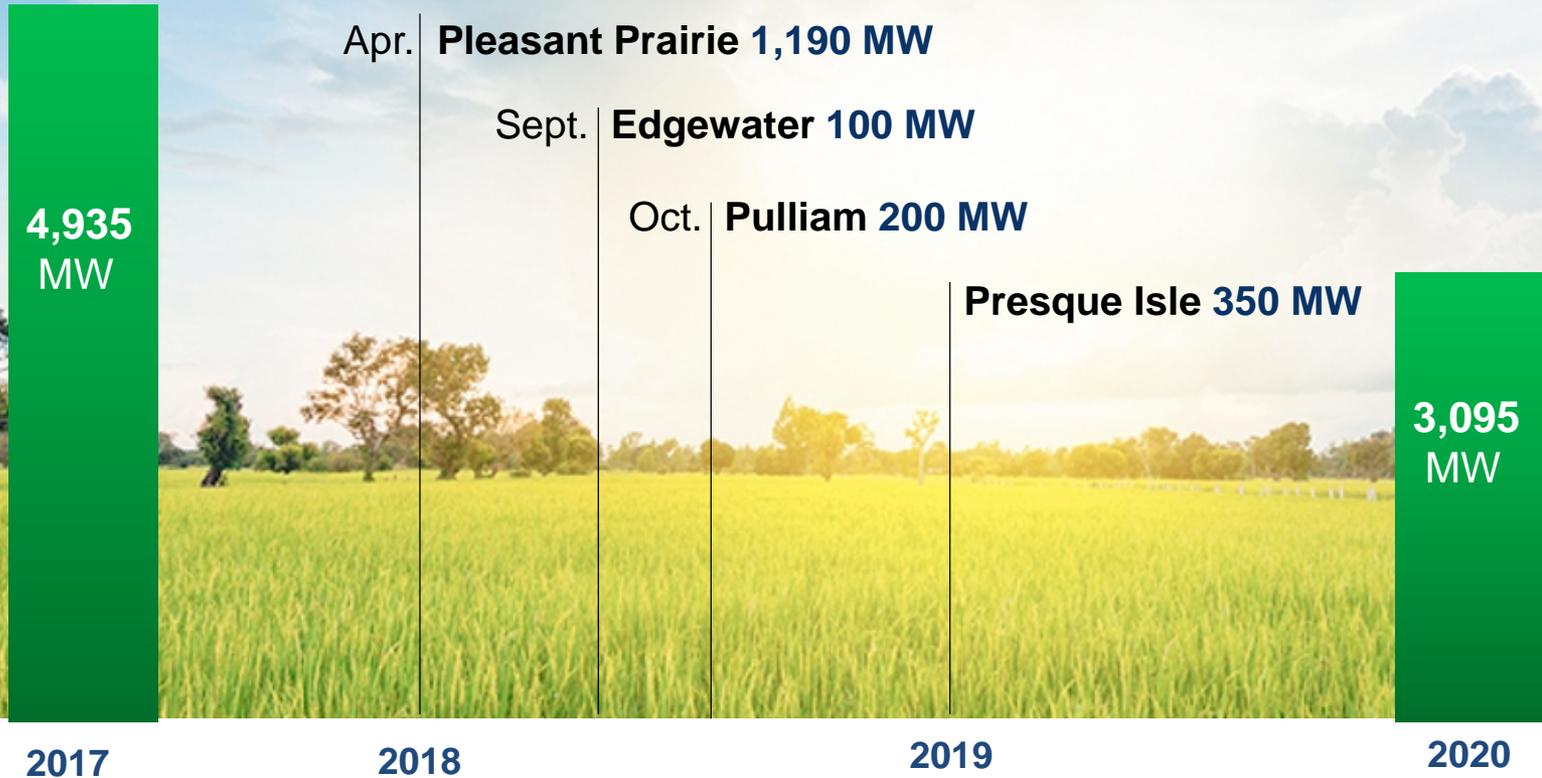
Reshaping our generation includes:

- Retiring older fossil-fueled generating units
- Building state-of-the-art natural gas generation
- Investing in cost-effective zero-carbon generation



*Coal-fueled generation retirements*

# Progress of reducing greenhouse gas emissions



# Supporting a clean energy future in Wisconsin

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



**30**  
hydro plants  
175 MW



**1**  
biomass plant  
50 MW



**5**  
wind turbine  
facilities  
500 MW



**3**  
utility-scale  
solar facilities  
300 MW

## Transitioning to a cleaner energy future

<b>Coal</b>	<ul style="list-style-type: none"> <li>Retired or converted~2,850 MW of coal-fueled generation</li> <li>Sold Milwaukee County Power Plant</li> </ul>
<b>Natural gas</b>	<ul style="list-style-type: none"> <li>Added over 800 MW from highly efficient, combined-cycle units</li> </ul>
<b>Renewables</b>	<ul style="list-style-type: none"> <li>Added over 400 MW of wind generation</li> <li>Added new short-term purchase power agreements for 75 MW of wind generation</li> <li>Added 50 MW of biomass generation</li> <li>Received approval for up to 185 MW in renewable pilot programs</li> <li>Add over 300 MW of new solar generation</li> </ul>

# Investing in zero-carbon generation



- Solar generation technology has improved in efficiency and become more cost-effective, and complements our summer demand curve.
- Wisconsin Electric, Wisconsin Public Service and Madison Gas and Electric are partnering on major solar initiatives.
- In addition, Wisconsin Electric is moving forward on two innovative renewable pilot programs for 185 MW of carbon-free generation.

Project	Utility	Location	Investment	Capacity*	Timing
Badger Hollow Solar Park	WPS	Iowa County, WI	\$130M	100 MW	Construction Underway
Two Creeks Solar Project	WPS	Two Rivers, WI	\$130M	100 MW	Construction Underway
Badger Hollow II Solar Park	WE	Iowa County, WI	\$130M	100 MW	Received PSCW Approval 2/21/20

\*Madison Gas and Electric will own an additional 50 MW at each site

# Working with our customers to add more solar to the mix

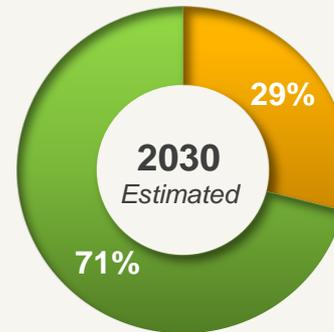
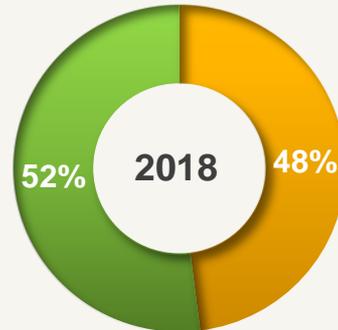
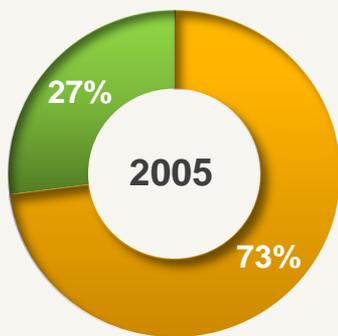
## Solar Now

- Renewable pilot program connects We Energies to community partners (large businesses, nonprofits and government customers) that decide to host solar panels.
- Solar Now projects are capped at 35 MW
  - Queue is now over double the cap
  - 5 MW is now delivering solar energy into the grid — enough to power more than 1,000 homes.

# The future of our Wisconsin fleet

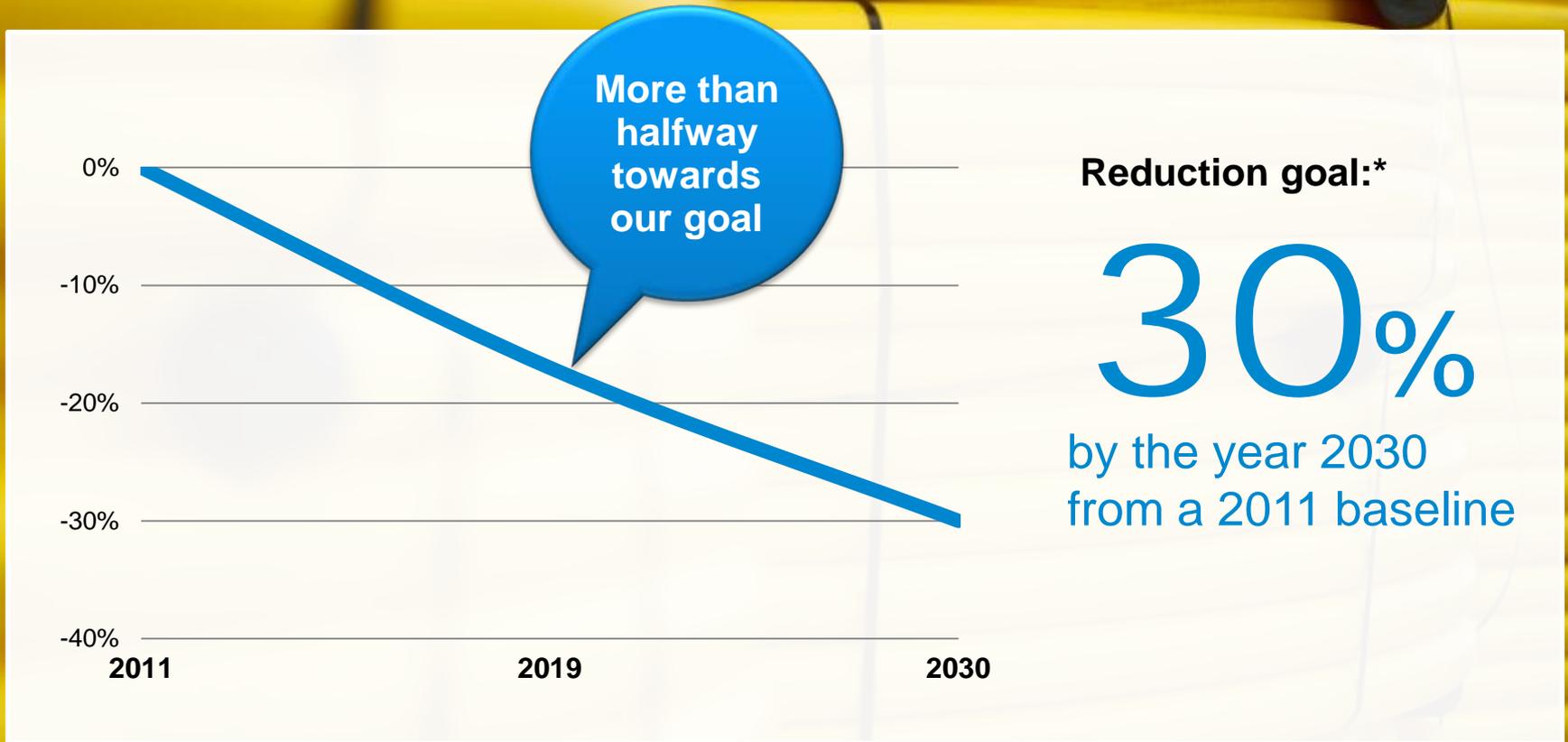
We continue to reshape our portfolio of electric generation facilities strategically focusing on investments that improve environmental performance, reduce emissions from our operating fleet and ensure our customers receive affordable, reliable electricity.

## Sources of electricity supply by fuel type



\*Assumes low-carbon generation includes natural gas generation, as well as coal-fueled generation with at least 70% emission reduction.

# Our methane reduction goal



\*This goal represents 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.



**WEC**  
*Energy Group*

