



**BASIN ELECTRIC
POWER COOPERATIVE**

A Touchstone Energy® Cooperative 

Sustainability Report

Chris Baumgartner, Member and External Relations senior vice president
Tracie Bettenhausen, senior staff writer/editor

October 20, 2022

Sustainability Report

- A report to highlight Basin Electric's activity
- Audiences
 - Primary: Finance/insurance community
 - Legislative/regulatory
 - Membership/employees
 - Public



Sustainability Report

- Telling our story
 - Leadership in environmental stewardship, renewable generation, and reclamation
 - Leadership in carbon capture, both at Great Plains Synfuels Plant and in research and development
 - Attention to safety and sustainability
 - Putting people and communities first
 - Democratic member control
 - Much more...



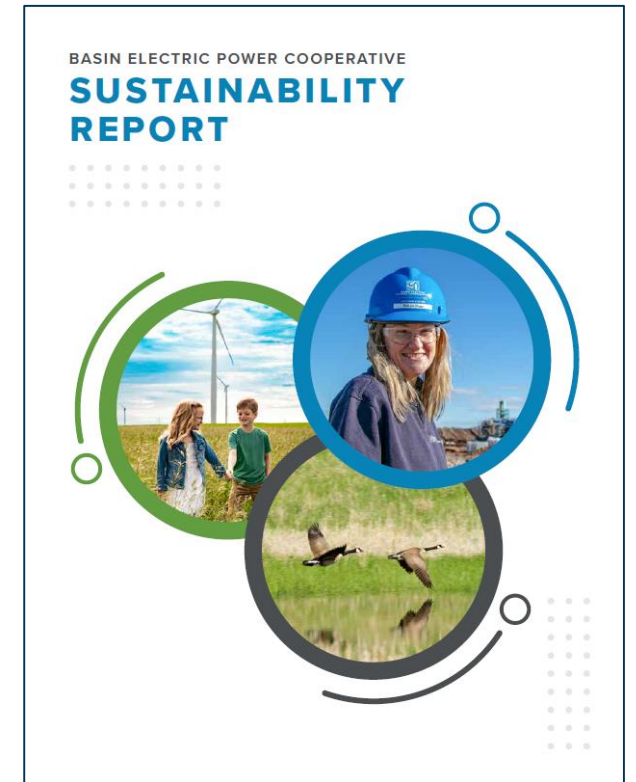
Sustainability Report

- Critical features
 - Reliable and Sustainable (2 pager)
 - Purpose: to help finance and insurance representatives communicate necessity of baseload generation
 - Can be used standalone with key stakeholders
 - Will appear on website on its own in addition to full report
 - Focus on attention to ESG (environmental, social, governance) factors over our history and into the future



Sustainability Report

- We will:
 - Focus on the affordability and reliability our members expect
- We will not:
 - Set a goal that is outside of what technology can currently accomplish and our members can afford



Sustainability Report

- **October:**
Presented to Basin Electric board
Presented to District Manager Meeting
- **November:**
Completed report posted at basinelectric.com
- **April:**
Printed and mailed along with Annual Report



Sustainability Report

RELIABLE & SUSTAINABLE

The service Basin Electric and our member electric cooperatives provide rural America is essential — reliable, affordable, and responsible energy delivered to 3 million meters at homes, schools, businesses, and more across a nine-state region that stretches from the Canadian border to the Mexican border and across the Great Plains. The Basin Electric family of electric cooperatives and our employees work hard every day delivering on our commitment to maintain a safe and reliable flow of electricity to power lives.

Especially in the Upper Great Plains, reliable electricity is more than just a convenience — it's a necessity for survival in many instances. Our members endure harsh weather conditions for more than half the year while continuing their routines of commuting to and from work, keeping livestock fed and watered, drying grain, sending children to school, operating machinery, running businesses, and more.

Basin Electric was founded to provide power to rural America, and our culture of stewardship, innovation, and adaptability has proven successful as we have kept the lights (and heat) on. For more than 60 years, our generation and transmission assets have been the engines of commerce for a service territory that feeds and fuels a nation.

We will continue to honor our commitment of providing our membership with energy that is safely produced, reliable, economic, and environmentally responsible.

RELIABILITY: NECESSARY FOR RESILIENCY

WHAT HAPPENS WHEN THE POWER GOES OUT?

- Houses start to cool off immediately.
- On a -20-degree F (Fahrenheit) day (which happens more often than you'd think), a house will be cold in 6 hours and virtually uninhabitable in 12-18 hours.
- Uninsulated pipes can freeze in as little as 4-6 hours.
- Even if a home's heat comes from natural gas or propane, electricity is still typically necessary for it to function.
- Because temperatures can reach life-threatening lows in the winter, every state in Basin Electric's service area has guidelines against turning off a person's heat in the winter.



DAYS BELOW FREEZING

Basin Electric's Headquarters is in Bismarck, North Dakota, where it averages 182 days per year of below-freezing temperatures.

That's approximately half the year.

— National Weather Service, Bismarck, North Dakota

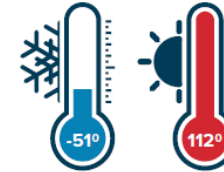
LIVING IN THE DARK



Sunrise 8:33 a.m., sunset 4:53 p.m.
8 hours 20 minutes of daylight

Data from Mnoor, North Dakota, on Dec. 21, 2022, the shortest day of the year.

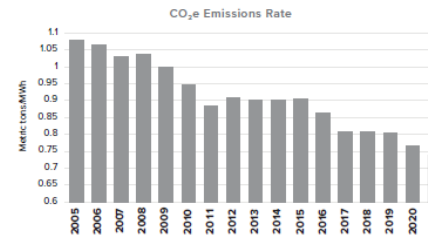
FROM ONE EXTREME TO THE OTHER



Basin Electric serves areas with extreme temperatures. In the past 20 years across North Dakota, the coldest temperature was -51° F and the highest was 112° F.

DECLINING CARBON INTENSITY

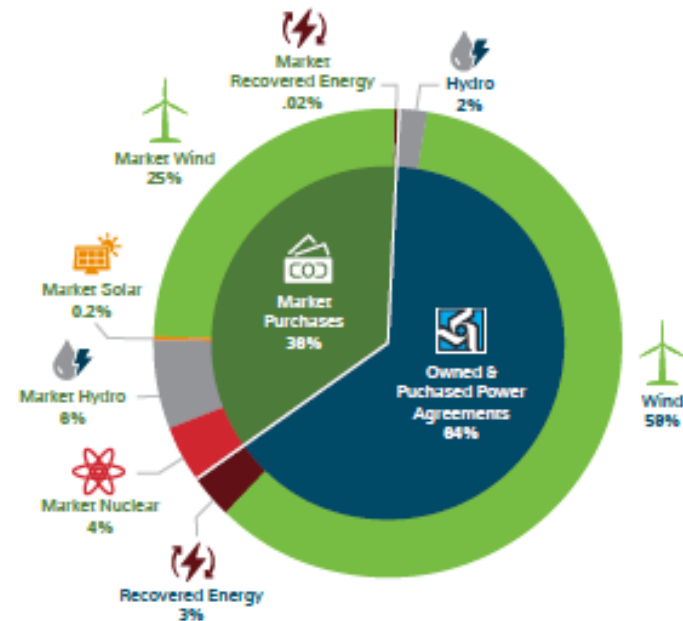
As of 2021, coal represents less than 40% of Basin Electric's generation portfolio. The chart below shows how the cooperative's carbon intensity declines over time as new generation is added.



Sustainability Report

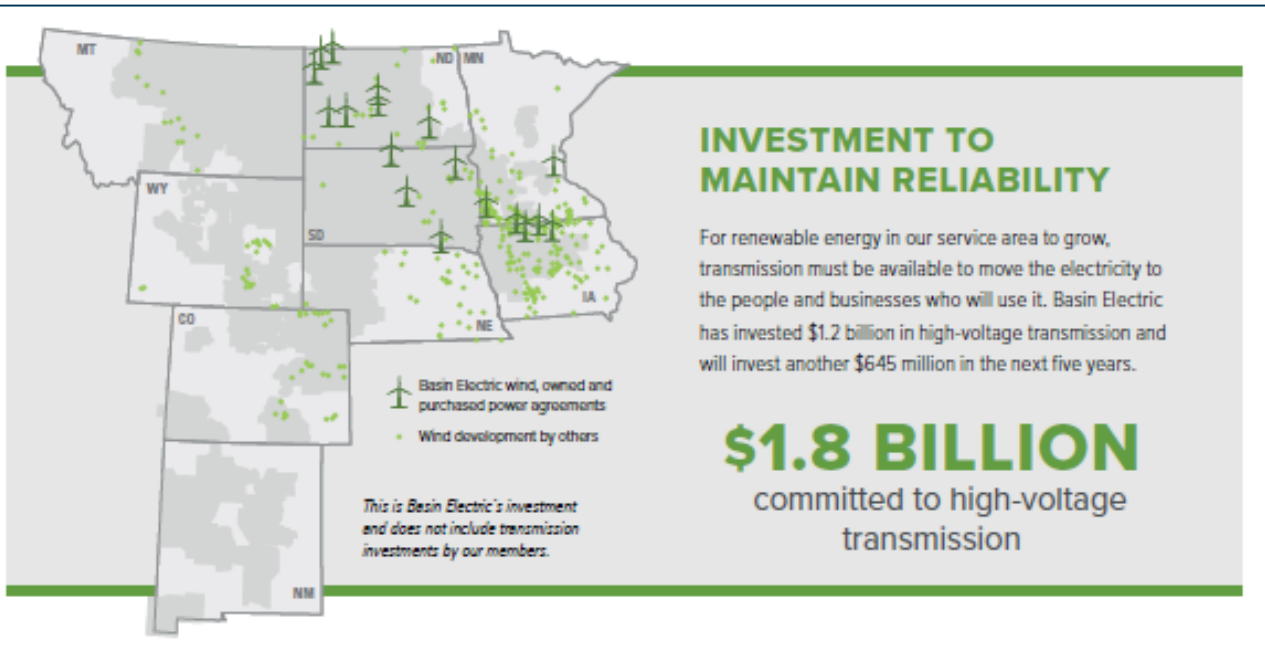
CLEAN ENERGY GENERATION AND PURCHASES

This chart shows Basin Electric's renewable resources, both owned and purchased. In addition to renewable resources, the chart includes non-emitting resources such as hydroelectricity and nuclear. Energy produced from the cooperative's owned resources as well as from long-term purchased power agreements makes up 64% of the total non-emitting resources, while 36% comes from short-term energy purchases from the market.



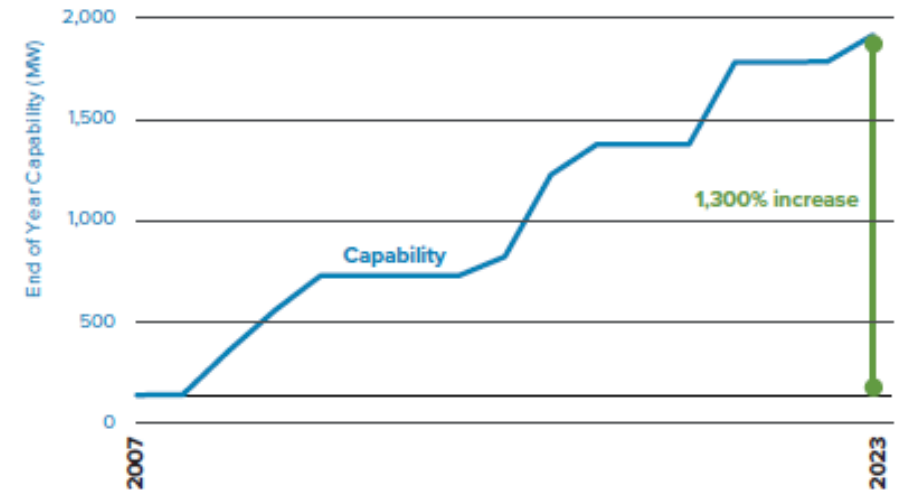
Data is from 2021 and is based on energy, not capability. Chart includes data received from the two regional transmission organizations we participate in, Southwest Power Pool and Midcontinent Independent System Operator.

Sustainability Report



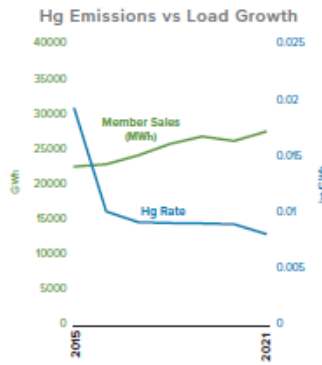
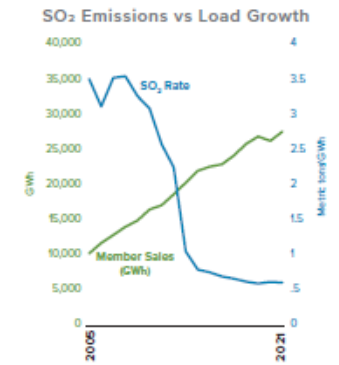
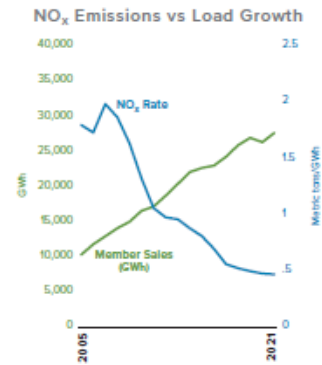
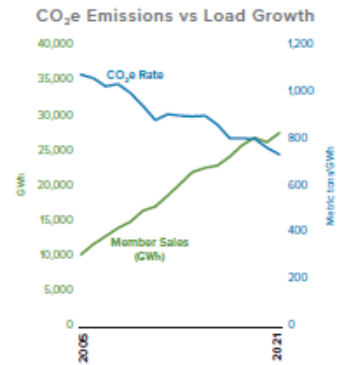
GROWTH OF WIND IN BASIN ELECTRIC'S PORTFOLIO

Basin Electric's commitment to adding renewable generation dates back 20 years with the construction and commissioning of its first wind project. Since then, the cooperative has constructed a number of wind projects of its own, including the largest wind project in the nation that is solely owned and operated by a cooperative. We have also secured purchased power agreements for a large amount of wind-generated power. In fact, we more than doubled our wind capability in just five years, from 2015-2020, and expect it to continue growing into the future.



Sustainability Report

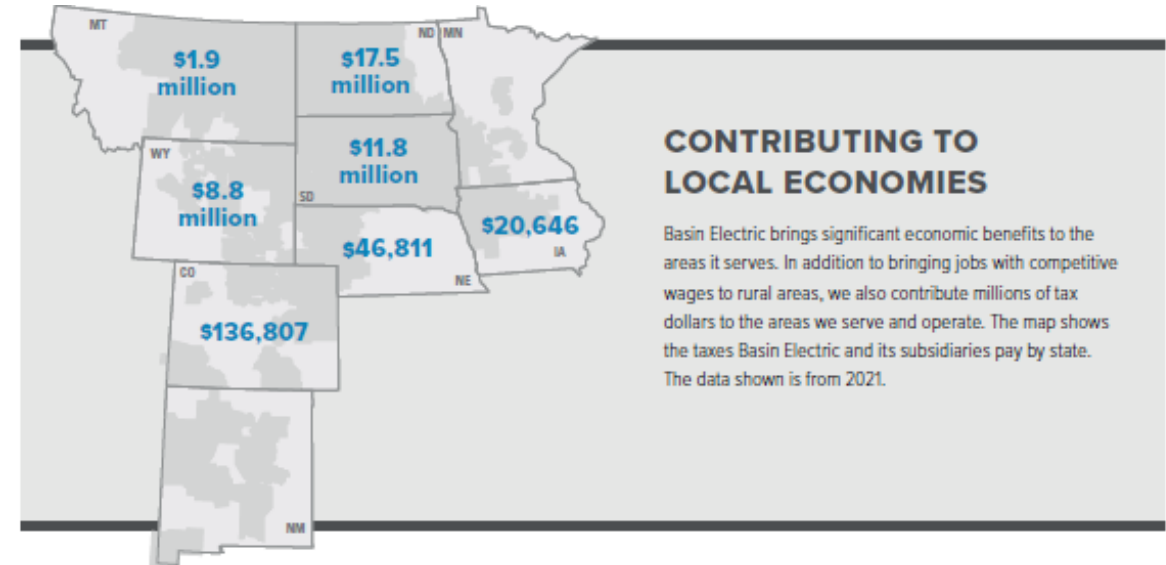
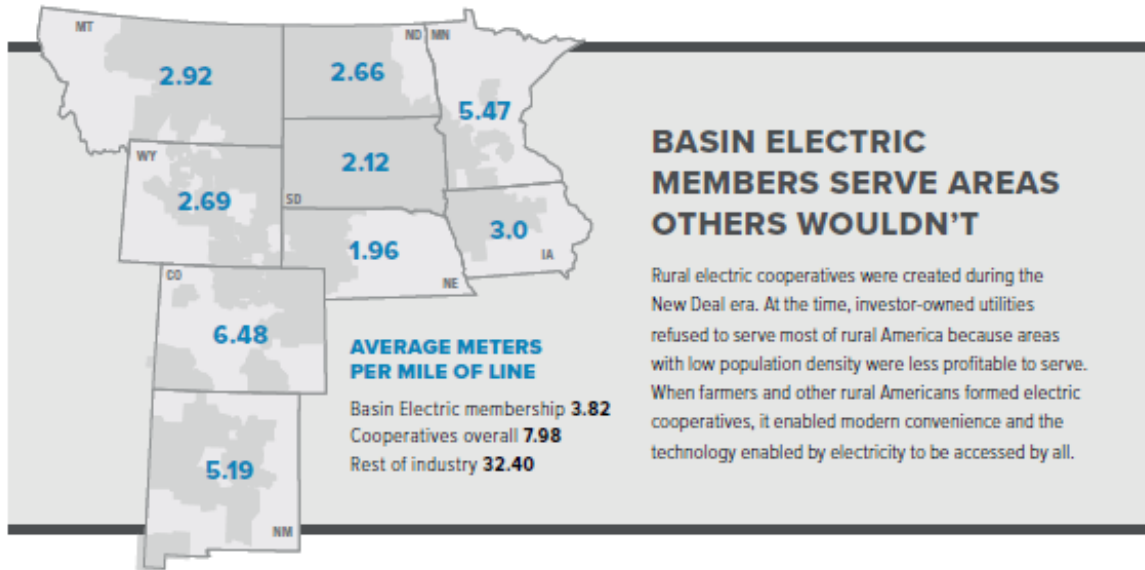
GROWING LOAD WHILE LOWERING EMISSIONS INTENSITY



Mercury (Hg) emissions were not recorded prior to 2015.

THROUGH 2021, BASIN ELECTRIC AND ITS SUBSIDIARIES HAVE INVESTED
 CLOSE TO **\$2 BILLION** IN EMISSIONS CONTROL TECHNOLOGY,
 AND MORE THAN **\$176 MILLION**
 WAS SPENT IN 2021 ALONE TO OPERATE AND MAINTAIN THOSE CONTROLS.

Sustainability Report



Sustainability Report

OPEN AND TRANSPARENT COMMUNICATION

Basin Electric prides itself on open and transparent communication and given the size and diversity of our service area, effective communication is essential. The table below details the engagement channels we leverage to communicate with our diverse group of stakeholders.

OUR STAKEHOLDERS INCLUDE	ENGAGEMENT CHANNELS	
Member directors, managers, and staff	<ul style="list-style-type: none"> • Websites • Quarterly magazine • Newsletter • Monthly board report video and summary • Quarterly Class A district meetings • Member manager conferences 	<ul style="list-style-type: none"> • Annual member CFO update • Annual members-only meeting • Annual Meeting • Member service programs • Resolutions & Bylaws Committees • Facility tours
Communities	<ul style="list-style-type: none"> • Direct communication • Support of community events and programs 	<ul style="list-style-type: none"> • First responder training • Volunteerism
Employees	<ul style="list-style-type: none"> • Intranet • Quarterly magazine • Newsletter • Monthly board report video and summary 	<ul style="list-style-type: none"> • CEO in-person visits • Team meetings • Training events
Regulators	<ul style="list-style-type: none"> • Direct communication • Routine outreach 	<ul style="list-style-type: none"> • Filing applications
Local, state, and federal government	<ul style="list-style-type: none"> • Public meetings/hearings 	<ul style="list-style-type: none"> • Lobby visits
Unions	<ul style="list-style-type: none"> • Labor relations personnel • Benefits meetings 	<ul style="list-style-type: none"> • Annual meetings
Banks, rating agencies, and investors	<ul style="list-style-type: none"> • Quarterly updates • Annual in-person visits 	<ul style="list-style-type: none"> • Facility tours • Ongoing dialogue
Insurance companies	<ul style="list-style-type: none"> • Annual in-person visits 	<ul style="list-style-type: none"> • Ongoing dialogue

MEMBERSHIP STRUCTURE

