



BASIN ELECTRIC POWER COOPERATIVE

A Touchstone Energy® Cooperative 

Renewable Energy



Through direct investments and annual payments under renewable power purchase agreements, Basin Electric has invested more than \$5 billion in renewable resources. By year-end 2017, Basin Electric will have more than 1,720 megawatts (MW) of green and renewable* capability:

- 1,360 MW of wind generation;
- 44 MW of recovered energy generation;
- 316 MW of hydropower (winter peaking power purchased from WAPA).

Wind Generation

In 2011, Basin Electric commissioned the largest wind project in the nation operated by a cooperative, the 162-MW Crow Lake Wind Project, in central South Dakota. The project consists of 108 GE 1.5-MW turbines, one of which is owned by Mitchell Technical Institute (MTI) in Mitchell, South Dakota, for training wind technology students.

Basin Electric owns two projects in North Dakota: the 77 turbines of PrairieWinds 1, and Minot Wind, which

consists of two 1.3-MW turbines and three 1.5-MW turbines. Both projects are located south of Minot, North Dakota.

PrairieWinds ND 1 and PrairieWinds SD 1, the entities that owned PrairieWinds 1, Minot Wind, and Crow Lake Wind, were Basin Electric subsidiaries, and were merged into the cooperative in early 2018.

Basin Electric also owns and operates a small wind project at Chamberlain, South Dakota. The site has two 1.3-MW turbines.

Basin Electric purchases power from several wind projects:

- NextEra Energy Wind Energy Centers

Edgeley Wind Project (North Dakota)	40 MW
Wilton Wind Project (North Dakota)	49.5 MW
Wilton Wind 2 (North Dakota)	49.5 MW
Baldwin Wind Project (North Dakota)	100 MW
Hyde County Wind Project (South Dakota)	40 MW
Day County Wind Project (South Dakota)	99 MW
Brady 1 Wind Project (North Dakota)	150 MW
Brady 2 Wind Project (North Dakota)	150 MW

* The actual renewable energy attributes (aka green tags or RECs) of much of that generation was allocated to members or sold to others. No claims of environmental attributes may be claimed for any part of Basin Electric's power supply, unless those attributes are assigned to the power claimed as green or renewable.



- Corn Belt Power Cooperative wind resources in Iowa:

Iowa Lakes Electric Cooperative	
• Superior Wind Project	10.5 MW
• Lakota Wind Project	10.5 MW
Hancock County	7.3 MW
Crosswinds	16.8 MW

- Wind projects owned by others in South Dakota and Minnesota.
- Other contracts for long-term wind purchases totaling 348 MW, which have started since 2015.

Consolidated Edison, Inc. Campbell County Wind Project (South Dakota)	94 MW
Novatus Energy Sunflower Wind Project (North Dakota)	104 MW
Tradewind Energy, LLC Lindahl Wind Project (North Dakota)	150 MW

As of June 2017, Basin Electric purchases the output from 382 small wind and solar projects owned by member-consumers throughout the cooperative's service territory. The output totals more than 8 MW.

Recent Additions

Since 2014, Basin Electric has been committed to purchasing additional wind. By 2017, Basin Electric has 1,360 MW of wind in its portfolio, nearly doubling the cooperative's wind generation in a matter of a few years. By the end of 2019, Basin Electric forecasts it will have 1,651 MW of wind in its portfolio.

Other Renewable Generation

Several of Basin Electric's members have asked about incorporating solar as a resource option. The cooperative is considering how to best incorporate both small and large solar into its generation fleet. Basin Electric will work with the membership as it develops a solar resource strategy.

Basin Electric purchases the output from eight recovered energy generation sites along the Northern Border Pipeline: Culbertson, Montana; Manning, St. Anthony, and Zeeland, North Dakota; Wetonka, Clark, and Estelline, South Dakota; and Garvin, Minnesota.

Each generates 5.5 MW of renewable energy from exhaust heat produced by the pipeline's compressor stations. The sites produce power with virtually no incremental emissions and are considered carbon-free generation. They are owned and operated by subsidiaries of Ormat Technologies of Reno, Nevada.

Visit Basin Electric's website for answers to frequently asked questions about building wind projects: www.basinelectric.com/facilities/wind/wind-facts/