

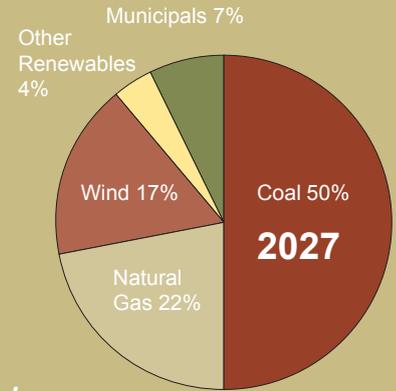
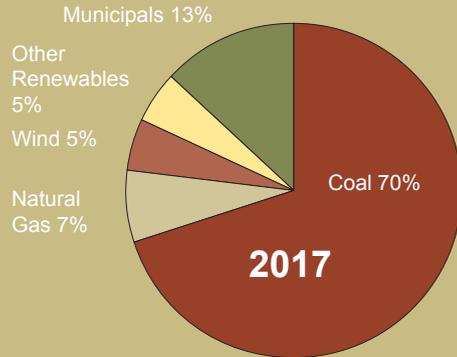


DAIRYLAND POWER
COOPERATIVE

A Touchstone Energy® Cooperative 

Index

Wind	4
Hydro	6
Landfill Gas-to-Energy	8
Consumer-owned	10
Solar	12
Community Solar.....	14
Stewardship.....	16
Dairyland System Map ...	18



This capacity projection demonstrates Dairyland's planned goal of resource diversification between 2017 and 2027, with reductions in coal and increases in lower carbon and renewable sources of energy.

Cover photo: Whistling Wings is one of Dairyland's 15 solar facilities in Wisconsin and Iowa. Whistling Wings is located in Oakdale Electric Cooperative's (Necedah, Wis.) service territory.

Renewable Energy Resources

Dairyland's commitment to our members and the environment is part of our vision as a safe, sustainable, premier power cooperative. By generating or investing in renewable energy, Dairyland can help meet electrical demand while minimizing impacts to natural resources. Leaf through this booklet to learn about Dairyland's diverse and growing "green" portfolio.



A Touchstone Energy® Cooperative 

Wind



Dairyland continues its major investment in wind energy with two new renewable energy partnerships, in addition to existing wind investments. In 2017, Dairyland (in partnership with Avangrid Renewables) began purchasing 80 MW of renewable energy from the Barton Wind Farm (Kensett, Iowa), which is enough to power more than 19,000 homes.

Dairyland has also announced that it will purchase the entire output of the 98 MW Quilt Block Wind Farm from EDP Renewables. The Quilt Block Wind Farm, under construction near Platteville, Wis., is expected to begin commercial operation by late 2017.

Over the years, Dairyland has also invested in the Winnebago Wind Project in Iowa, the Adams Wind Farm and the Prairie Star Wind Farm in Minnesota.





Hydro

Water is an excellent and abundant natural resource for generating renewable energy.

Dairyland has owned the 22 MW Flambeau Hydroelectric Station since 1951 and is licensed to continue operating the renewable energy facility until 2037. The water-powered plant is located on the Flambeau River near Ladysmith, Wis.

Water from the Dairyland Reservoir, formed by the construction of a dam, supplies the energy to the power plant's generators. Water flows through the turbines, which rotate the generators to produce electricity.

Dairyland strives to be a good neighbor in communities where we do business. In addition to operating the hydro plant, Dairyland has made significant environmental

and recreational enhancements to the adjacent lake area. By improving parklands and roads, constructing boat landings and providing a handicap-accessible fishing area, quality-of-life is enhanced for residents and visitors.

Dairyland has also worked cooperatively with Rusk County and local conservation groups on major projects to improve the Flambeau Reservoir's fish habitat.

In 2015, Dairyland expanded its commitment to renewable resources with the purchase of output from Sartell Hydro, a hydroelectric generating station located on the Mississippi River in Sartell, Minn. The Sartell Hydro Station can power approximately 4,500 homes with water-powered electricity.

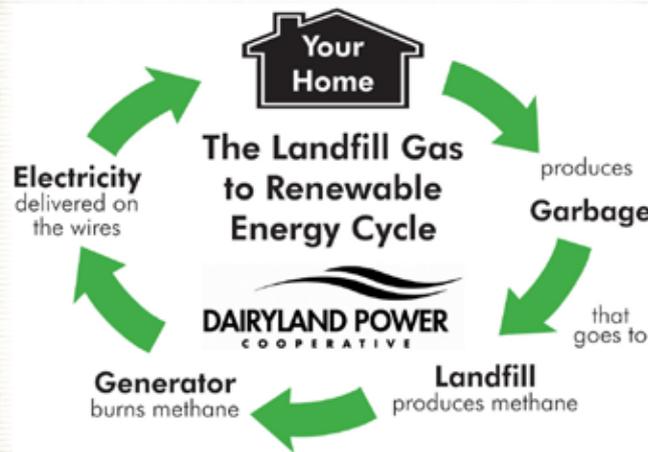




Landfill Gas-to-Energy

Dairyland invests in renewable energy from two landfill gas-to-energy (LGE) facilities. This innovative technology turns something negative – landfill gas – into something positive: renewable energy.

Dairyland purchases the output from two Waste Management, Inc., LGE facilities located near Bruce, Wis., and Lake Mills, Iowa. The plants are effective power producers and don't come with concerns about fuel supply. It's unlikely landfills will ever run out of garbage!



Waste Management, Inc., Fact:

Nationally, energy supplied by landfill gas replaces over 2.5 million tons of coal per year.



Consumer-owned renewable energy

Dairyland's member cooperatives continue to experience a considerable increase in consumer-owned distributed renewable generation installations, thanks to favorable economics and decreased manufacturing costs.

Dairyland works with its member cooperatives on policies that help enable the development of consumer-owned renewable energy projects including wind turbines and photovoltaic arrays (solar).

Approximately 1,065 consumer-owned distribution generation installations are located throughout Dairyland's service territory - and the numbers continue to grow.



Above photo: Consumer-owned photovoltaic array in Barron Electric Cooperative's (Barron, Wis.) service territory.

Large photo: Consumer-owned photovoltaic array in Vernon Electric Cooperative's (Westby, Wis.) service territory.

Small photo (bottom): Consumer-owned wind turbine in Oakdale Electric Cooperative's (Oakdale, Wis.) service territory.

Small photo (top): Consumer-owned rooftop photovoltaic array in Jump River Electric Cooperative's (Ladysmith, Wis.) service territory.





Solar

Earth's sun provides heat and light for the world... and cooling, too, in the form of renewable energy. Dairyland is a leader in locally produced solar energy in Wisconsin. Dairyland's 15 new solar installations are located in Wisconsin and Iowa. Together, they will yield close to 21 MW of renewable energy, enough to power over 3,000 homes.

The power purchase agreements are with solar developers SoCore Energy and groSolar. The developers will install, own, operate and maintain the 15 solar sites.

In addition, 12 kilowatt solar installations are being constructed on-site at three schools near Dairyland power plant facilities. "Solar for Schools" will provide educational opportunities while generating renewable energy.



Pollinator Gardens

The renewable energy produced by the recently announced solar projects is great news on its own. The sites will host an additional environmental benefit by serving as pollinator habitat for endangered bees and butterflies. Pollinator gardens will contain a mixture of prairie grasses to specifically attract and sustain the bee and butterfly community.

Large Photo: Downsview solar facility, Dunn Energy Cooperative (Menomonie, Wis.).

Small Photo: Medford solar facility, Taylor Electric Cooperative (Medford, Wis.).



Community Solar

Hassle-free solar ownership for cooperative members

Many of Dairyland's member cooperatives offer community solar projects for their members who are interested in owning or investing in solar energy. Co-op members invest in renewable energy with the added benefits of a central community location and no maintenance concerns!

A number of Dairyland's member cooperatives have piggybacked onto Dairyland's utility-scale solar installations (detailed on p.12) with additional community solar sites. In doing so, they have multiplied the local renewable energy for their members while benefitting from economies of scale.



Evergreen is Dairyland's renewable energy voluntary "green power" program. Evergreen is ideal for cooperative members who want to do more to preserve the environment and support renewable energy generation.

Dairyland's diverse portfolio of renewable energy means that Evergreen includes wind, solar, hydro and biogas. New projects come online regularly to grow the Evergreen program.





Large Photo: Eau Claire Energy Cooperative conducts many solar tours for youth and beyond. These kids got close-up to learn about MemberSolar, the community solar installation located at ECEC headquarters.

Bottom left: Allamakee-Clayton Electric Cooperative employees and board of directors announce the completion of their community solar project, known as ACEC SunSource.

Bottom right: Lambs serve as Eau Claire Energy Cooperative's vegetation management team in the MemberSolar field near their headquarters.



Strong Stewardship

Environmental stewardship is a core value at Dairyland, tied to a strong commitment to the well-being of the region we serve.

Stewardship takes many forms at Dairyland, from bluffland preservation, erosion mitigation and fish habitat restoration projects to park and hiking trail enhancements and continued success with Peregrine falcon nesting sites. Dairyland has also invested in

a “green fleet” for its business vehicles, comprised of low-emission vehicles.

New stewardship initiatives are being developed in and outside of Dairyland offices and facilities each year.

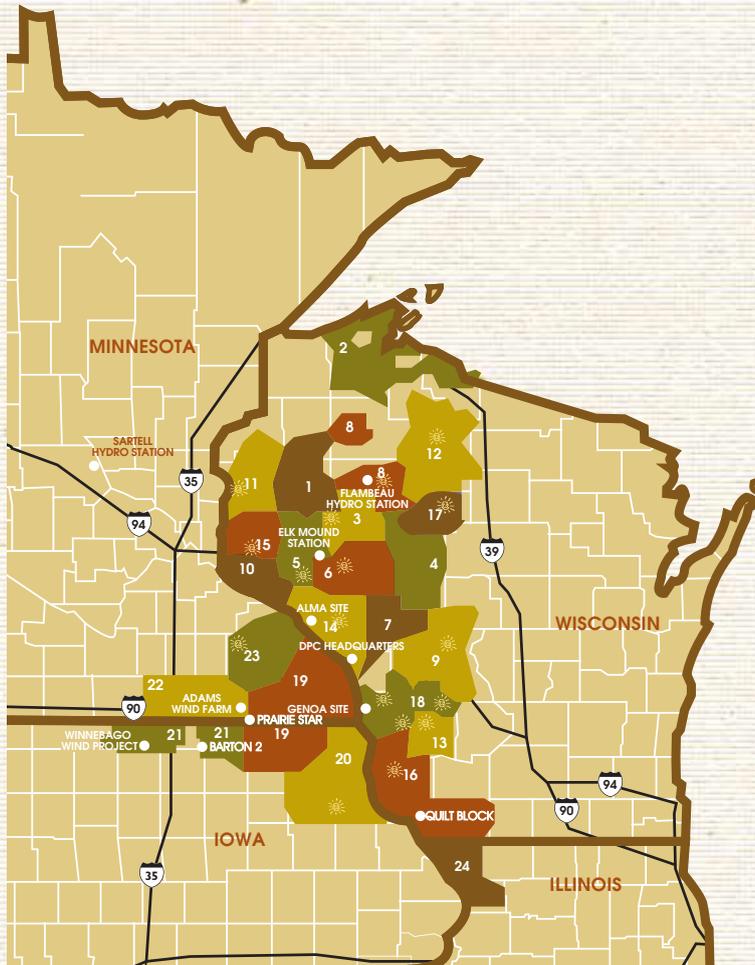
For example, Dairyland’s recent e-recycling event safely disposed of 11 tons of recyclable waste. Dairyland supports pollinator habitats at its solar energy sites, conducts energy efficiency assessments and uses “single stream” recycling at its Administration Building.





Dairyland owns and helps maintain large portions of land around the Dairyland Reservoir near the Flambeau Hydro Station (Ladysmith, Wis.). Park shelters, fishing docks, forests and trails are open to the public and add to the recreational opportunities for area visitors.

Dairyland Power Member Cooperatives



Wisconsin

1. Barron Electric Cooperative/Barron
2. Bayfield Electric Cooperative/Iron River
3. Chippewa Valley Electric Cooperative/Cornell
4. Clark Electric Cooperative/Greenwood
5. Dunn Energy Cooperative/Menomonie
6. Eau Claire Energy Cooperative/Fall Creek
7. Jackson Electric Cooperative/Black River Falls
8. Jump River Electric Cooperative/Ladysmith
9. Oakdale Electric Cooperative/Oakdale
10. Pierce Pepin Cooperative Services/Ellsworth
11. Polk-Burnett Electric Cooperative/Centuria
12. Price Electric Cooperative/Phillips
13. Richland Electric Cooperative/Richland Center
14. Riverland Energy Cooperative/Arcadia
15. St. Croix Electric Cooperative/Hammond
16. Scenic Rivers Energy Cooperative/Lancaster
17. Taylor Electric Cooperative/Medford
18. Vernon Electric Cooperative/Westby

Iowa/Minnesota

19. MiEnergy Cooperative/Cresco & Rushford
(Merger of Hawkeye REC and Tri-County Electric Cooperative on Jan. 1, 2017)

Iowa

20. Allamakee-Clayton Electric Cooperative/Postville
21. Heartland Power Cooperative/Thompson & St. Ansgar

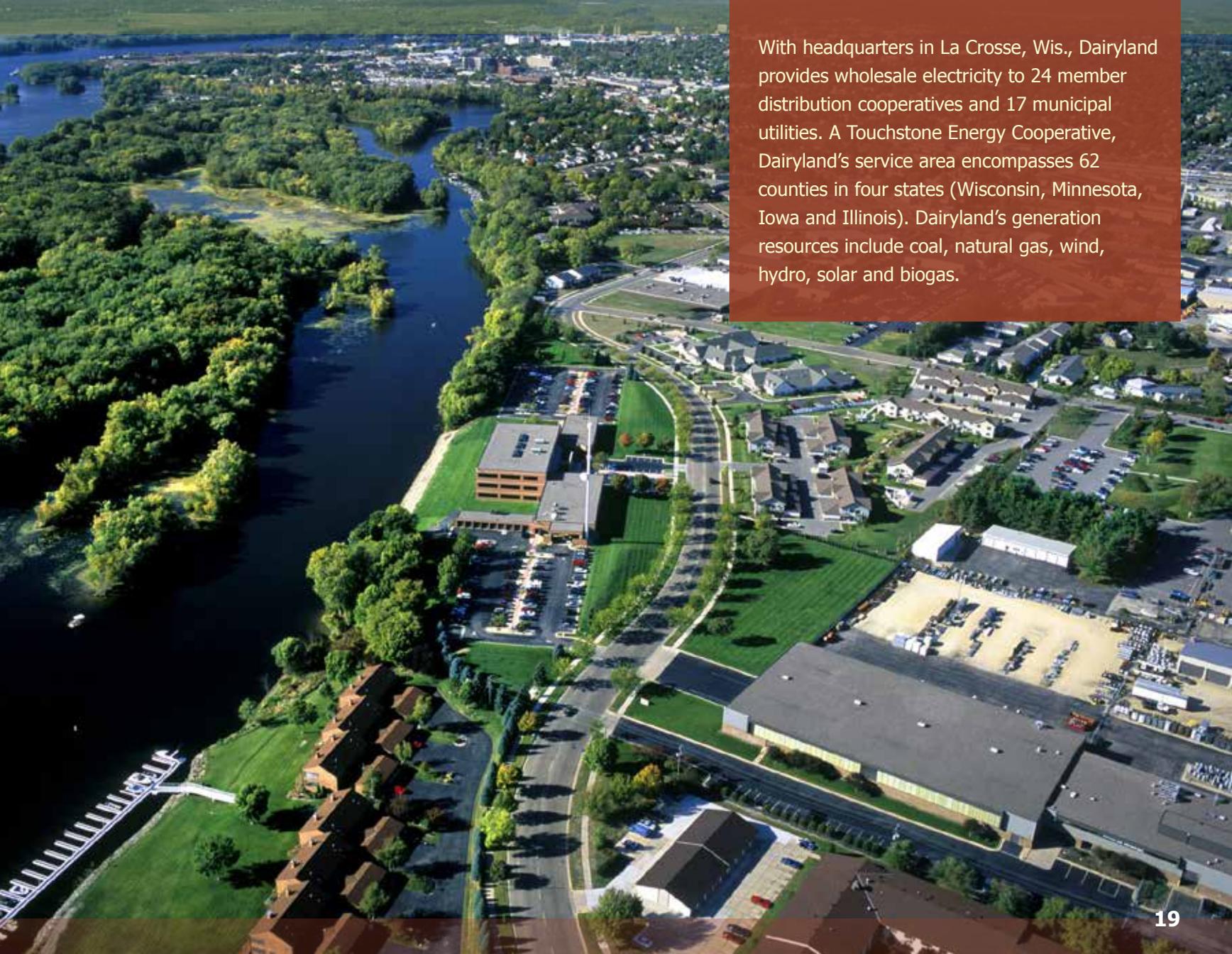
Minnesota

22. Freeborn-Mower Cooperative Services/Albert Lea
23. People's Energy Cooperative/Oronoco

Illinois

24. Jo-Carroll Energy/Elizabeth

Please visit Dairyland's website www.dairylandpower.com for details on all of our energy resources.



With headquarters in La Crosse, Wis., Dairyland provides wholesale electricity to 24 member distribution cooperatives and 17 municipal utilities. A Touchstone Energy Cooperative, Dairyland's service area encompasses 62 counties in four states (Wisconsin, Minnesota, Iowa and Illinois). Dairyland's generation resources include coal, natural gas, wind, hydro, solar and biogas.



DAIRYLAND POWER

COOPERATIVE

A Touchstone Energy® Cooperative 



As an effort to preserve the environment, this publication has been printed on recycled paper.

Dairyland Power Cooperative is an equal opportunity provider and employer.