



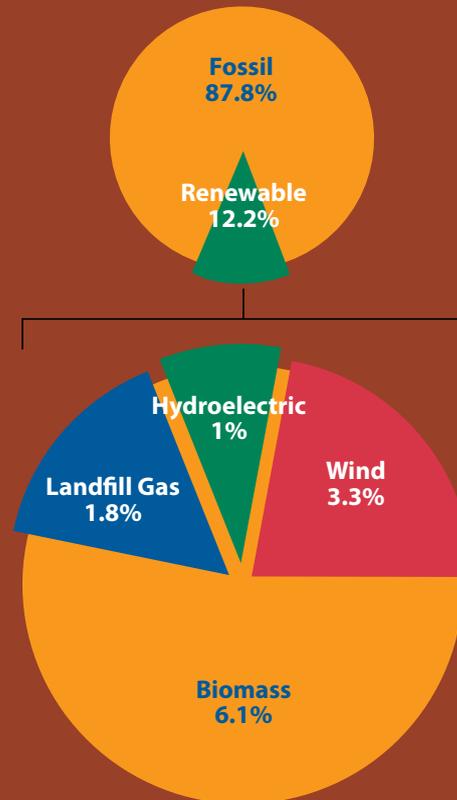
DAIRYLAND POWER
COOPERATIVE

A Touchstone Energy® Cooperative 

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2013-2014 Renewable Resources



Cover photo: Turbine in the setting sun at the Iberdrola Winnebago Wind Power Project in Iowa. Dairyland purchases the 20 MW renewable output from the wind farm.

Renewable Energy Resources

By generating renewable forms of energy for our member cooperatives, Dairyland can meet electrical demand and maintain our commitment to protecting the environment.

Leaf through this booklet to learn about Dairyland's diverse and growing "green" portfolio.



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Wind



Probably the most well-known type of renewable energy is wind. Dairyland's wind energy portfolio includes a partnership with G. McNeilus Wind Energy for the purchase of 18 MW of renewable energy from a wind farm in Adams, Minn. The renewable energy at that "farm" is enough to power 4,800 homes in Dairyland's system. Dairyland also invests in the Prairie Star Wind and Chandler Wind Farms in Minnesota.

Most recently, Dairyland invested in 20 MW of output from the Winnebago Wind Power Project in Iowa. Wind turning the turbines at this wind farm can power 5,000 homes in the cooperative system.





Hydro

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

Dairyland has owned the 18 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.

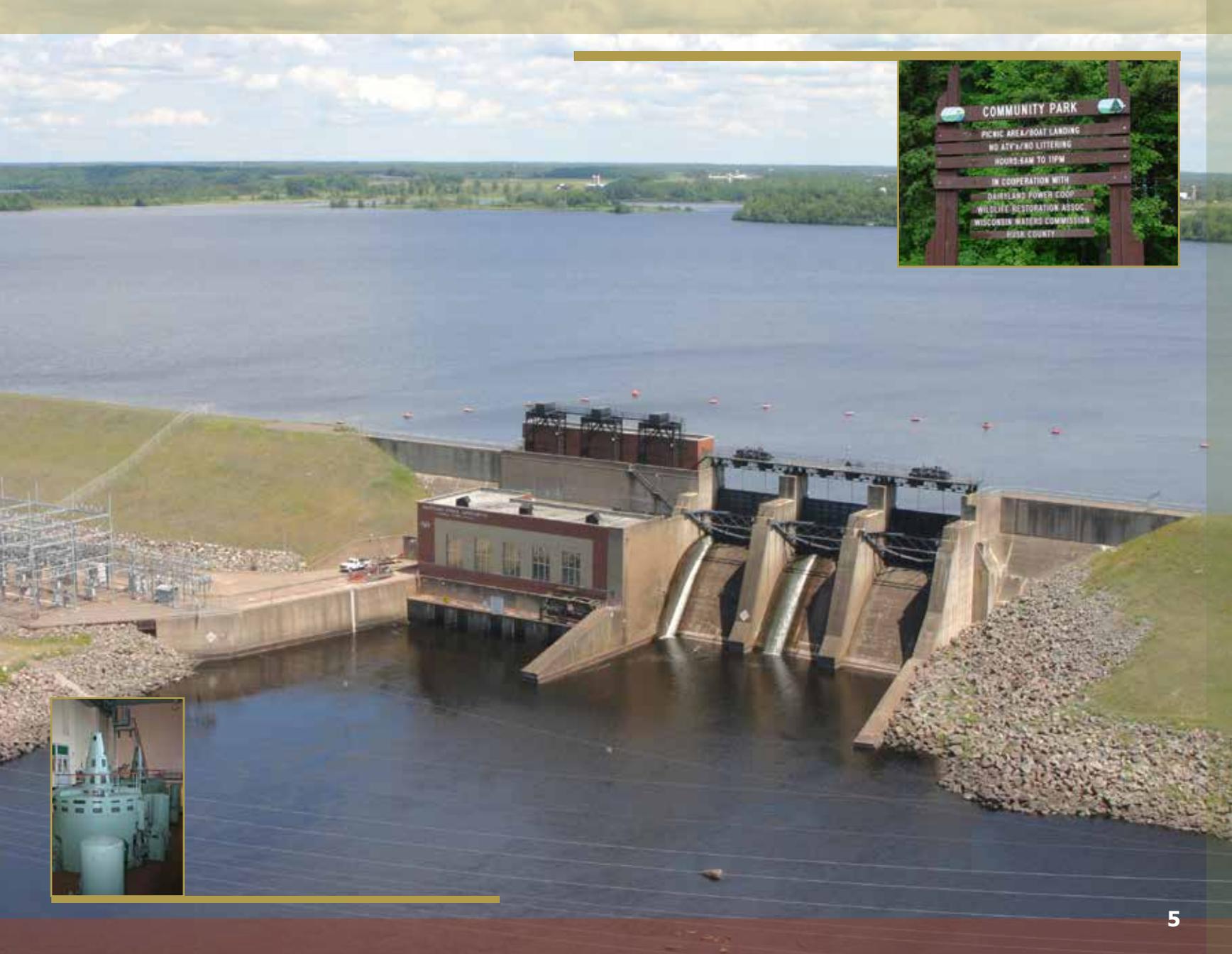
Water from the Dairyland Reservoir, formed by the construction of a dam, supplies the energy to the power plant's generators. Water flows through the turbines, which rotate the generators to produce electricity.

In addition to operating the hydro plant, Dairyland has made environmental enhancements to the adjacent lake area.

These activities include improving recreational resources and parklands, constructing boat landings and providing a handicap-accessible fishing area.

In recent years, Dairyland has cooperated with Rusk County and local conservation groups on a major project to improve the Flambeau Reservoir's fish habitat. As a result of this stewardship project, popular ice fishing tournaments are now held annually on the Reservoir.





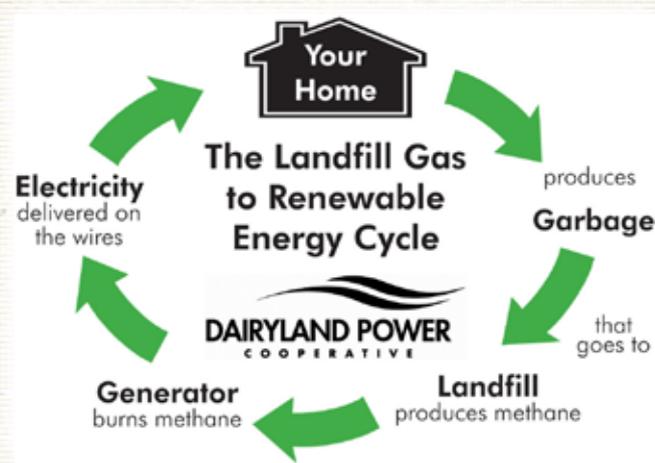
Landfill

Dairyland provides renewable energy from three landfill gas-to-energy (LGE) facilities. This innovative technology turns something negative—landfill gas—into something positive: renewable energy.

Dairyland owns one of the LGE plants, the Veolia ES Seven Mile Creek plant in Eau Claire, Wis., and purchases the output of the other two, located near Bruce, Wis., and Lake Mills, Iowa, from Waste Management, Inc.

Nearly 12,000 homes in Dairyland's cooperative system can be powered by landfill gas. The plants are also very efficient power producers, and don't come with concerns about fuel supply. It's unlikely landfills will ever run out of garbage!

Dairyland has received the U.S. Environmental Protection Agency's Landfill Methane Outreach Program's Energy Partner of the Year award for the Seven Mile Creek plant.



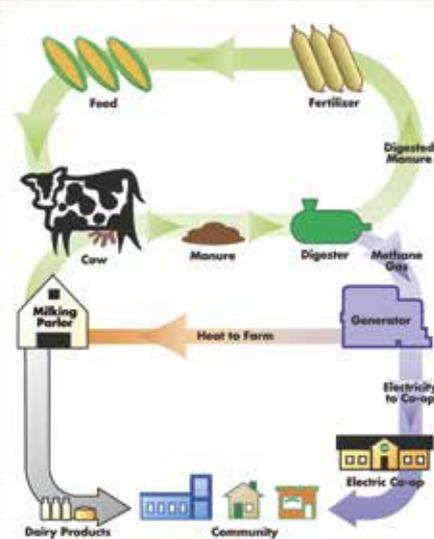


Animal Waste-to-Energy

Dairyland continues to be a national leader in animal waste-to-energy, helping meet clean energy needs while resolving dairy farm waste issues.

Dairyland purchases the renewable energy produced from several anaerobic digester “cow power” facilities in Wisconsin. These facilities can power hundreds of homes with renewable energy.

Supporting new and future technologies is key for growth. Recently, Dairyland began purchasing renewable energy from a manure digester plant located at a small dairy farm. The 200 cow Peters Farm facility is unique in that it represents the first small-scale use of a manure digester system in the region. The technology used at the Peters Farm facility was developed by a Wisconsin company, USEMCO.



How does animal waste-to-energy work?

Cow manure is the resource to generate renewable energy. The manure is collected and heated, creating the natural byproduct of methane gas. That biogas is the fuel used to power the generators and create electricity.



Photo: Dairyland Director, Planning Services, Neil Kennebeck checks out the new digester tank technology at the Peters Farm.



Evergreen



**Your energy choice
for their future.**

EvergreenSM is Dairyland's renewable energy voluntary "green power" program. Evergreen is ideal for those who want to do more to preserve the environment and support renewable energy generation. Our diverse portfolio of renewable energy means that Evergreen includes not just wind power, but also solar and biomass sources such as landfill gas and cow manure animal waste energy.

Dairyland's commitment to renewable resources grows each year, with new projects coming online regularly. For example, Dairyland recently began purchasing the renewable energy generated by a digester plant at an industrial wastewater facility. New opportunities in wind and solar are also on the horizon.





Consumer-owned renewable energy

Dairyland's member cooperatives have experienced a considerable increase in consumer-owned distributed renewable generation installations recently, thanks to favorable economics and decreased manufacturing costs. Dairyland works with our member cooperatives on policies that help enable the development of consumer-owned renewable energy projects including wind turbines and photovoltaic arrays (solar).

Several hundred consumer-owned distribution generation installations are located throughout Dairyland's service territory, and the numbers are certain to grow.



Above photo: Consumer-owned photovoltaic array in People's Energy Cooperative's (Oronoco, Minn.) service territory.

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

Small photo to right: Consumer-owned wind turbine in Polk-Burnett Electric Cooperative's (Centuria, Wis.) service territory.





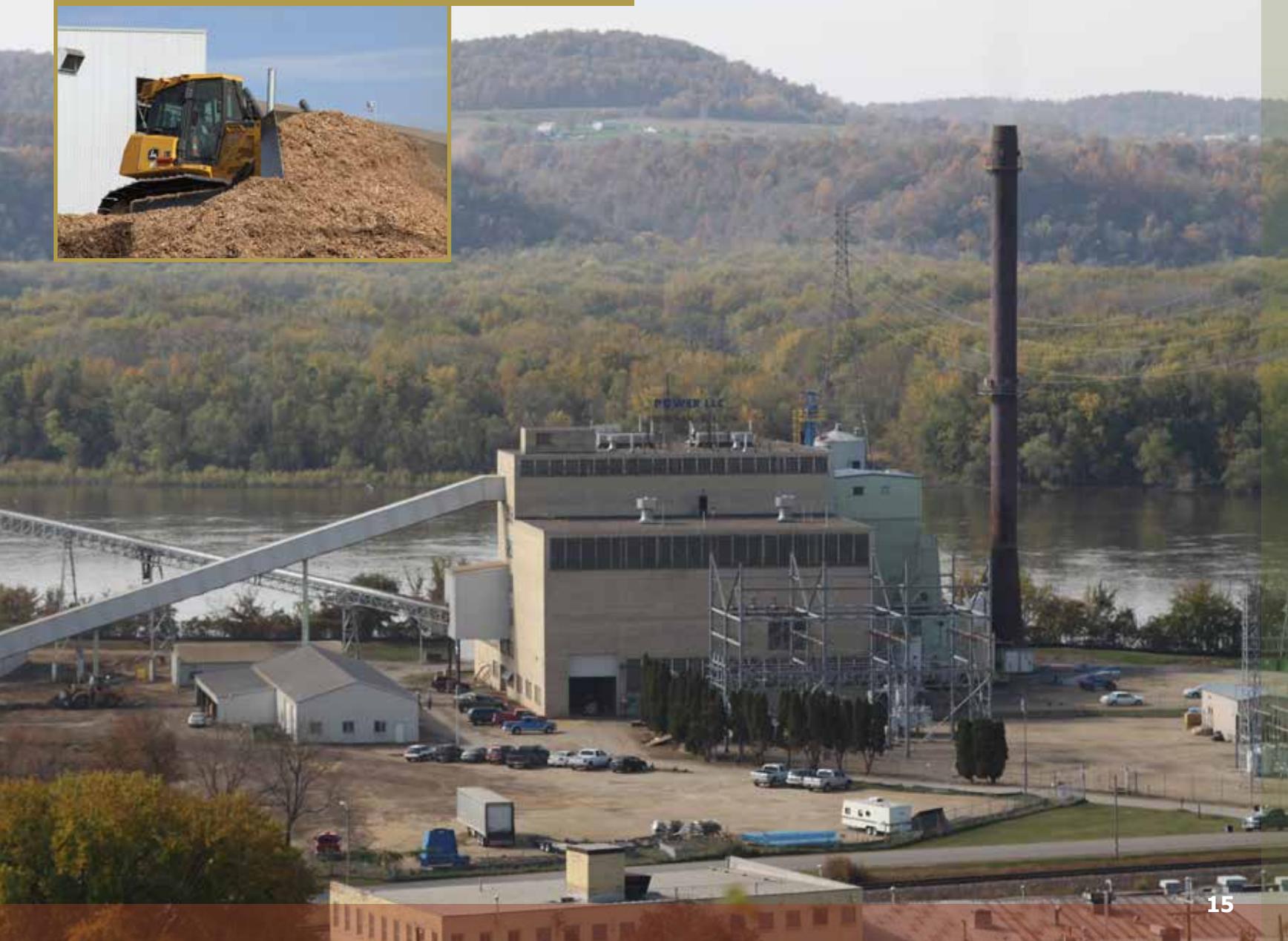
Biomass

The largest renewable resource in the Dairyland service area is a biomass facility in Cassville, Wis. It produces enough energy to power 28,000 homes.

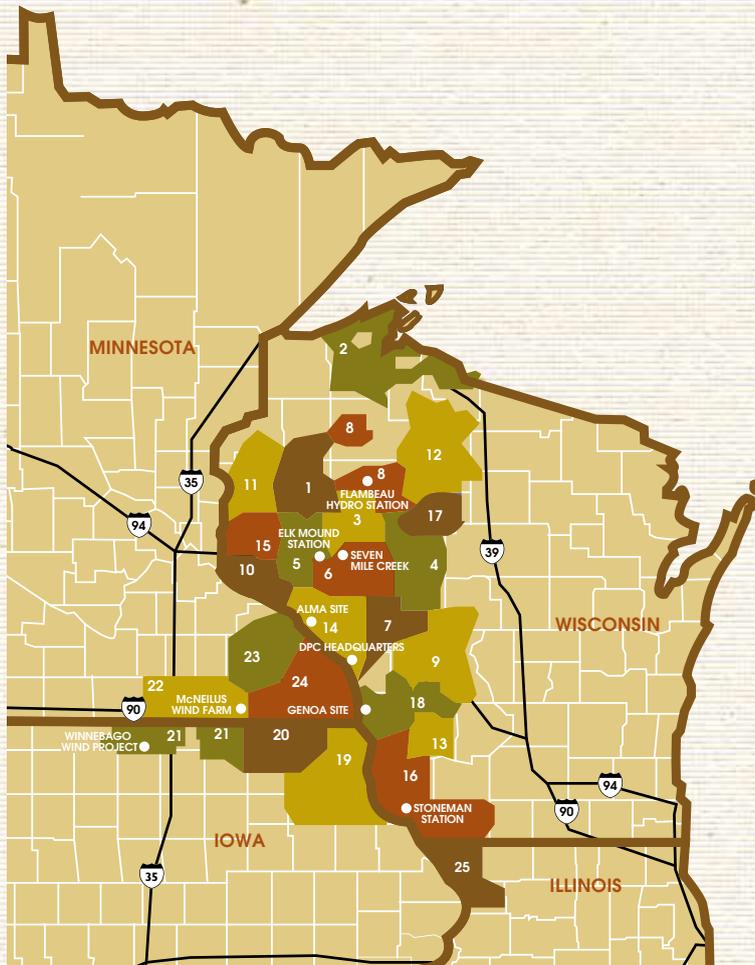
The E.J. Stoneman Station power plant came online in fall 2010 and is owned by DTE Energy Services. Electricity is produced through the burning of wood waste, such as “green wood” (fresh wood cut from forestry operations), sawdust and construction remnants. Dairyland purchases the entire 40 MW output of the biomass plant.

This particular facility has an unusual history. Formerly a coal-fired power plant owned and brought into service by Dairyland in 1951, Dairyland sold it in the 1990s. Current owner DTE Energy Services recently converted it to a biomass power plant. Now, all these years later, the Stoneman Station (named in honor of Dairyland’s first Board president) is again helping power homes and businesses in the Dairyland system... this time with renewable energy.





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

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

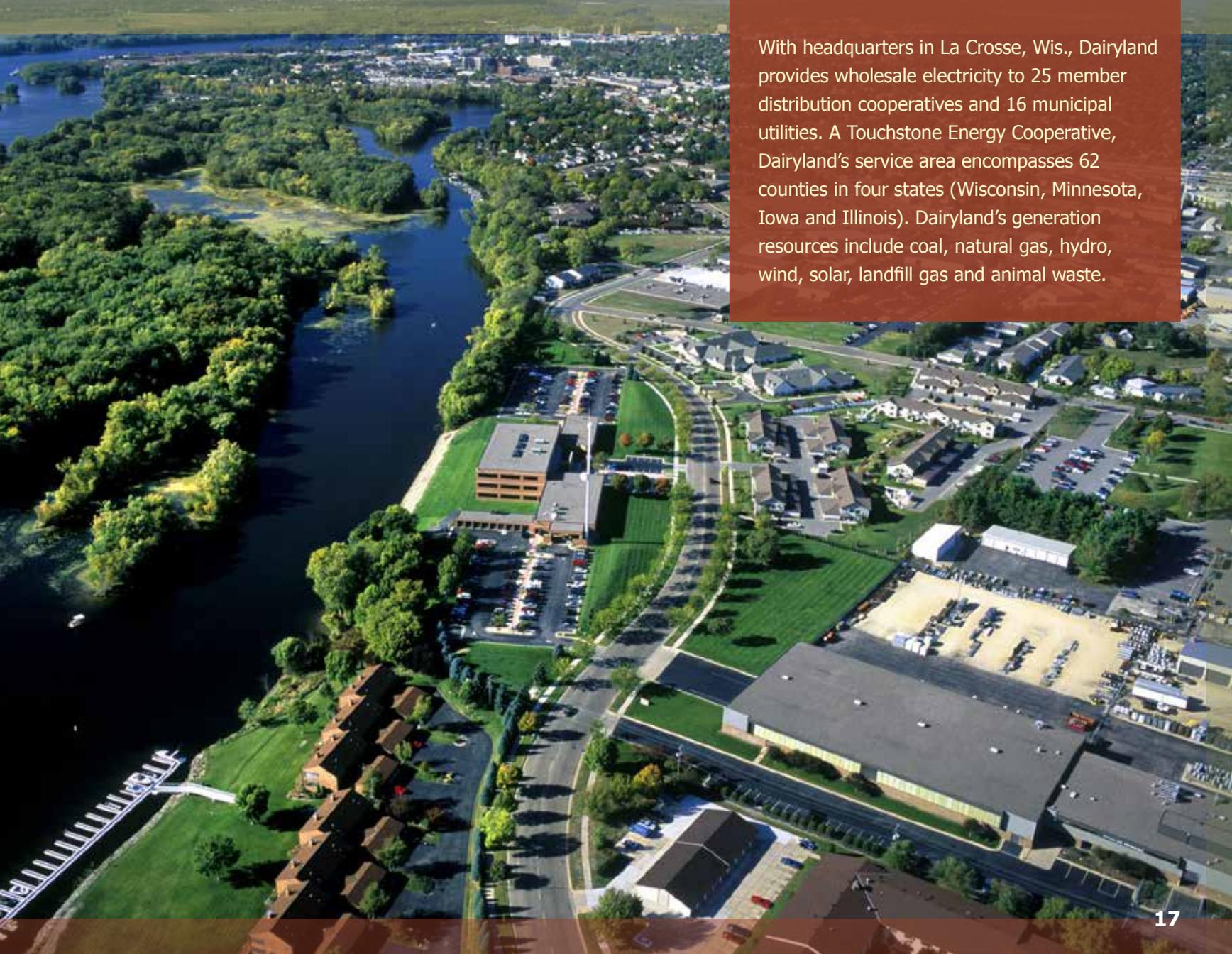
Minnesota

22. Freeborn-Mower Cooperative Services/Albert Lea
23. People's Energy Cooperative/Oronoco
24. Tri-County Electric Cooperative/Rushford

Illinois

25. Jo-Carroll Energy/Elizabeth

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



With headquarters in La Crosse, Wis., Dairyland provides wholesale electricity to 25 member distribution cooperatives and 16 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, hydro, wind, solar, landfill gas and animal waste.



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