



2010 our clean energy future | Wisconsin and Michigan

At Xcel Energy, we remain committed to our environmental leadership strategy. We are pursuing a variety of clean energy initiatives, including emission-reductions, renewable resources development, energy efficiency programs and new technologies.

CARBON DIOXIDE EMISSIONS REDUCTIONS

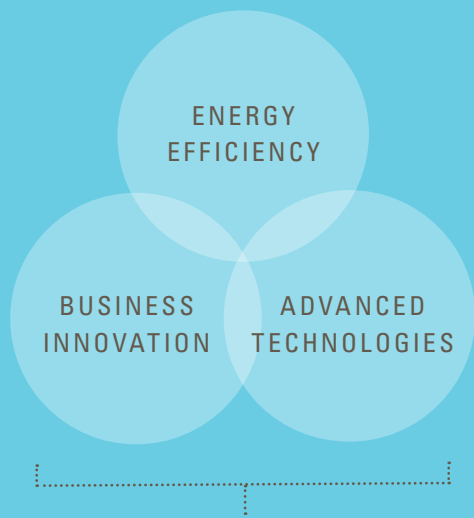
About 80 percent of the electricity we use in Wisconsin and Michigan comes from power plants that Xcel Energy owns and operates in Minnesota and South Dakota.

In 2009, 47 percent of our electricity in the Upper Midwest was generated by carbon-free sources, and we have a long-range plan to reduce emissions. This includes our recently completed Metro Emissions Reduction Plan (MERP), which reduced air emissions by nearly 3.5 million tons per year, improving the air we breathe in Wisconsin and Michigan, as well.

MERP EMISSIONS REDUCTIONS*		
CO ₂ REDUCTION	3.4 million tons/yr.	40% ▼
SO ₂ REDUCTION	38,000 tons/yr.	96% ▼
NO _x REDUCTION	27,000 tons/yr.	95% ▼
MERCURY REDUCTION	199 lbs./yr.	81% ▼
PARTICULATES REDUCTION	1,390 tons/yr.	90% ▼

* Based on 2009 emissions compared to 2005 as the baseline year.

Xcel Energy's nuclear generation plants in Red Wing and Monticello, Minn., provide safe, reliable, low-cost, carbon-free power for our customers in the Upper Midwest, including Wisconsin and Michigan. We are working to continue their operation and increase their capacity to help meet our customers' energy needs.



ENERGY EFFICIENCY

BUSINESS INNOVATION

ADVANCED TECHNOLOGIES

CLEAN ENERGY FUTURE

“For Xcel Energy, environmental leadership is more than just a promise. We have the results to prove our commitment – and every effort moves us closer to a clean energy future.”

– Dick Kelly,
Xcel Energy Chairman and CEO

ADVANCED TECHNOLOGIES

Energy from renewable sources is a growing part of our energy mix because it provides clean, cost-effective energy to our customers, and it supports our emissions-reduction goals. With the help of wind, hydroelectric power and biomass, we have already **exceeded the Renewable Portfolio Standards** in Wisconsin and Michigan for 2010.

Because we don't always know when and how strongly the wind will blow, we are working with the National Center for Atmospheric Research to develop a state-of-the-art **wind energy forecasting system**. The forecasts help operators make critical, cost-saving decisions about powering down traditional coal- and gas-fired power plants when sufficient winds are predicted, enabling the increased use of alternative energy.

We also have launched a groundbreaking project that tests **battery-storage technology** and its ability to store wind energy and move it to the electricity grid when needed. Fully charged, the one-MW battery could power 500 homes for more than seven hours.

We own and operate **19 hydroelectric plants** in Wisconsin and Michigan, which provide more than 250 MW of clean, renewable electricity. In 2009, a **rehabilitation project** at our Dells Hydro in Eau Claire, Wis., reduced the number of turbines from seven to five, while increasing the generating capacity by 35 percent.

By burning **biomass**, we reduce carbon dioxide and other air emissions. In 2009, the Bay Front Power Plant in Ashland, Wis., **set a new record** of 253,122 tons of biomass burned, a 15 percent increase over 2008.

Got garbage? We can convert it to **refused-derived fuel** at our French Island Power Plant in La Crosse, Wis. The plant processes about 50,000 tons of municipal solid waste each year, thus keeping it out of the landfills.

ENERGY EFFICIENCY

Energy conservation plays an important role in our resource planning.

For eight years, our **Community Conservation Program** has helped Wisconsin customers save energy and money in their homes and businesses. We partner with **Focus on Energy** to run the program, which provides free or reduced energy assessments to residential and small business customers in targeted areas. Incentives to customers who have made energy-efficient improvements have reached \$1.3 million.

In 2009, we reduced electricity consumption in our corporate facilities by nearly 2.7 million kWh. Our headquarters facility in Eau Claire, Wis., was recently named a **"Green Sustainable Business"** for proactively engaging in green business practices and operations.

BUSINESS INNOVATION

We continue to study the availability of **sustainable woody biomass resources**. For example, near Ashland, Wis., we are conducting clone and production trials of hybrid poplar and black willow crops to learn about the performance of these crops and determine management and harvest options. In an effort to help our local economies and meet our biomass needs, we also are investigating the feasibility of developing **grower cooperatives**.

Wisconsinites are stepping up to help our environment. In the first year of the Wisconsin **Windsor**® program, more than 450 residential customers and 30 business customers signed up to receive all or part of their energy from renewable resources. Windsor® is one of the largest voluntary green energy programs in the nation.

Thanks to significant **land management and prairie restoration** efforts, endangered plant species, rare grasshoppers and butterflies are once again thriving on Xcel Energy's Tyrone property in Dunn County, Wis. The 4,300-acre property consists of prairies, shoreline, forests and farm lands.

