



Central Clean Energy Resource Team *Strategic Energy Plan Summary*

June 2005

ENERGY
EFFICIENCY AND
SMART DESIGN
ARE WAYS THAT
THE CENTRAL
CERT HOPES TO
REDUCE
ENERGY COSTS
IN ITS REGION.

CERTs Partners:

Minnesota Department of Commerce, The Minnesota Project, University of Minnesota Regional Sustainable Development Partnerships, Rural Minnesota Energy Board, Metropolitan Counties Energy Task Force, Resource Conservation and Development Councils

Funded by:

The Legislative Commission on Minnesota Resources from the U.S. Department of Energy Oil Overcharge Money, The Carolyn Foundation, The Blandin Foundation, Minnesota Department of Commerce, U.S. Department of Energy, University of Minnesota Initiative for Renewable Energy and the Environment, University of Minnesota Regional Sustainable Development Partnerships, University of Minnesota, Morris Center for Small Towns

The Central Clean Energy Resource Team has compiled an inventory of resources, in terms of both energy potential and human capacity. We identified energy efficiency in buildings, solar technologies and biomass as top priorities and are poised to connect people with the resources to activate projects with sustainable outcomes.

MAKING NEW BUILDINGS ENERGY SMART

Smart design and energy efficiency in buildings is one way that the Central CERT hopes to increase clean energy in its communities. The many new building projects in the region, evidence of a growing population, are prime locations for energy efficiency work. The Central team plans to reach out to developers, especially for public and community buildings, and hopes that their proactive approach will ensure that new buildings in the region are as efficient as possible. Central CERT has developed a list of 12 key energy related questions to ask about a building project that also includes available techniques to increase building energy efficiency.

One Central CERT member researched a new hospital planned by Lakewood Health Systems in Staples-Motley. By being persistent and courteous, she was able to talk with a series of people working on the building project, and they eventually decided to add daylight sensors to the areas with a lot of glass.

The team has compiled information on the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program, which provides

a framework for assessing sustainable building development, and the State of Minnesota Buildings, Benchmarks and Beyond (B3) program, which requires that buildings financed with state bonding money exceed the building code by at least 30 percent. Central CERT will connect project developers with resources like LEED and B3 to further educate them about building efficiency measures.

MAKING SOLAR A REALITY IN CENTRAL MINNESOTA

The Central CERT plans to make sure that more solar energy systems come on line in the region. The annual solar resources in Minnesota are roughly equivalent to Texas and Florida, making Minnesota well suited for solar development. The Solar Assistance Program offered by the nonprofit Rural Renewable Energy Alliance (RREAL), which is active in the region and on the Central CERT team, installs solar hot water systems in low-income households who qualify for federal heat assistance. They help households reduce dependence on federal heat assistance and lower their energy bills.



The Central CERT has coordinated two bus tours to explore efficiency and clean energy at work in their region.

RREAL's program is one that the Central team hopes can be replicated in other communities in Minnesota. The Central team's role in solar projects will be educating people about the solar potential and connecting them to organizations like RREAL and Minnesota Power, which offers a \$2,000 per kilowatt solar rebate to citizens in their service territory.

"WE COULD SAVE MONEY, AND MAKE IT A WIN-WIN SITUATION."

*Kerry Nixon,
General Manager,
Central MN Ethanol Coop*

SUPPORTING LOCAL BIOMASS INITIATIVES

The team's resource assessment confirmed that biomass materials are plentiful in the region. The forested Central Region is rich in sawmill wood residue, forest residue, and hybrid poplars grown as an energy crop. The team is continuing research on biomass pricing and the quantity of raw material necessary for different types of energy projects.

In the meantime, the team will continue to support and promote projects like the Central Minnesota Ethanol Coop, which is transitioning its heating system from natural gas to biomass gasification. As the plant, located in Little Falls, Minn., gets its biomass process operating, ethanol plants around the state and throughout the Midwest are watching carefully. The biomass waste wood will be transported to the plant in Little Falls from less than 70 miles away, and the new technology will translate to big cost savings. "It was our way of complying [with emissions requirements], but in a way that we could save money, and make it a win-win situation," said Kerry Nixon, General Manager. "We will virtually

be making a renewable fuel from a renewable fuel. A lot of ethanol plants in the industry are looking to do something like this, they are just waiting to see us in operation."

Whether they help convince contractors to install occupancy sensors in a new hospital, facilitate the work of the Rural Renewable Energy Alliance to assist low-income families with their utility bills, or support the transition of a local ethanol plant to biomass gasification technology, you can guarantee that Central Clean Energy Resource Team will have a positive impact on our rapidly growing communities.



Tour participants meet with staff at the Central Minnesota Ethanol Coop to learn more about ethanol production.

For More Information:

Linda Ulland
Central Regional Partnership
218.894.5192
218.894.5197 (fax)

Melissa S.B. Pawlisch
University of Minnesota's
Regional Sustainable
Development Partnerships
612.624.2293
paw10048@umn.edu

Central CERT Member Snapshot:

- Browerville Blade
- Central Lakes Agricultural Center
- Central Minnesota Ethanol Cooperative
- Individuals interested in energy issues
- Region 5 Development Commission
- Rural Renewable Energy Alliance
- Wadena County Commissioner
- Wadena Electric Cooperative
- Water Foundation
- Whole Farm Coop