



Northeast Clean Energy Resource Team *Strategic Energy Plan Summary*

June 2005

THE NORTHEAST CERT WANTS TO INCREASE THE PRESENCE OF CLEAN ENERGY BY REACHING OUT TO SCHOOLS AND COMMUNITIES, COUNTY BY COUNTY.

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:

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It is natural for people and communities in Northeast Minnesota to embrace clean energy since so much of the Northwood's economy depends on tourism and a pristine environment. Northeast Clean Energy Resource Team members believe that clean energy will use local resources, invigorate local economies and improve the environment. After extensive research to identify the local energy resources, the Northeast CERT adopted an ambitious central project idea: to complete demonstration projects at every school/community in the region. During the next two years, they would like to have at least one project in each Northeast County.

NORTHEAST CERT BUILDS A CLEAN ENERGY BUZZ

Northeast CERT will facilitate more renewable energy and energy efficiency projects on the ground at schools in its region and, in the process, educate area children and adults about the benefits of both. Working to initiate change in this way will increase the visibility of clean energy, and educate the next generation of consumers about clean energy options. Initially, the team would like to implement energy efficiency retrofits at local schools while integrating energy conservation and sustainable energy development into classroom curriculum.

STARTING WITH SCHOOLS

The team kicked off this initiative by working with the North Shore Community School in Duluth. Conversations and educational meetings with the North Shore Community School Board about renewable energy was the first step. In addition, the team helped to get the

school's solar (PV) demonstration project moving by generating letters of support. After an initial meeting with the school board, the team adapted the educational presentation into a template that anyone in the region can use to give a presentation to his or her own school district.

"CERT has been invaluable in connecting us with resources, providing time, information, advice and encouragement," said BJ Kohlstedt, curriculum director at North Shore Community School. "They will continue to be involved as we move beyond demonstration models to planning a building addition that incorporates sustainable energy and education into our design."

In November 2004, the team began helping the Proctor Public Schools to think about on-site renewable energy projects. Outlining steps the schools would need to take prior to implementing a renewable energy project led to the development of a "Renewable Energy To Do List for Schools," which can be used by school districts throughout the state. Since the team began the dialogue, the Proctor Public Schools have received a grant from Minnesota Power to install a small onsite wind generator.



Solar panels at the Duluth Zoo.

CONNECTING PROJECTS AND RESOURCES

By connecting communities with resources such as Minnesota Power, the local investor owned utility, and local Great River Energy coops, CERT can help the Northeast move toward a clean energy future. Several utility staff are active team members and they are eager to help move projects forward. Minnesota Power offers a Solar Sense program that provides a \$2,000 per kilowatt rebate (up to a maximum of \$4,000) for customers who install photovoltaic (PV) systems on a home, business or industrial facility. The program was designed to complement and provide an extra incentive to the State of Minnesota's Solar Electric Rebate Program, which provides a \$2,000 per kilowatt rebate for up to four kilowatts of grid connected solar energy. The program has been instrumental in both increasing the number of mainstream PV projects as well as training nearly 80 technicians from around the state to install PV systems.

In addition to utility staff, local government staff are sharing their experiences with others in the region through their involvement with the Northeast CERT. The City of Duluth is a member of the Cities for Climate Protection Campaign, and will be replacing approximately 440 traffic lights with energy efficient LEDs in 2005. When coupled with the Minnesota Power rebate, the City will save \$33,000 in energy costs this year.

HELPING SCHOOLS SUCCEED

When it comes to demonstration projects in schools and communities, one size does not fit all. For this reason, a CERT member from the University of Minnesota at Duluth obtained funding from the University of Minnesota's Initiative for Renewable Energy and the Environment to create a renewable energy model for schools. The development

process and the resulting model will allow the researchers to work with representatives from interested schools to compare and contrast various system options and trade offs, design and install unique, cost-effective systems tailored to each school's energy consumption patterns and educational interests, and then help these schools find the dollars to make these projects a reality.

CERT members see that engaging students and community members is a vital part of each project. The team is working

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*BJ Kohlstedt, curriculum
director at North Shore
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with a grant writer to find funding for a web-based educational display system that would present real-time energy production information from renewable energy installations around the state in a kid-friendly, approachable

way. The model will collect data from existing renewable energy projects around the state and provide new projects with "freeware" to use in graphical displays that will teach people about renewable energy and better inform them of their energy choices. While the Northeast team moves forward with schools and communities to initiate clean energy projects, they plan to change the way that people think about energy. As they pass by a water tower, kids and adults make the connection with their water supply. But when they flip a switch, the connection to an image of a wind turbine, solar panel, or coal plant might not be as immediate. Through demonstration projects connected to education, NE CERT will create more energy conscious individuals and communities.

Northeast CERT Member Snapshot:

Cities for Climate Protection
Fond du Lac Tribal and
Community College
Individuals interested in
energy issues
Johnson Controls
Lake Country Power
Cooperative
Laurentian RC&D
Minnesota House of
Representatives
Minnesota Power
Minnesota Renewable
Energy Society
North Shore Community
School
Onanogozie RC&D
Proctor Public Schools
Reed Energy
St. Louis County
Silver Creek Institute
University of Minnesota-
Duluth
Western Lake Superior
Sanitary District

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