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COMMUNITY WIND POWER FOR RENEWABLE INCOME

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CONSIDERING its incredible history and environmental benefits, wind power is one of the most underutilized sources of renewable energy. Stretching back as early as 200 BC, communities have been harvesting the wind for power. However, the scale and popularity of wind power is only now starting to reach critical mass as concerns of climate change rise and energy usage continues to soar. While global investment in clean energy is soaring and wind power technologies are expected to expand 411 percent in the next ten years-BALLE took a look at the opportunities for local investment and ownership.

Minnesota is taking advantage of their wind potential at a greater rate than most states. They have the potential of producing an estimated 75,000 MWs, which would give them a national ranking of 9th place. They could produce all that with fairly low levels of wind grade. A group of farmers in southwest Minnesota reported their area had Level 3 wind velocity and volume - and the projects were still profitable. Weighing this with the fact that 1) A small turbine can be installed in about 1 month; and 2) There are an increasing number of financing options could mean very rapid growth in this sector for Minnesota.

Minnesota is one of the best locations for harnessing the renewable power of the wind. It is really the birthplace of community wind and the current hotbed for such. Minnesota is currently the 4th largest wind power producing state in the U.S. The state is producing 600MW of wind power. The only states producing more than Minnesota are Texas, California and Iowa. The key difference is that at least 100MW of Minnesota's supply is coming from community-owned wind farms.

Most of this wind power comes from the southwest corner of the state, but the awareness throughout the state is very impressive. Paul Maas, a small farmer in southeast Minnesota is very disappointed he doesn't have the best landscape for a wind turbine. He said he would definitely put up a turbine if he didn't live in a valley! Even though Paul cannot install a turbine himself, his knowledge of wind power and the local resources to get started on

installation is a testament to the rate at which Minnesota is succeeding.

WHAT IS COMMUNITY WIND?

Community wind refers to wind power generated through small farms, LLC's schools and individuals, not corporations. Small wind projects in Minnesota are usually 2MW or smaller. However, communities are coming together in a very cooperative way to produce on a utility scale as well. This distributed generation allows customers to control their energy source, make a profit, and reduce the energy losses from long distance transmission.

INCENTIVES FOR COMMUNITY WIND

Minnesota is offering unique benefits for small wind producers. These are in addition to the federal tax incentives:

Minnesota is one of the first states to mandate all utility companies in the state to allow net metering from all renewable energy resources up to 40kW. In addition to allowing net metering, the "must purchase net exceeds generation (NEG) at the average retail rate."

"Minnesota's largest utility (Xcel Energy) has been mandated by the Minnesota Public Utilities Commission to acquire 1,125MW from wind power by 2010 (425 MW have already been purchased). More than 150 megawatts are required to come from small wind projects of 2MW or less."

Minnesota Renewable Energy Production Incentive provides the state will pay out 1.5 cent per kilowatt hour for "electricity generated from new wind energy projects less than 2 MW in capacity. Qualifying projects will receive payments for ten years, extending beyond the current eligibility expiration date of January 1, 2005. Projects will be admitted to the program on a first come, first served basis until new wind capacity installed under the program statewide totals 100 MW."

Technical connection legislation was passed to require the "state's Public Utilities Commission to develop standards for interconnection and operation of distributed generation facilities."

No sales tax. All wind energy equipment, materials, construction, and repair is exempt from Minnesota state sales tax if used as a power source.

Production property tax replacement. In 2002, the Minnesota legislature ruled wind energy projects would be exempt from property taxes. They are required to pay local taxes based on electricity production, but this rate is generally much lower than the standard property tax.

Minnesota's newest renewable energy legislation, the Next Generation Energy Act, places a new priority on community wind. "A utility that needs to construct new generation, or purchase the output from new generation, as part of its plan to satisfy its good faith objective under that section should take reasonable steps to determine if one or more C-BED (Community-Based Energy Development) projects are available that meet the utility's cost and reliability requirements."

By mandating Xcel Energy to purchase small wind, the company is now an important partner for many small farmers. The company has advanced their infrastructure and capacity for connecting distributed power sources to the grid, in addition to purchasing the produced wind

Many of these incentives are unique to Minnesota, where the legislature has taken an active interest in wind.

FINANCING AND OWNERSHIP OPTIONS

With the state and federal incentives for wind production, small-wind projects have become more and more financially viable. However, there are still many challenges to getting such a large sum of start-up capital for a small family farmer-or even a collection of small family farmers. A 1.5MW wind farm costs around $1.8 million.
The purchasing power agreements (PPA's) generated by Xcel Energy provide small wind farms and individuals a huge point of leverage to sell their projects through to local banks. While debt-financing can be intimidating for a small farm, a 20-year purchasing agreement with front-loading purchasing terms from the state's largest power company is incentive enough for many.
In addition to the standard financing models, green power also offers a unique opportunity for the sale of carbon credits and renewable energy credits (RECs). With the growing interest from consumers to buy green power and individuals and organizations to offset their carbon footprint, a partnership with a group such as Native Energy can go a long way. Native Energy is helping small farms with early stage capital by partnering with a local installer.and selling carbon credits for the life-cycle of their project-giving them cash or major installation discounts up front!

LOCAL INVESTORS AND MINWIND
One of the best models for community ownership in Minnesota comes from a Cooperative LLC called Minwind. This community wind farm was founded by farmers in southwestern Minnesota. The goals were to hold local ownership on a larger project, maximize profitability, create economic development in rural areas, provide quality jobs, develop a replaceable model, maintain cooperative principles. Originally, the founders sold membership stock to 66 farmers, formed 2 LLC's, developed two 1.8MW projects, and conegotiated purchase power contracts.
As the project grew in recognition, membership grew and grew. Since the first two projects, Minwind I and II, the group has grown to include 9 LLC's, 11 Turbines, and 200 local investors (85 percent shares to farmers). All the projects have stayed under 2MW to take advantage of the 1.5 kwh Minnesota cash incentive.
The pros of this approach include pure local investment and immediate returns. On the flip side, however, the equity shares may need to be registered as securities.

CORPORATE PARTNERSHIP AND THE MINNESOTA-STYLE FLIP
Dan Juhl, one of the leaders in community wind power, owns a 10.2MW wind farm in Minnesota and has helped install many more, including seventeen 600kW wind turbines. He designed the “Minnesota-Style Flip,” a unique model for corporate partnership and alternative equity ownership. In this case, a landowner with insufficient tax liability partners with tax-motivated corporate investors to own utility-scale wind turbine(s) to sell power to the utility. Initial interests in project LLC (99% corporate/ 1% local) “flip” after 10 years. After 10 years, the farmer will own 99-100% of the turbines and be able to generate power for another 10-15 years.
“When Great River Energy issued a request for proposals to develop 100 MW of wind power in 2003, a group of local citizens from Jackson and Martin counties responded. The group obtained agreements from about 40 landowners for the wind project, raised seed money, tested the wind, and got permits.” The group, now known as the Trimont Area Wind Farm, created green jobs and income for the community.
According to Kevin Maas, founder of Farm Power, a Washington-based energy LLC, “the

Trimont farm is the best example of where a community plays with the big boys; they developed a 100MW wind farm, sold the pre-construction-stage project to a major investor, while retaining a nice portion of the ongoing income stream. Farmers and ranchers throughout the country receive lease payments for hosting wind turbines; while these payments have helped communities, only in Minnesota do local owners also control many of the wind turbines."

RENEWABLE ECONOMIC DEVELOPMENT
"Mounting evidence points to the idea that community wind has greater economic impacts on local economies."
In addition to the direct farm benefits, community-owned projects provide much needed income and jobs to the community in the form of production, installation, parts suppliers, maintenance, education, and consultation in this service area. Local lawyers will be used to help draw up contracts. Local banks are more likely to be enrolled, contributing community capital. Wind farms owned by distant or corporate owners are far less likely to use local labor and equipment.
Suzlon, one of the world's leading wind turbine builders, recently opened a blade manufacturing plant in Pipestone, Minnesota. Continuing demand for Suzlon turbines from Minnesota community wind projects was the big driver of this choice. The vast majority of wind equipment comes from European plants, but in Minnesota, local labor is building local blades in Suzlon's new buildings.

Mary Rick is the program manager at the Business Alliance for Local Living Economies. She holds an MBA in Sustainable Business from the Bainbridge Graduate Institute in Washington, and has received awards for her work from Metropolis Magazine and the Royal Society for the encouragement of Arts, Manufacture & Commerce. Prior to her work at BALLE, Mary worked on community development projects in rural Kenya, and directed membership and events at Global Exchange.