



e² energy “Harvesting the Wind”

Background Essay

Wind is the fastest growing renewable energy resource in the world. Denmark, which gets 20% of its electricity from wind, is leading the world right now, but Germany may soon surpass Denmark in that regard. So where does the United States stand when it comes to wind energy? Right now the United States gets less than half of 1% of its energy from wind, but at the same time there is enough wind in the United States to provide 1½ times the energy demand of the country. Shouldn't more communities be utilizing this clean, renewable energy resource?

In the Southwest corner of Minnesota, the Buffalo Ridge region, there is a productive and progressive wind industry that is not only providing clean energy, but also economic development and prosperity to the local community. Often times communities are resistant to the implementation of wind farms on their local land because of the aesthetic effects on the natural environment. In Minnesota this hasn't been the case, because it's the community itself that is building and benefiting from the wind farms. In many cases, an outsider will enter a community with his/her own contractors, build a wind farm and leave taking most of the financial benefits with him/her. How can this model be changed to ensure that the local community not only supports the building of wind farms but also reaps most of the benefits?

Dan Juhl, President of the Woodstock Wind Farm, will describe the process by which he leased land to create a wind farm in the Buffalo Ridge region of Minnesota. When the landowners noticed the profits that he was gaining with his wind turbines, they enlisted his help and expertise to build their own. They installed two wind turbines and became the first farmer-owned commercial wind farm in the state. They certainly weren't the last. Now other farmers have joined forces to bear the financial burden of installation together and within a year recovered their initial investment. The community wind industry has grown so much in Minnesota in the last ten years that Suzlon – India's #1 blade manufacturer – has opened its first U.S. blade manufacturing facility in Pipestone, Minnesota in the heart of Buffalo Ridge. The facility employs over 300 people right now, a number that will surely continue to grow as the current demand for blades in Minnesota is greater than Suzlon can produce.

For more information about community wind, visit www.windustry.org/community

For more information about Dan Juhl and Woodstock Wind Farm, visit www.danmar.us/windfarm.html

For more information about Suzlon, visit www.suzlon.com



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PRE-VIEWING QUESTIONS

1. What were some of the economic effects on rural areas after the Industrial Revolution?
 2. What are the benefits of building a business (such as a wind farm) locally versus from outside the community?
 3. What percentage of the power in the United States do you think comes from wind energy?
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POST-VIEWING QUESTIONS

1. What is a community wind farm? How is it different than any other wind farm?
2. Dan Juhl says that community wind is a “trifecta,” what are the three reasons that he thinks this is true? Do you agree? Why or why not?
3. In what ways has the blade manufacturing facility benefited the community of Pipestone?
4. If we used all of the wind energy available what percentage of our energy needs could it power?