

## Electricity from the Wind: the New Cash Crop

The events of 2002 proved that it's tough to make a living on the family farm. Net farm income was projected to be down 21% from 2001; dry conditions in much of the country reduced the forecasted yields of corn, soybeans, and wheat; and lower returns were expected for livestock commodities. As unemployment rates rose, the 54% of farmers and ranchers who work off the farm for wages or salaries also suffered—and so did the tax bases of the rural counties they reside in.

But some rural landowners and the communities they live in are faring better by taking advantage of a new cash crop: electricity from the wind. Dave Benson, a farmer and county commissioner of Nobles County, Minnesota, understands the benefits that wind power can bring to a community. Minnesota has more than 300 megawatts (MW) of installed wind power and the opportunity to implement several thousand more over the next 20 years—and Minnesotans are taking full advantage of this cash windfall.

“This is one of the few bright spots in a rural landscape,” Benson said. “Wind is homegrown energy that we can harvest right alongside our corn or soybeans or other crops. We can use the energy in our local communities, or we can export it to other markets. We need to look carefully at wind energy as a source of economic growth for our region.”

And the outlook for regional economic growth from wind energy is heartening. During the next 20 years, achieving the goals of the U.S. Department of Energy's Wind Powering America initiative will create \$60 billion in capital investment in rural America, provide \$1.2 billion in new income for farmers and rural landowners, and create 80,000 new jobs. Because wind projects are more capital intensive than conventional power plants, property taxes for wind projects are often two to three times higher per unit of energy than conventional plants. Thanks to wind energy, Pecos County, Texas, added \$4.6 million to its property tax revenue in 2002 alone.

Wind projects also contribute to state business, sales, and income taxes. The increased revenue benefits local services such as schools, health care facilities, and roads. Farmers and landowners in rural communities also benefit. Landowners in southern Minnesota and northern Iowa who lease their land to wind developers receive annual payments from \$2,000 to more than \$4,000 per turbine. The Union of Concerned Scientists estimates that typical farmers or ranchers with good wind resources could increase the economic yield of their land by 30%-100%.

Wind projects also benefit rural economies by providing local jobs, from temporary construction jobs during the initial phases of a project to permanent wind smith jobs.

Because of these many benefits, rural community leaders across America are investigating whether wind energy can benefit their local economies—and they're finding many opportunities to site wind projects in their communities. According to the American Wind Energy Association (AWEA), in 2001 nearly 1,700 MW of new wind-generating equipment worth \$1.7 billion was installed in 16 states. AWEA projects that well over 2,000 MW of wind power will be installed in 2003.

Wind energy will benefit rural communities by contributing to a portfolio of energy options. Wind energy is “homegrown” energy. By contributing to utility-grade power generation, wind power can extend non-renewable energy sources, helping to secure our energy future, reduce energy costs, and reduce our dependence on foreign energy. For these reasons, rural utilities are looking for ways to diversify their energy portfolios and partner in utility-grade wind power generation. In the process, more of the revenue stays at home in the rural community.

Wind energy generated in rural areas can be easily connected to the current utility grid system. In fact, rural leaders in the Minnesota Buffalo Ridge region where Benson lives are planning a new transmission line along I-90 that will bring energy to the Twin Cities. Benson’s region currently generates about 360 MW, but the rural communities can only use 50-60 MW.

“We need a line to export this new crop,” Benson said. “And we’re hoping to educate the community to be partners in owning the means of production. Our hope is that it really benefits the local communities.”

Although integrating wind energy into the energy portfolio mix sounds like a futuristic concept, harnessing the power of the wind is hardly a new idea in the American West. Small turbines on individual farms and ranches were commonplace before the advent of rural electrification. Implementing wind projects in rural America may be a return to the past that could help preserve rural communities and the family farm. Making a living on the family farm has never been easy, but harnessing wind energy as the cash crop of the future is proving to be a viable way to ease the financial burdens of farmers, ranchers, and rural communities and preserve the rural way of life.

*This article was prepared with information provided by the Department of Energy's Wind Powering America Program. For more information, please visit [www.windpoweringamerica.gov](http://www.windpoweringamerica.gov).*