## **Wind Farming**

Be on the lookout near Odell, IL for a sea of 400 foot tall windmills, painted light grey to blend in with the clouds. The three-bladed windmills are turned into the wind by a computer-controlled motor, and the wind spins turbines which are up to 130 feet long — more than the length of three 18-wheelers parked end to end! Odell's wind farms boast about 140 windmills for commercial production of electric power. Many wind projects are located on farms and ranches, providing extra income while allowing owners to continue to use the land for crops and grazing.

Wind farms produce electricity without the air pollution caused by coal and oil-fired power plants, nor the radioactive waste generated by nuclear power. Although some energy is used in constructing the metal blades and mechanical parts, the initial input of power is a small fraction of the amount of energy which can be produced over the life of the windmill. The wind does not blow constantly, of course, so wind power must be combined with solar, hydroelectric, fossil fuel or other sources of power to supply a constant stream of electricity.

The windmills are expensive to install, and require highly experienced technicians and large cranes. One windmill with a life span of 20 years costs approximately 1.5 million dollars. Windmills also exact a cost to wildlife and the landscape. Birds and bats have been killed by colliding with the spinning blades, and this is of particular concern along major bird migration routes. In addition, windmills sometimes make a noise which nearby residents find disturbing. While some people consider them ugly and fear the view will cause a loss in property value, others find them interesting. Most people agree that windmills are much nicer to look at than a coal or oil-fired power plant.

In 2009, wind farms, both on land and offshore, were humming along in 35 U.S. states, and generated 1.8% of the nation's electricity – enough energy to power the entire state of Wisconsin or 6.4 billion households. Due to its long-term potential and relatively low environmental impact, the wind-power industry has increased tremendously over the past ten years. Keep an eye out for more wind farms as this green energy source continues to grow.

## Source(s):

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