



WIND POWER WASHTENAW

Background

On April 5, 2006, the Washtenaw County Board of Commissioners passed a resolution directing County staff to "draft a strategic business plan examining the feasibility of providing wind generated electricity for Washtenaw County and to provide wind testing and the construction of a Wind Farm to provide additional electricity for the County."

Getting Started

The first step is testing the local wind resource by putting up one or more tall



Tower with anemometers

meteorological towers to collect wind data in order to assess the feasibility of different scales of wind turbine development. We already know that small scale wind can work in Washtenaw, but we need more data at higher elevations to determine if larger utility-scale turbines are viable in this area.

In May of 2008, Wind Power Washtenaw raised an 80 meter Meteorological Tower at the Chrysler Proving Grounds in Sylvan Township, south of Chelsea. We will be collecting data for 12-18 months. All data will be published on our website monthly.

Once the data has been analyzed, and an investment grade report will be prepared by our consultant and distributed to the public and to parties interested in developing local wind energy.



WIND POWER WASHTENAW

Project Goal

Wind Power Washtenaw's goal is to promote the development of wind energy in the County by testing local wind resources; assessing the data for small and large wind turbine economic feasibility; and providing investment grade information to residents, businesses and energy providers.

Project Partners

The Wind Power Washtenaw project is a cooperative effort between Washtenaw County, The Chrysler Corporation, the University of Michigan Department of Atmospheric, Oceanic, and Space Sciences and the City of Ann Arbor .

Learn More

For more information, contact the Washtenaw County Department of Planning and Environment at (734) 222-3939 or visit www.ewashtenaw.org/wind



*Cover photo by Don Rutt.
Photos courtesy of DOE/NREL.*

Wind Power Washtenaw



A Turbine in Traverse City

Washtenaw County Department of Planning and Environment

705 N. Zeeb Road
P.O. Box 8645
Ann Arbor, MI 48107-8645

Phone: 734-222-3800
Fax: 734-222-6803

www.ewashtenaw.org/Wind

COMMERCIAL SCALE



Blairsburg, Iowa

What is it?

Large numbers of utility-scale turbines (a “wind farm”) which together produce many megawatts of electricity intended for commercial sale. Usually owned and operated by energy companies or public utilities, or electrical cooperatives.

Will it work in Washtenaw?

We are hopeful. Developments of this size take advantage of economies of scale and are typically able to offer a lower price per unit of energy. These projects are typically undertaken by large banks looking to make a high return on investment or by power companies that need to offset their fossil fuel use. Another model has local landowners partner with a private company to develop at this scale themselves. In any case, the developer will look to invest in a location that has good wind, lots of open space, and access to transmission infrastructure.

Two commercial-scale wind farms are currently being developed in Michigan’s thumb area. The electricity to be generated at these farms is being purchased by Wolverine Power and Consumers Energy.

COMMUNITY SCALE

What is it?

Small clusters or individual utility-scale turbines owned by a cooperative of local investors or land owners.



Will it work in Washtenaw?

We are hopeful. In this model, individuals or small groups of investors obtain financing to develop one or several utility-scale turbines. They then earn money by selling the electricity they generate and its associated renewable energy credits. Just as the larger projects, they are also eligible for production tax credits. Increasingly, these local initiatives are getting larger to take advantage of economies of scale.

One example of this model is the Minwind development in Rock County, Minnesota. Read more about the Minwind project at: <http://www.nwcommunityenergy.org/wind/wind-case-studies/minwind/>

SMALL SCALE

What is it?

Individual, small-scale turbines used by residences, business, institutions or farms to help power their homes and businesses and reduce their energy bills.

Will it work in Washtenaw?

Yes. Small, on-site wind production can come in many forms. Small residential units range from 1 to 10 kilowatts (kW) and can often be located in a back yard. Larger on-site units for institutions and businesses range up to 100 kW. In all cases, the turbine produces electricity that directly reduces the amount of power a residence, business or institution buys from the electric utility.

Data from the Wind Power Washtenaw Project will help improve wind resource maps so that area residents have better information about wind availability at their homes and businesses.

For more information on small wind, see the American Wind Energy Association’s FAQ: <http://www.awea.org/smallwind/faq.html>

