

Wind Power in Indiana???

With the ending of the elections and all the political speeches, we have recently been experiencing a lot of hot wind lately. However, both presidential candidates were promoting alternative energy sources, including wind power. What about wind turbines? Hoosiers are asking if Indiana has potential for such wind power. To help meet America's increasing energy needs while protecting our Nation's energy security and environment, the U.S. Department of Energy (DOE) is working with wind industry partners to develop clean, domestic, innovative wind energy technologies that can compete with conventional fuel sources. The Department of Energy's Wind Program and the National Renewable Energy Laboratory (NREL) has published a new wind resource map for the state of Indiana. This resource map shows wind speed estimates at 50 meters (about 164 ft.) above the ground and depicts the resource that could be used for utility-scale wind development. Future plans are to provide wind speed estimates at 30 meters (around 98 ft.), which are useful for identifying small wind turbine opportunities. DOE's Wind Energy Program efforts have culminated in some of industry's leading products today and have contributed to record-breaking industry growth.

As a renewable resource, wind is classified according to wind power classes, which are based on typical wind speeds. These classes range from Class 1 (the lowest) to Class 7 (the highest). In general, at 50 meters, wind power Class 4 or higher can be useful for generating wind power with large turbines. Class 4 and above are considered good resources. Particular locations in the Class 3 areas could have higher wind power class values at 80 meters (about 262 ft.) than shown on the 50 meter map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may be suitable for utility-scale wind development. Note: DOE's Wind Energy Program staff state that wind resource at a micro level can vary significantly; therefore, local community developers should get a professional evaluation of their specific area of interest before finalizing any plans.

The following map shows the highest wind resources in Indiana are found across the northern half of the state. Class 3 areas are located across the north-central region of Indiana with the largest contiguous area being northwest of Lafayette and northwest of Indianapolis. Other Class 3 areas are located east of Muncie. Particular locations in the Class 3 areas could have higher wind power class values at 80 m. than shown on the 50 m. map because of possible high wind shear. Given the advances in technology, a number of locations in the Class 3 areas may be suitable for utility-scale wind development. We know wind farms are being built in Benton County. And we have heard industry contacts are being made in Boone, Montgomery, and Tippecanoe counties. To learn more about wind energy see the DOE's website at <http://www1.eere.energy.gov/windandhydro/>. Check out Selected Wind Energy Topics (left hand side of page) or the maps and other energy information at <http://www.windpoweringamerica.gov/>.

Indiana Wind Resource Map

This map shows the potential wind class resource at 50 meters or about 164 ft. of height.

