

# BLUE CREEK Wind Farm



## Project Overview

In one of the most wind-rich areas in Ohio, the Blue Creek Wind Farm has sprouted from farmers' fields and is generating clean, renewable electricity for customers and significant new local revenue. Avangrid Renewables was the first company to begin construction in a state that had no modern, utility-scale wind projects.

At the time of its completion in early 2012, it was the largest single-stage project in Avangrid Renewables' U.S. wind fleet of some 50 projects. Located in Tully, Union, and Hoaglin townships of Van Wert County, and Benton, Blue Creek, and Latty townships of Paulding County, in what is largely corn, wheat and soybean country, the homegrown wind power will be another crop from the fertile farm lands of northwestern Ohio, blowing all year long and providing for generations.

## Project Details

**Project Capacity:** 304 Megawatts (MW)

**Number of wind Turbines:** 152 Gamesa G90, 2.0 MW wind turbines on 100m towers; the majority of the equipment at Blue Creek was manufactured and assembled in Wisconsin, Texas, Illinois, Pennsylvania, and North Dakota.

**Project Location:** Van Wert and Paulding counties, in northwest Ohio. While the project boundary covers nearly 80 square miles, the total impact of the project is less than 1 acre per turbine, including access roads and the maintenance building.

**Project Status:** Began construction in September, 2010; reached commercial operation in June, 2012.

For more information, visit [www.avangridren.com](http://www.avangridren.com) or see us on Twitter, Facebook, LinkedIn, YouTube, Instagram, and Vine under the handle **AvangridRen**.

## Developer and Owner

Avangrid Renewables is a subsidiary of AVANGRID, Inc. (NYSE: AGR) and part of the IBERDROLA Group, an energy pioneer with the largest renewable asset base of any company in the world. Avangrid Renewables is headquartered in Portland, Oregon, and currently operates and contracts for more than 6,000 MW of renewables in the U.S.



## Customers

**FirstEnergy Solutions**, a subsidiary of FirstEnergy Corp., purchases 100 megawatts. FirstEnergy is a diversified energy company headquartered in Akron, Ohio. Its 10 electric distribution companies form one of the nation's largest investor-owned electric systems, serving customers in Ohio, Pennsylvania, New Jersey, West Virginia, Maryland and New York. Its diverse generating fleet features non-emitting nuclear, scrubbed baseload coal, natural gas, hydro and pumped-storage hydro and other renewables, and has a total generating capacity of more than 20,000 megawatts.

**American Municipal Power, Inc. (AMP)**, a nonprofit leader in wholesale power supply for municipal electric systems, purchases 26 MW. AMP serves 129 member systems in seven states and is a leader in the deployment of renewable generation, including the largest deployment of new run-of-the-river hydroelectric generation in the nation. AMP members' portfolio also includes significant investment in solar, landfill gas and advanced fossil fuel technology.

**The Ohio State University** purchases 50 MW. The purchase of clean, renewable wind energy capacity equates to approximately 25 percent of the entire Columbus campus electricity load, and is one of the single largest purchases of actual renewable energy by any university in the country.

## Technology

The turbines are on a 328-foot (100 meter) towers for a total height of 476 feet. Each nacelle weighs 85 tons. Each foundation uses about 60 truck-loads of concrete and 60 tons of steel rebar.

## Households Served

Each turbine can produce up to two megawatts or 2,700 horsepower, which would be enough to power about 500 average Ohio houses. The total project could power approximately 76,000 homes annually—which according to the 2010 census, is about four times as many households as there are in Van Wert and Paulding counties combined.



## Local Economic Benefits

Blue Creek represents a \$600 million private investment—Ohio's largest in 2011. The project pays approximately \$2 million in annual lease payments to local landowners, and \$2.7 million in annual payments to local taxing bodies. In Van Wert County, where 75 percent of Blue Creek is located, Avangrid Renewables is the largest single taxpayer—larger than the next 11 businesses combined.

## Energy and Environmental Benefits

The Blue Creek project offsets carbon dioxide emissions for its customers by approximately 1.6 billion pounds per year. According to the U.S. Environmental Protection Agency, that is the equivalent to the volume of 158 Ohio Stadiums and the equivalent to planting an estimated 138,000 acres of trees, taking 114,000 cars off the road, or not consuming over 2.1 million barrels of oil. The project also avoids the consumption of 408 million gallons of water per year.