Renier Construction Blows through Central Ohio with First Commercial Wind Turbine Installations

Two wind turbines have sprouted this fall at highly visible central Ohio locations and are gaining enormous awareness for wind power as an alternative energy source.

Renier Construction installed the first commercial wind turbines in Franklin and Delaware county, visible from Interstate-270, and U.S. Route 23, respectively.

"If I would have known that installing wind turbines in these highly traveled areas would gain so much positive interest and attention from the community, we would have installed one of our own a long time ago," stated William Spratley, executive director of Green Energy Ohio at the dedication ceremony on October 22.

A state grant and a federal tax break will assist Byers Auto Group, the owner of the wind turbines, to save roughly two-thirds of the $600,000 cost for the two turbines. Based on conservative estimates, the electricity generated by the turbines likely will pay off the cost within seven to 10 years, said Michael G. MacKay, project executive for Renier Construction of Columbus.

Taking advantage of wind power "just made sense," said George Byers Kauffman, vice president of the Byers family-owned company.

Kauffman and MacKay hope the project will set an example for other businesses and help central Ohio diversify the ways it produces electricity.

The 150-foot wind turbine in Franklin County is a Northwind 100 model and is expected to produce up to 150,000 kWh a year. The 80-foot wind turbine in Delaware County was manufactured by Proven Energy and is expected to produce 25,000 kWh per year.

The turbines are connected to the area's electricity grid allowing for any surplus power to be sold to the utility, when the power isn't used on site.

Kauffman has invited school and community groups to visit the dealerships and study the flat-screen monitor displaying how much electricity is being generated at any given moment.

Karen McClain

The second turbine at the Byers dealership in Delaware county. Photo courtesy: Richard Lamprey.

Solar Contributes to OSU EcoCAR Efficiency

OSU EcoCAR showing off its new eco friendly paint job at the Wexner Center.

The Ohio State University EcoCAR team is one of 16 universities across the United States and Canada that are participating in EcoCAR: The NeXt Challenge. EcoCAR: The NeXt Challenge is a three-year collegiate advanced vehicle technology competition that challenges students to re-engineer a GM donated crossover utility vehicle. Goals of the competition are to improve fuel economy and emissions while maintaining performance, safety, and consumer appeal of the vehicle. In order to meet these goals, The Ohio State University EcoCAR team has chose to design and build an extended range electric vehicle in combination with a solar panel to further boost efficiency of the vehicle.

The Ohio State EcoCAR uses an affordable solar panel with a flexible and light weight design to boost the vehicles efficiency. The solar panel is strategically mounted onto the vehicles roof where sunlight exposure is at a maximum. The solar panel is responsible for generating 12 volt power, which is used to power the vehicles accessories and devices such as power locks and windows. The solar panel provides 12 volt power to the vehicle at approximately 4-5 amperes. As a result of this current, about 60 watts of power, depending on available sunlight, is generated. For a few seconds, the 60 watts of power generated through sun exposure allows the EcoCAR to gain approximately 0.17 miles of all electric range or power the vehicle's accessories and devices. In comparison to the 12 volt power generating process utilized in electric vehicles today, a solar panel is approximately 5 to 10% more efficient. This may not seem huge, but in the long run a solar panel will get drivers a lot further for a lot less.

Abbey Underwood