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Minnesota Firm Designing Large Solar Energy Installation



Westwood Renewables hopes its ambitious new solar- power installation will be part of a growing trend.

August 2009 | by [Andy Steiner](#)

If all goes as planned, by this winter a new power plant—the largest of its kind in the Midwest—will be up and running on a Minnesota college campus. The plant will occupy three to four acres of land, generating 500 to 600 megawatts of electricity a year, but will create no emissions or hazardous waste, require very little maintenance, and be virtually silent.

This project is the brainchild of Dwight Jelle and Mario Monesterio, principals of Eden Prairie–based Westwood Renewables, an installer of photovoltaic (solar-cell) systems. It would consist of numerous ground-mounted 16-foot-high robotic “sunflowers” packed with approximately 2,000 panels programmed to track the journey of the sun east to west, gathering energy from its rays in both sunny and cloudy conditions. Similar systems already are in use worldwide. But until recently, Minnesota’s solar potential has been largely ignored.

“If you were to rate solar power potential on a scale of zero to 10, Minnesota would earn a rating of 6 or 7,” Jelle asserts. “Germany, the number-one solar producer in the world, rates only around a 3.” In the U.S., he adds, “Arizona’s solar potential is actually only somewhere in the range of 25 percent better than Minnesota’s. The solar potential in parts of California is equal to Minnesota.”

Jelle and Monesterio have spent much of their long careers working to build interest in alternative energy, installing more than 9,000 megawatts of utility-scale wind and solar power projects since 1997. Earlier this year, Jelle and Monesterio were awarded a grant of nearly \$2 million from the Renewable

Development Fund to construct the college-campus solar power system.

Under the proposed agreement, the host college—whose name is being kept secret until all details of the project are finalized—would donate the land in return for all electricity generated. Any energy the college doesn't use would be sold to Xcel Energy. Once the agreement is finalized, installation of the solar project could begin almost immediately.

Jelle has worked for land and energy development firms for nearly a quarter century. He has helped develop more than 80 wind farm projects for clients ranging from homeowners to corporations to architecture firms. Monesterio, who earned an associate's degree in renewable energy from Red Wing Technical Institute in 1980, has been involved in the industry as a manufacturer and an employee.

The two had crossed paths and worked together many times during their careers, each eventually starting his own firm. Renewed interest in alternative energy made them realize that the time was right to bring their companies together. Westwood Renewables was established in January.

Monesterio and Jelle hope that their latest project will be the first in a series of similar installations, a network of alternative power plants that will provide the region with clean, renewable energy. This spring, the Minnesota Legislature added a boost by enacting several million dollars in incentives for solar projects.

The new firm is optimistic about its prospects. "If you look back to the '70s, we went through this once before," Jelle says. "This industry ramped up, then the cost of fuel went down and everything quit We need to make up for lost time."

UPDATE: The college in the story was identified in the news after this issue came out. It's St. John's University in Collegeville.

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