

PáTu Wind: Beating the Odds

A Community Wind Case Study

An Unusual Wind Project Keeps Dollars Local

In Oregon's Columbia River Gorge, surrounded by hundreds of commercially-owned wind turbines, is a row of utility-scale wind turbines that are owned by a local wheat farmer. The PáTu Wind project consists of six General Electric wind turbines each rated at 1.5 MW. The project began operations in December 2010 and generates enough clean energy for about 2,200 homes. Ormand Hilderbrand, the project developer and owner, continues to farm wheat around his turbines, optimizing the use of natural resources on his property.

Local ownership and management of utility-scale wind projects like this is unusual. However, by keeping the ownership and profits from the project local, PáTu Wind has generated local jobs, supported local businesses, and provides more

overall economic return for the surrounding region than would a large-scale commercial project.

Beginning Down the Path to Community Wind

Hilderbrand knew his family's farmland in Sherman County, Oregon, had a good wind resource because he had already leased some of it to a commercial developer. When a portion of the commercial developer's project stalled, Hilderbrand decided to try his hand at developing a community-scale project. His original financing model mirrored a traditional equity flip common among community wind projects in the Midwest. Hilderbrand applied for the federal Production Tax Credit (PTC) and was able to secure an investment commitment from a large bank experienced in commercial wind projects.

Turbulence in the Economy Hits Home

The project was ready for construction when, in 2008, Congress failed to extend the expiring PTC, and Hilderbrand could not get his turbines installed before the expiration deadline. Wary of proceeding without the confirmed PTC extension, the project's primary investor pulled out, and Hilderbrand found his project without financing just as the financial crisis of 2008 hit. The PTC was eventually extended but by then several of the banks with wind experience were gone and others retreated from lending to smaller projects.



Ormand Hilderbrand recognized his family farm's potential and overcame many obstacles to make community wind a reality.

Photo source: Ormand Hilderbrand

Putting the Pieces Together

Delayed but not deterred, Hilderbrand decided to move forward with a new financing model where he would own the project from the start and secure construction financing and long-term debt himself. The passage of the American Recovery and Reinvestment Act in 2009 introduced the Investment Tax Credit, which provides a credit worth up to 30% of project costs, making it much easier to attract investors and repay construction financing. Hilderbrand secured other critical project components, like the 50% Oregon Business Energy Tax Credit, a 20-year power purchase agreement with Portland General Electric, and a long-term transmission agreement with Bonneville Power. He covered most of the initial development costs himself—taking out a second mortgage on his home and tapping his retirement savings—but the strength of his plan and development tenacity finally attracted needed equity from a few private investors.

The Struggle to Secure Construction Financing

Hilderbrand was able to secure a long-term loan through Oregon's Small-scale Energy Loan Program, but those funds would only be available once the project was online. In order to make it that far, he needed a loan to cover the purchase of the turbines and the costs of construction, which proved to be the most difficult task of the development process. Construction financing carries greater risk for lenders, as there is no completed project to use as collateral. Credit markets remained largely frozen and major banks showed no interest in lending for construction. Hilderbrand approached multiple smaller, regional banks, but their lack of experience with similar projects made them extremely cautious. For a time, the situation seemed desperate, but fortunately, a willing lender appeared. It still took a lot of work and cost to get through the bank's due diligence process, but finally all of the pieces were in place.



PaTu consists of six General Electric wind turbines each rated at 1.5 MW. The project generates enough clean energy for about 2,200 homes.

Photo source: Ormond Hildebrand

Beating the Odds, Breaking Ground

The PáTu Wind project broke ground in July 2010. As of 2014, the project has been meeting projected energy generation targets, contributing to Oregon's sustainable generation goals. Hilderbrand is the first to acknowledge how difficult the process has been, but he believes in the importance of community-scale clean energy projects like his. He hopes PáTu can be a model and an inspiration, encouraging other developers to achieve similar success and encouraging proactive policies to support additional community-based renewable energy projects.

The Northwest Wind Resource & Action Center provides timely, accurate information on wind energy issues in the Pacific Northwest. It is supported in part with funding from the U.S. Department of Energy and managed by Renewable Northwest, Oregon Department of Energy, and Northwest SEED. www.nwwindcenter.org.



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