

WIND POWER & ECONOMIC DEVELOPMENT

Real Examples from the Pacific Northwest January 2007



Photo: Puget Sound Energy

Northwest communities are benefiting from investments in the region's abundant renewable resources. Between October 2005 and October 2006, seven new wind farms were completed in the Northwest, providing 954 megawatts (MW) of new wind power capacity – that is enough clean, renewable energy to power 238,500 average Northwestern homes. These new wind farms are bringing billions of dollars of capital investment and new economic activity to the region.

The development of wind energy has grown over the last several years because the price of wind-generated electricity is affordable and stable over the long term. Wind farms create a variety of economic benefits including:

- **keeping jobs and money in our communities;**
- **funding schools, fire districts and other essential services;**
- **providing a new source of income for farmers and rural landowners; and**
- **creating thousands of good-paying jobs.**

Here's what 954 megawatts of new wind power has brought to the Pacific Northwest:

- **\$1.38 billion in new capital investment;**
- **between \$2 million and \$3 million in annual royalty payments to rural landowners;**
- **between \$5.8 million and \$6.8 million each year in local property tax revenues;**
- **nearly 1400 construction jobs during peak construction periods;**
- **roughly 80 new permanent family-wage jobs for operation and maintenance.**

HOMEGROWN ENERGY KEEPS MONEY AND JOBS LOCAL

The wind that blows across the Pacific Northwest is a free and domestic source of power. In contrast, **conventional fossil-fueled power plants drain billions of dollars out of the regional economy each year** to pay for imports of coal and natural gas. If the electricity generated by the seven new wind farms was generated at modern natural gas plants instead, the plants would drain \$62-\$109 million out of the regional economy every year to pay for imported natural gas.¹ Wind power is a truly homegrown energy source that keeps money and jobs in our communities.

“The Elk Horn Wind Project will create a new infusion of revenue to our county [that] will be crucial to the continuation of critical county services.”

- John Lamoreau,
Former Union
County Commissioner

PROPERTY TAX BENEFITS

County officials in Union County, Oregon are anxiously awaiting new revenue from the 104 MW Elk Horn Wind Farm that is currently under development. “The Elk Horn Wind Project will create a new infusion of revenue to our county [that] will be crucial to the continuation of critical county services,” said former Union County Commissioner, John Lamoreau. **“It is estimated our county will receive \$10 million over the next 20 years from just this one project.”**

The 75 MW Klondike Phase II Wind Farm in Sherman County, Oregon, is expected to **increase Sherman County's general fund by about 20%, or \$750,000 annually.**

Puget Sound Energy, owner of the 229 MW Wild Horse Wind Farm near Ellensburg, Washington, is now **Kittitas County's largest single taxpayer**, paying approximately \$1.3 million in property taxes annually. This new tax revenue includes \$480,000 for the Kittitas School District, \$402,000 for the state school fund, and \$162,500 for the county general fund.²



LANDOWNER BENEFITS

Farmers and ranchers who lease their land to wind developers receive **annual royalty payments of between \$2,000 and \$7,000 per year for each turbine** sited on their property. For comparison, each turbine sits on roughly a half-acre of land; that same half-acre would earn less than \$100 per year if used to cultivate winter wheat.

According to John Hildebrand, a wheat and wind farmer in Sherman County, Oregon, the turbines are compatible with farming operations. "Put them up, we can farm around them easily," declares Hildebrand. "The turbines use very little land and the new roads give us better access to our fields. Plus, the turbines make money in the winter when I can't work my land."

JOB CREATION AND COMMUNITY SPENDING

The Wild Horse Wind Farm **employed 250 construction workers**, most from within Oregon and Washington and approximately one-third from within rural central Washington counties. The wind farm will also create approximately **fourteen permanent family-wage jobs** for operations and maintenance.³ During construction, Horizon Wind Energy and its contractors **spent over \$8.4 million in the local community** during a twelve-month period on equipment rental, salaries for local hires and other local purchases.⁴

OTHER ECONOMIC BENEFITS

The Ports of Vancouver and Longview, Washington have become the major ports of entry for wind turbine components destined for Northwestern wind farms. The Port of Vancouver has seen such an increase in wind turbine-related business that they have invested in a new crane – the largest mobile harbor crane in North America – specifically to unload the turbines from ships.

The ILWU, Local 4, unloads turbines at the Port of Vancouver and reports that the increased volume of turbines arriving through the port generated **more than 25,000 labor hours in the past two years and created about 30 new positions** – good family-wage jobs. The ILWU estimates that the 'ripple effect' from this new port activity has **created nearly 2,000 new jobs in the area.**⁵

The rapid pace of wind development in the Pacific Northwest encouraged Vestas, the world's largest wind turbine manufacturer, to locate it's North American headquarters in Portland, Oregon. The right combination of public policy support and robust wind development activity could encourage manufacturers of turbines, blades and other wind power components to open factories in the Northwest in the future.

"The turbines use very little land and the new roads give us better access to our fields. Plus, the turbines make money in the winter when I can't work my land."

*-John Hildebrand,
Sherman County wheat
and wind farmer*

CONCLUSION

Wind power development in the Pacific Northwest represents a major economic wind-fall for the region. The seven large, recently completed Northwest wind farms are generating millions of dollars in new property tax revenue for counties, millions more in annual royalty payments for landowners and creating thousands of new jobs. It is clear that harvesting the region's renewable energy resources not only generates clean, homegrown, renewable energy, but also creates a robust regional economy by bringing new jobs and revenue to communities across Oregon and the Northwest.

1. Natural gas fuel cost estimate assumes a 30% capacity factor for wind farms, combined cycle natural gas plants operating at 55% efficiency with 90% capacity factors using natural gas at \$4-\$7/mmBtu.
2. See "Wild Horse Wind Power Project Tax Impacts." Economic Development Group of Kittitas County.
3. See "Gov. Gregoire Gives Go-Ahead for Wild Horse Wind Farm." Horizon Wind Energy. <http://www.horizonwind.com/news/articles/2005july26.aspx>
4. Communications with Chris Taylor, Horizon Wind Energy, November 2006.
5. See "The Port of Vancouver Carries its Weight." The Columbian, October 15, 2006.
- . Other information from a survey of wind energy developers conducted by the Renewable Northwest Project.

January 25, 2007

