Wind Power & Economic Development

Real Examples from Washington

February 2009

In 2006, the voters of Washington passed Initiative 937, the Clean Energy Initiative. I-937 enacts a Renewable Energy Standard that requires Washington's 17 largest utilities to get 15% of their electricity from new, homegrown, renewable energy sources by 2020. Utilities are also required to pursue all low-cost energy efficiency and conservation opportunities.

By all accounts, I-937 has been a complete success – and its good for Washington because it creates good paying jobs for Washingtonians, assists rural communities, and brings more clean energy to the state, all at competitive costs.

Washington communities are benefiting from investments in the region's abundant renewable resources. The state boasts 11 wind projects totalling more than 1,365 MW. RNP conducted a study of just four new wind farms completed in the Washington since 2005. *These four projects alone* provide 648 megawatts (MW) of new wind power capacity – enough clean, renewable energy to power 162,000 average Northwestern homes and bring millions of dollars of capital investment and new economic activity to the state.

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**
- **Helping farmers and ranchers stay in the farming business by providing a new source of income**
- **Creating hundreds of local, good-paying jobs.**

Here's what just four of Washington's eleven wind projects have brought to rural counties:

- **$996 million in new capital investment**
- **Between $1.3 million and $2.1 million in annual royalty payments to rural landowners**
- **Between $3.5 million and $4.0 million each year in local property tax revenues**
- **Almost 700 construction jobs during peak construction periods**
- **Over 65 new permanent family-wage jobs for operation and maintenance**

HOMEGROWN ENERGY KEEPS MONEY AND JOBS LOCAL

The wind that blows across Washington is a free and domestic source of power. In contrast, **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 four wind farms was generated at modern natural gas plants instead, the plants would drain $42 - 74 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.

JOB CREATION AND COMMUNITY SPENDING

The Wild Horse Wind Farm near Ellensburg, Washington **employed 250 construction workers**, most from within Oregon and Washington and approximately one-third from within central Washington counties. The wind farm also created approximately **fourteen permanent family-wage jobs** for operations and maintenance.[2] 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.[3]

Photo: Puget Sound Energy

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PROPERTY TAX BENEFITS

Puget Sound Energy, owner of the 229 MW Wild Horse Wind Farm is **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.[4]

Dayton and Columbia County, Washington received a tremendous infusion from the Hopkins Ridge Wind Farm, with **more than $1.7 million in local and county taxes** since operation began.[5]

In Klickitat County, home of the Big Horn Wind Farm, Economic Development Department former director Dana Peck described the project's importance to the community by saying, "Finding ways to strengthen the County's ag sector is a major goal of our economic development efforts in Klickitat County and wind power projects are an excellent way to achieve that goal."[6]

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- Dana Peck
former Klickitat County Economic Development Department Director

LANDOWNER BENEFITS

Farmers and ranchers who lease their land to wind developers receive **annual royalty payments averaging between $3,000 and $6,000 per year for each turbine** sited on their property. For comparison, each turbine sits on roughly an acre of land; that same acre would earn $319 per year if used to cultivate winter wheat.[7]

Wind turbines are compatible with farming operations, with landowners farming and ranching around them. The turbine footprints are small and new roads can provide improved access to fields. For instance, the Big Horn wind project uses less than one percent (about 70 acres) of the total project acreage and landowners continue using the remaining land for wheat farming and grazing.

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 in 2006 they have invested in a new crane – the largest mobile harbor crane in North America – specifically to unload the turbines from ships. In 2008, The Port ordered a second crane to keep up with the increase in wind turbine cargo.

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 72,000 labor hours in 2007 and created 26 new positions** – good family-wage jobs.[8]

CONCLUSION

Wind power development in Washington represents a major economic windfall for the region. The four large, recently completed Washington wind farms are generating millions of dollars in new property tax revenue for counties, millions more in annual royalty payments for landowners and creating hundreds 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 to Washington 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 using natural gas at $4-$7/mmBtu.
2. "Gov. Gregoire Gives Go-Ahead for Wild Horse Wind Farm." Horizon Wind Energy press release (July 2005).
3. Communications with Chris Taylor, Horizon Wind Energy (Nov 2006).
4. "Wild Horse Wind Power Project Tax Impacts." Economic Development Group of Kittitas County.
5. "PSE Adds Turbines at Hopkins Ridge Wind Facility." Reuters (Aug 2007)
6. "PPM Announces 200 MW Big Horn Wind Project." Iberdrola Renewables website (Oct 2005).
7. Assumes 58 bushel/acre yield at $5.50/bushel. Sources: "Oregon Small Grains Press Release." National Agricultural Statistics Services (Sept 2008) and "Portland Daily Grain Report." USDA Market News (Dec 2008).
8. "Vancouver port buys crane." Portland Business Journal (Oct 2008).

--. Other information from a survey of wind energy developers conducted by the Renewable Northwest Project.

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