



Oregon Renewable Energy Projects Fact Sheet

- Over **\$9.27 billion** invested in new renewables and more than **3,300 MW** installed.

Cumulative Project Investment & Benefit Totals¹

- Invested:² **\$9,277,324,383**
- Public Revenue:³ **Over \$110.4 million**
- Installed Capacity: **3,320.19 MW**
- Estimated Jobs Created:⁴ **Over 5,000**

Wind Investments:

Total Invested:² **\$7,271,803,262**

Total Installed Capacity:⁵ **3,153 MW**

- Total Number of Projects: **29**
- Equivalent to **16%** of Oregon's net electricity generation in 2010⁶ and capable of electrifying approximately **750,000** Oregon households annually, nearly half of Oregon's total of 1,507,137 households⁷.
- Pounds of CO₂ mitigated:⁸ Over **4.6 million metric tons** annually
 - CO₂ mitigated is equivalent to a reduction of nearly half of Oregon's 2010 total carbon emissions from electricity generation of just over 10 million metric tons.⁶
- Oregon currently ranks **5th** out of any state in wind power capacity installed as of the fourth quarter of 2012.⁹

Job Creation:⁴

Direct Construction: **2,112**

▪ Est. Cumulative Total Wages:
\$101,540,736

Permanent On-Site: **181**

▪ Estimated Annual Wages:
\$8,145,000

Public Revenue:

- Total Cumulative:³ **\$110,491,003**
- Estimated annual land lease payments:¹⁰ **\$7.5 million**

Solar Investments:

Total Invested:² **\$1,665,415,121**

Total Installed Capacity:⁵ **85 MW**

- Total Number of Installations: **8,862**
- Total installation jobs created:⁴ **664**
- Estimated Total Wages: **\$31,923,792**

Solar Manufacturing:

- Estimated Job Creation:⁴ **1470**
- Estimated Annual Wages: **\$51,450,000**

Public Revenue:¹²

- Estimated Future Payments for Utility Scale Solar: **\$469,800 Annually**

Geothermal Investments:

Total Invested:² **\$156,658,000**

Total Operating Capacity:⁵ **23 MW**

- Number of installations: **3**
- Estimated Capacity in Development:¹³ **90-114 MW**
- Over **\$88 million** invested in development and exploration²

Public Revenue:

- Estimated Future Annual Payments:¹⁴ **\$1.3 million**

Estimated Job Creation:⁴ **320**

Bioenergy Investments:

Total Invested:² **\$183,448,000**

Total Installed Capacity:⁵ **59.19 MW**

- Number of installations: **21**

Job Creation:⁴

Direct Construction: **221**

- Est. Cumulative Total Wages: **\$10,625,238**

Permanent On-Site: **94**

- Estimated Annual Wages: **\$4,230,000**

-
- ❖ All dollar values presented in inflation adjusted 2012 dollars (2012\$)
 - 1. Cumulative totals spanning the years 1998 through the first quarter of 2013 for currently operating renewable energy systems.
 - 2. Investment data for currently operating renewables was either sourced directly from project reports and news feeds, or based on estimates from the U.S. Energy Information Administration's April 2013 report, *Updated Capital Cost Estimates for Utility Scale Electricity Generating Plants* and NREL's November 2010 report *Cost and Performance Assumptions for Modeling Electricity Generation Technologies*. Estimations are as follows: Biomass \$2.8 mil/MW, Geothermal \$3.2 mil/MW, Wind \$2.0 mil/MW, Solar PV \$3.8 mil/MW.
 - 3. Cumulative revenue paid from all renewables, as of the 2012-2013 tax year, to state and local governments through property taxes, Strategic Investment Programs, etc. Data obtained directly from state/county assessors & treasurers.
 - 4. Job creation was determined for both direct construction and permanent operations & maintenance positions only. Data was gathered either by directly sourcing information from project reports and news feeds, or were estimated using *The Jobs and Economic Development Impact Model (JEDI)* developed by National Renewable Energy Laboratory (NREL). Wages estimated based on industry averages obtained from the U.S. Bureau of Labor Statistics (<http://www.bls.gov/green/greencareers.htm#greendata>).
 - 5. Installation data sourced from Northwest Power and Conservation Council, county & state reports, and project reports.
 - 6. Assuming wind turbine generation efficiency of 33%. Generation data source from EIA's *State Electricity Profiles* (2012) <http://www.eia.gov/electricity/state>
 - 7. Assuming wind turbine generation efficiency of 33% and typical Oregon household electricity consumption of 12 MWh annually. Electricity consumption data obtained from U.S. Energy Information Administration *Average Monthly Residential Electricity Consumption*. Household information obtained from *American Community Survey* (2013) (U.S. Census Bureau)
 - 8. Assuming wind turbine generation efficiency of 33% and the typical emissions rate from U.S. natural gas-fired electricity generation (1,135 lbs/MWh). U.S. Environmental Protection Agency. *Clean Energy* (<http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html>).
 - 9. American Wind Energy Association. (January 2013), *U.S. Wind Industry Fourth Quarter 2012 Market Report*.
 - 10. American Wind Energy Association. (October 2012), *State Fact Sheets Updated Through 3rd Quarter of 2012*. http://www.awea.org/learnabout/publications/factsheets/factsheets_state.cfm
 - 11. Estimation for existing utility scale private solar farms that are currently under Oregon's Enterprise Zones. Estimation based on total capital investment at a levy rate of 0.9%.
 - 12. Sourced from pending applications, exploration projects, and current projects under development.
 - 13. Estimation for new geothermal projects that have been constructed, but yet assessed. Estimation based on total capital investment at a levy rate of 0.9%.