

**RNP Members**

- 3Degrees
- American Wind Energy Assoc.
- Blattner Energy
- Bonneville Environmental Foundation
- BP Wind Energy
- Calpine
- Center for Energy Efficiency & Renewable Technologies
- CH2M Hill
- Citizens' Utility Board
- Climate Solutions
- Clipper Windpower
- Columbia Energy Partners
- Columbia Gorge Community College
- David Evans & Associates
- E.ON Climate & Renewables
- Element Power
- Environment Oregon
- Environment Washington
- enXco, Inc.
- Eurus Energy America
- EverPower
- Gaelectric
- Gamesa Energy USA
- GE Energy
- Geothermal Resources Council
- GL Garrad Hassan
- Green Mountain Energy
- Horizon Wind Energy
- Iberdrola Renewables
- Jones Stevedoring
- Lane Powell PC
- MAP
- Montana Environmental Information Center
- MontPIRG
- Natural Resources Defense Council
- NaturEner
- NextEra Energy Resources
- Northwest Environmental Business Council
- NW Energy Coalition
- OSPIRG
- Port of Vancouver, USA
- Portland Energy Conservation, Inc.
- REC Silicon
- RES America Developments
- Ridgeline Energy
- Solar Oregon
- SolarCity
- Stoel Rives, LLP
- SunPower Corporation
- Suzlon Wind Energy
- SWCA Environmental Consultants
- Tanner Creek Energy
- Tonkon Torp LLP
- Vestas Americas
- Warm Springs Power & Water Enterprises
- Washington Environmental Council
- WashPIRG
- Western Resource Advocates
- Western Wind Power



**Renewable Northwest Project**

**Total Renewable Energy Investment in Oregon**

More than **\$5 billion** has been invested in Oregon's renewable energy industry.

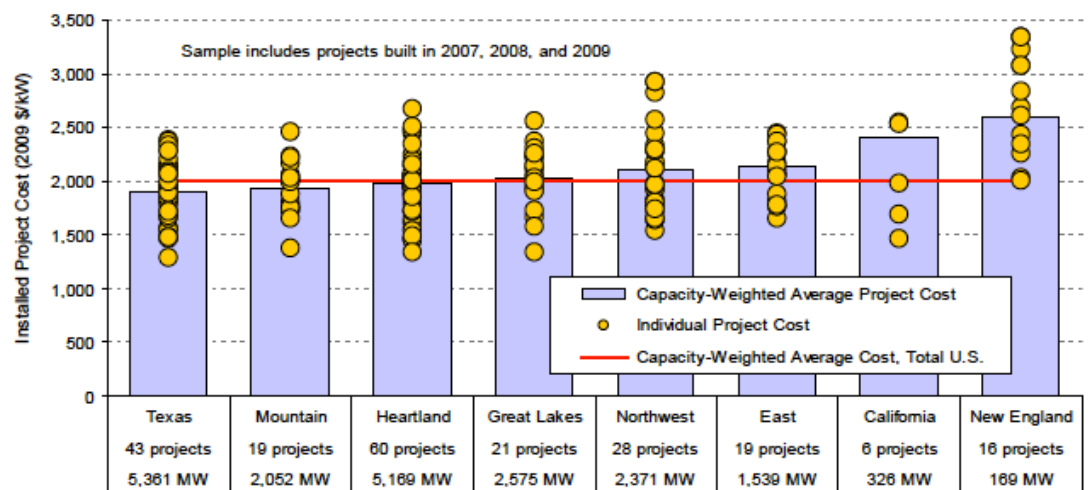
Technology	Investment
Wind	\$4,509,968,594
Solar Manufacturing	\$632,000,000
Solar Development	\$143,531,794
Geothermal	\$121,152,545
<b>Total</b>	<b>\$5,406,652,933</b>

**How We Got the Numbers**

**Oregon Wind**

**\$4.5 billion** of total capital investment in wind project development.

There are currently 2,374 MW of wind operating or under construction in Oregon. Total investment of \$4.5 billion is based on an average installed cost of \$1,900/kW, which is a conservative estimate<sup>1</sup>.



Source: Berkeley Lab

**Figure 29. Installed Wind Power Project Costs by Region: 2007-2009 Projects**

## Oregon Solar PV Manufacturing

More than **\$600 million** of capital investment in solar manufacturing plants.

	Jobs	Plant Investment
SolarWorld <sup>ii</sup>	1,000	\$500,000,000
Solaix <sup>iii</sup>	80	\$52,000,000
Sanyo <sup>iv</sup>	200	\$80,000,000
PV Powered <sup>v</sup>	150	Unknown
Peak Sun <sup>vi</sup>	50	Unknown
Supply Chain <sup>vii</sup>	100	Unknown
Total	1,580	<b>\$632,000,000</b>

## Oregon Solar PV Development

More than **\$140 million** of capital investment in residential and commercial solar PV development, according to data from the Oregon Residential and Business Tax Credit programs<sup>viii</sup>.

## Oregon Geothermal Development

With Federal cost share programs, **over \$120M** has been invested in geothermal exploration, research, and project development since 2009. At least 75MW will be coming online in the short term, and the exploration and research will provide a very “hot” future<sup>ix</sup>!

---

<sup>i</sup> According to the Lawrence Berkeley National Lab (LBNL) 2009 Wind Technologies Report, the capacity-weighted average installed cost of wind projects developed between 2007-2009 in the Northwest was over \$2,000/kW. The majority (roughly 80%) of total Northwest wind capacity came online in 2007 or later.

Wiser, Ryan and Bolinger, Mark. Lawrence Berkeley National Laboratory (LBNL). *2009 Wind Technologies Report*. August, 2010. <<http://eetd.lbl.gov/ea/emp/reports/lbnl-3716e.pdf>>

<sup>ii</sup> <http://www.solarworld-usa.com/news-and-resources/news/solarworld-opens-north-americas-largest-solar-cell-manufacturing-facility.aspx> **and** <http://www.solarworld-usa.com/news-and-resources/news/SolarWorld-fulfills-1000-worker-commitment-in-Oregon.aspx>

<sup>iii</sup> <http://www.solaicx.com/news-and-events.html> **and** [http://www.sustainablebusinessoregon.com/articles/2010/01/solaicx\\_plans\\_to\\_triple\\_portland\\_plant\\_capacity.html](http://www.sustainablebusinessoregon.com/articles/2010/01/solaicx_plans_to_triple_portland_plant_capacity.html)

<sup>iv</sup> [http://www.oregonlive.com/business/index.ssf/2008/09/its\\_official\\_sanyo\\_hatching\\_80.html](http://www.oregonlive.com/business/index.ssf/2008/09/its_official_sanyo_hatching_80.html) **and** Oregon Solar Energy Industries Association.

<sup>v</sup> Direct conversation with PV Powered. February 2, 2011.

<sup>vi</sup> Oregon Solar Energy Industries Association (OSEIA). February 2, 2011.

<sup>vii</sup> Ibid.

<sup>viii</sup> According to Oregon Department of Energy (ODOE), the total system costs of solar PV installations under the Residential Energy Tax Credit (RETC) program from 2001 through July, 2010, equals \$38,339,391. The total system costs of solar PV installations under the Business Energy Tax Credit (BETC) program from 2001 through January, 2011, equals \$105,191,863.

<sup>ix</sup> US Department of Energy (ODOE), Energy Efficiency and Renewable Energy (EERE). Geothermal Technologies Program. [http://apps1.eere.energy.gov/geothermal/projects/state\\_listing.cfm/state=OR](http://apps1.eere.energy.gov/geothermal/projects/state_listing.cfm/state=OR)