

U.S. Jobs and Financial Benefits Limited from Green Energy Wind Investments

The American Recovery and Reinvestment Act (ARRA) program, also known as the stimulus bill, funded large wind and solar renewable energy projects during the years 2009-2011 to the tune of 9.7 billion tax payer dollars. Seventy-nine percent, or \$7.66 billion was spent on wind projects.(1)

Jobs created from the 197 large wind projects funded under the ARRA program resulted in a total of only

- 5,500 short term jobs per year during the construction phase,
- 770 long term jobs per year for operation and maintenance.

The portion of stimulus funding that went into the U.S. economy from wind installations during the years 2009 through 2011 ranged from 48% to 66% of total investment.(2)

- That means one-third to one-half or 2.61 billion to 3.98 billion in tax dollars went to support wind energy jobs and the economies in countries outside the US.

Sources

(1) Preliminary Analysis of the Jobs and Economic Impacts of Renewable Energy Projects Supported by the §1603 Treasury Grant Program. Daniel Steinberg and Gian Porro. *National Renewable Energy Laboratory*. Marshall Goldberg *MRG & Associates*. Technical Report. NREL/TP-6A20-52739. April 2012

(2) 36 IHS-CERA. "U.S. Wind Industry Overview: A Baseline Snapshot of U.S. Wind Manufacturing." Cambridge, MA: IHS-CERA, 2010.
Bolinger, M.; Wiser, R.; Darghouth, N. "Preliminary Evaluation of the Section 1603 Treasury Grant Program for Renewable Power Projects in the United States." *Energy Pol.*; Vol. 38, 2010; pp. 6804–6819.
David, A.S. "Impact of Wind Energy Installations on Domestic Manufacturing and Trade." Washington, DC: U.S. International Trade Commission, Office of Industries, 2010.

**Many Massachusetts wind projects use
foreign turbines and/or foreign workers
(ARRA projects only when noted)**

- MWRA DeLauri Pump Station, Charlestown. A single wind turbine purchased from the Chinese state-owned wind turbine manufacturer Sinovel under the Buy American ARRA Exemption. Sinovel does not have health and safety setbacks to the extent American turbine manufacturers do and therefore these foreign turbines can be placed in locations that put human health and safety at risk.
- Fairhaven Wind project. Starting in November 2011 trees were cut down along a bike trail to make way for the installation of two Sinovel turbines. The turbines began operating in May 2012. There was a problem with the turbines and a Chinese crew was sent over to install needed equipment.
- Scituate Community Wind project. A single Sinovel turbine began operation in the end of March 2012. According to a Boston Globe article, parts for the turbine traveled 10,934 miles from Tianjin, China.
- Falmouth Waste Water Treatment Plant has two Danish-made Vestas turbines. Wind 1 was purchased by the Massachusetts Technology Collaborative using the Renewable Energy Trust Funds collected from residential and commercial utility ratepayers. Wind 2 was bought with ARRA funds and therefore required an exemption to the Buy American provision.
- Hoosac Wind Project. Spanish wind developer Iberdrola is building a 19-turbine project in Monroe and Florida.
- Three “No Fossil Fuels” turbines in Kingston are manufactured in Spain by Gamesa.
- Kingston Community Wind. A blade started to delaminate from the Hyundai-made “Independence” turbine before it was turned on. A South Korean crew was sent to Kingston to make repairs on the blade. The turbine is located only 468 feet from Route 3 barely over the height of the turbine.