



# Clean Energy Manufacturing Jobs & Earth Day 40th Anniversary

APRIL 22, 2010

As we mark the 40th Anniversary of Earth Day on April 22, 2010, our nation is making strides towards a clean energy economy. It is critical that, as we undergo this transition, clean energy policies not only achieve our environmental goals, but our economic ones as well by making sure all workers throughout our economy play a role.

The development and deployment of clean energy production has the potential to both maintain existing manufacturing jobs and create millions of new opportunities. In his January 2010 State of the Union Address, President Obama touted the creation of new jobs in the solar industry that, in his words, “can’t be outsourced overseas.” Yet, visible flaws in our policies warrant the attention of Congress to ensure that American tax dollars are used to create jobs here at home instead of in factories in China and other foreign competitors.

## What is a Clean Energy Manufacturing Job?

The term “clean energy manufacturing job” includes any worker engaged in the manufacture of materials used to support clean energy technologies. For example, the construction of wind turbines, solar panels, and other clean energy equipment relies on thousands of manufactured components made of steel, glass, concrete, and other inputs. According to the American Wind Energy Association (AWEA), the construction of roughly 5,000 wind turbines (the amount installed in 2008) requires 2.4 million bolts, 27,000 miles of rebar, 1.2 million cubic yards of concrete (enough for more than 5,700 miles of 4-foot wide sidewalk) and at least 1 million tons of steel.<sup>1</sup>

## Where are “Clean Energy Manufacturing Jobs” being created?

Billions of dollars are being invested to support the production of clean energy in the United States. However, Americans have been frustrated to learn that our efforts to create jobs here at home are often resulting in the creation of manufacturing jobs in China and elsewhere and missing important opportunities to grow manufacturing in America.

- **West Texas Wind Farm.** In October 2009, a consortium of American and Chinese companies announced a deal to build a \$1.5 billion, 36,000-acre wind farm in west Texas, relying solely on imported Chinese turbines. Company officials said they planned to collect \$450 million in taxpayer support to subsidize the project

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that is estimated to create dozens of permanent jobs in the U.S. and thousands of manufacturing jobs in China.<sup>2</sup>

- **BP Solar.** In March 2010, BP announced the closure of its solar panel manufacturing facility in Frederick, MD. It intends to shift production to China and India to gain access to cheap labor. BP recently applied for taxpayer financial assistance for a proposed 32 megawatt solar-power generation plant on land belonging to the Energy Department's Brookhaven National Laboratory in New York.<sup>3</sup> In addition, the Frederick facility was the recipient of \$7.5 million in taxpayer funds in 2007.<sup>4</sup>
- **Evergreen Solar.** In November 2009, Evergreen Solar announced that it would be shifting solar panel assembly away from its Massachusetts plant to China. The announcement came just one year after cutting the ribbon on a plant subsidized by \$58.6 million in state grants, loans, land, tax incentives, and other support.<sup>5</sup>

## What policies are needed to maximize “Clean Energy Manufacturing Job” creation?

Without properly designed tax and investment incentives for clean energy generation, loan guarantees for nuclear reactor construction, and other federal supports, our efforts to rejuvenate our manufacturing base could be unseated by subsidized imports from countries seeking to capitalize on new demand for clean energy products in the United States, such as wind turbines and solar panels.

The U.S. recently fell to second place in clean energy investments with a total of \$18.6 billion in 2009 – falling far behind China's \$34.6 billion investment in 2009. It is essential that policies to spur further growth and investment in clean energy technologies and clean energy manufacturing are included in any clean energy and climate policy developed by Congress. These should include:

- **Buy America.** To the fullest extent possible, Congress should continue to enact and enforce strong domestic content requirements for all federal infrastructure investments, including instances when taxpayer dollars are used to support renewable energy equipment manufacturing or loan guarantees.
- **Access to Capital.** Congress should expand access to capital so that companies are able to make efficiency improvements to their existing operations and build new plants to meet the demand for renewable energy projects. The “Investments for Manufacturing Progress and Clean Technology (IMPACT) Act” (S. 1617), introduced by Senator Sherrod Brown (OH), provides grants to states so they can establish revolving loan funds to facilitate clean energy manufacturing projects.
- **Manufacturing Tax Credit.** Congress should fulfill President Obama's request for an additional \$5 billion for the 48c advanced energy manufacturing tax incentive, which supports increased manufacturing capacity of clean energy technologies in the United States. The \$2.3 billion provided under the *Recovery Act* is supporting 183 projects in 43 states, but was oversubscribed by a 3:1 ratio. The “Security in Energy and Manufacturing (SEAM) Act of 2010” (H.R. 5041) introduced by Congressman Phil Hare (IL-17), would provide the additional funding needed to jumpstart stalled projects while making sure that American clean energy manufacturing workers benefit.

### Endnotes

- 1 “AWEA Wind Power Value Chain.” American Wind Energy Association. Web. 19 Apr. 2010.
- 2 Smith, Rebecca. “Chinese-Made Turbines to Fill U.S. Windfarm.” *Wall Street Journal*. Web. 30 Oct. 2009.
- 3 Mufson, Steven. “BP Closing Maryland Solar Manufacturing Plant.” *Washington Post*. Web. 27 Mar. 2010.
- 4 “BP Solar selected for Solar America Initiative award from US Department of Energy.” BP Solar USA. 8 Mar. 2007. Web. 19 Apr. 2010.
- 5 Ailworth, Erin. “Evergreen Solar to Shift some Operations to China.” *Boston Globe*. Web. 4 Nov. 2009.



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