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Elusive Goal of Greening U.S. Energy

By [STEVEN GREENHOUSE](#)

The Great Green Hope for lifting America's economy is not looking so robust.

[President Obama](#), both during his campaign and in his first year in office, has promoted the promise of new jobs in cutting-edge, nonpolluting industries, and such green jobs will be a major issue at his jobs "summit" meeting Thursday.

But, increasingly, skeptics who point to the need for more jobs are wondering why he is not doing more to create green jobs faster.

Growth in clean energy industries and in green jobs has been considerably slower and bumpier than anticipated, industry experts say.

But rather than giving up on its green jobs mantra, the White House will rededicate itself to promoting green industries at the jobs meeting, which will bring together business and labor leaders, politicians and economists.

The initial promise of green jobs was based on governments around the world declaring the fight against [global warming](#) to be a priority. The theory was that jobs in environmentally minded companies would grow rapidly as a result. But instead, some green-industry companies have been shedding jobs in the United States, and in some cases moving them to China.

Last week, the Gamesa wind turbine plant in western Pennsylvania announced it was laying off nearly half its 280 workers. Last month, [General Electric](#) said it would close a solar panel factory in Delaware, while [Evergreen Solar](#), which received \$58 million in state aid to build a 900-employee plant northwest of Boston, said it would move some assembly to China, costing 250 jobs.

There are myriad reasons why green jobs have grown more slowly than hoped. The clean energy component of the \$787 billion [stimulus package](#) has only recently started to kick in. Energy experts say that banks, which have been reluctant to lend generally, have been especially loath to lend for alternative energy projects.

And renewable-energy companies are hesitating to invest in new plants and equipment before Congress enacts new environmental mandates, like [cap and trade](#), to limit carbon emissions. In addition, the long [recession](#) (along with correspondingly slack energy demand) caused the clean-energy industry to delay expansion plans.

As a result, the United States is likely to install just one-eighth as much new [solar power](#) this year as

Germany does, and China is expected to surpass the United States this year as the leader in adding new [wind energy](#) capacity.

“The renewable energy industry in the U.S. is an underdeveloped developing industry,” said Michael Peck, director of external affairs for Gamesa USA, a Spanish-owned company that has two wind turbine factories in Pennsylvania. “Manufacturers, developers, utilities, financiers — they don’t see the legislative pieces that they’re all hoping for to help the industry move forward.”

Recently, the Obama administration has taken several steps it says will soon produce thousands of green jobs. In August, it announced \$2.3 billion in tax credits that will go to manufacturers of clean energy technologies. It has also allocated \$6 billion for loan guarantees that could, in turn, generate \$60 billion in investments.

The administration notes that Solyndra, a company that makes solar photovoltaic panels in Fremont Calif., received a \$535 million loan guarantee to finance a manufacturing plant, creating 3,000 construction jobs and 1,000 permanent jobs.

In addition, the government’s \$11 billion program to modernize the nation’s power grid — to make it easier to absorb electricity generated by wind and solar power — is just getting off the ground, officials say. They say the weatherization part of the stimulus package has already put many people to work in California, Ohio, Georgia and other states, and that number is expected to more than double this winter and spring.

While many green industry executives and environmental experts applaud these efforts, they say more needs to be done. Some note that even with the administration’s recent moves, it has spent less than one-fourth of the \$80 billion clean energy component of the stimulus package.

Administration officials boast that the \$80 billion figure is by far the largest amount ever committed to renewable energy.

Within industry and the environmental movement, there are recurring calls for Congress to require the nation to generate 15 percent or 20 percent of its energy through renewable sources by a specific year, say 2020. General Electric, which has 10,000 wind turbines in the United States, says that to encourage growth in the wind industry, the nation should adopt a target of obtaining 12 percent of its energy from renewable sources by 2012.

“The clean energy market is gigantic and growing,” said Phyllis Cuttino, a director of the Pew Charitable Trusts’ Environmental Group. “The U.S. has a rich manufacturing base, a well educated work force and we are an innovation center. But if we don’t have the policies in place to make investment here a sure thing, then we could potentially lose to other countries. Other countries are jumping in. They have policies to take a lot of projects to scale, and that’s what’s missing in the United States.”

Nathaniel Bullard, a solar analyst at the research firm New Energy Finance, added, “In the U.S. there are problems arranging the project financing that is driving growth in countries like Spain.” Spain ranks second behind Germany and ahead of the United States in adding annual solar capacity.

Even so, many wind and solar companies are expanding in the United States, often in states with renewable

energy standards. First Solar is starting a fourth production line at its photovoltaic cell factory in Perrysburg, Ohio, adding 140 jobs to the 560 there. First Solar also hopes to use federal loan guarantees to build a 30-megawatt generating facility in Cimarron, N.M., creating 200 construction jobs.

A Dow Corning joint venture in Midland, Mich., is building a plant to make silicon wafers for photovoltaic cells. In a surprise to many, Suntech, the giant Chinese solar manufacturer, is building a factory in the Phoenix area — to expand in the American market and deflect [protectionist](#) pressures.

These modern factories are forcing some older, less efficient factories to close, especially with China's surge in solar panel production pushing down prices by 30 percent.

Rhone Resch, president of the Solar Energy Industries Association, said there would be more such investment in the United States if it had incentives like those in China, Malaysia or South Korea.

"In China, 80 percent of the entire cost of a factory and worker training is paid for by the government," Mr. Resch said. "Malaysia will give you a 10- or 20-year tax holiday."

He praised Mr. Obama's \$2.3 billion tax credit program, but said its 30 percent credits were not nearly as generous as China's.

Mr. Resch said it was important to remember that for every solar manufacturing job there are 8 to 10 jobs installing solar panels. That is hardly reassuring to advocates of American manufacturing who argue that the renewable energy industry needs to have lots of \$20-an-hour factory jobs and not just \$10-an-hour installation jobs.

"As a country we need to make a decision that we do or don't want to be a leader in this area," said Cathy Calfo, executive director of the Apollo Alliance, a coalition of business, environmental, labor and community groups pushing for clean energy.

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