



20% Wind Power: DOE Releases Report

In what the wind industry called a foundation for a vision of 20% wind power, the U.S. Department of Energy (DOE) today released a report detailing how wind energy can meet as much as one-fifth of the nation's electricity needs by 2030.

The groundbreaking report, "20% Wind Energy by 2030: Increasing Wind Energy's Contribution to U.S. Electricity Supply," is comprehensive in its breadth, for it includes an examination of the U.S.'s technological and manufacturing capabilities, future costs of energy sources, U.S. wind energy resources, and environmental and economic impacts of wind development. "20% Wind Energy by 2030" was formally unveiled at a press conference in Washington, D.C., at the National Press Club, where officials from the Department of Energy, National Renewable Energy Laboratory, and Federal Energy Regulatory Commission (FERC) joined representatives from BP, American Electric Power (AEP), and AWEA to discuss the report.

Contributing to the DOE report, which at the press conference Karsner called "the finest collaboration effort that we can bring to bear," were AWEA, utility consulting firm Black & Veatch, the National Renewable Energy Laboratory (NREL) and other national laboratories.

"DOE's wind report is a thorough look at America's wind resource, its industrial capabilities, and future energy prices, and confirms the viability and commercial maturity of wind as a major contributor to America's energy needs, now and in the future," said Andy Karsner, DOE Assistant Secretary of Energy Efficiency and Renewable Energy. "To dramatically reduce greenhouse gas emissions and enhance our energy security, clean power generation at the gigawatt scale will be necessary, and will require us to take a comprehensive approach to scaling renewable wind power, streamlining siting and permitting processes, and expanding the domestic wind manufacturing base."

Under the 20% wind scenario, installations of new wind power capacity would increase to more than 16,000 MW per year by 2018, and continue at that rate through 2030. To be sure, the supply-chain implications alone are somewhat daunting: in 2007 the industry installed an already-impressive 5,249 MW of new wind power capacity (35% of all new capacity), meaning that the industry will have to grow three-fold in a decade. As the report concludes, however, the challenges can certainly be overcome.

Among the report's findings is that a 20% wind contribution to the U.S. electricity supply would reduce natural gas use by 11%, something AWEA said would ease price pressure on the relatively clean-burning fossil fuel. It would reduce carbon dioxide emissions from electricity generation by 25% in 2030 and cut water consumption associated with electricity generation by 4 trillion gallons by that year. Annual revenues to local communities, the report finds, would increase to more than \$1.5 billion by 2030. Wind energy also would support roughly 500,000 jobs in the U.S., with an average of more than 150,000 workers directly employed by the wind industry.

The significance of the report's release cannot be overestimated, said members of the wind industry. The industry, in fact, is viewing the report as an opportunity to make the greater energy

industry, and nation as a whole, understand wind's capability to be a major contributor to the overall energy mix. In addition, as AWEA Executive Director Randall Swisher said at the news conference, the report serves as a "foundation for a vision" for the wind industry to achieve 20% penetration.

Several of the speakers highlighted various aspects of the report. FERC Commissioner Suedeen Kelly and AEP Vice President of Government Affairs Tony Kavanagh pointed to the need for a transmission superhighway that can connect wind power resources with load centers—transmission that is also needed for the greater electric industry as a whole. AEP made a significant contribution to the report, creating a map of what such a transmission superhighway would look like.

"Though economic and other factors will ultimately determine our energy future, we believe the 20% wind scenario is feasible, but only with a major national transmission highway system," said Kelly. She also noted that the "20% wind scenario would only cost 2% more than the cost of the baseline scenario without wind. At 50 cents per month for the average ratepayer, that is a small price to pay for the climate, water, natural gas, and energy security benefits it would buy—and it does not even count the stability provided to consumers eliminating fuel price risk."

"Wind is an important part of BP Alternative Energy's business and of BP's diverse energy portfolio," said Bob Lukefahr, president of BP Alternative Energy North America, Inc. "Siting and wildlife issues will be a challenge, but AWEA and industry leaders are committed to working with stakeholders to make wind the environmental electricity choice."

To download the full report and for more information, go to www.20percentwind.org .

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