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# Departments of Energy and Commerce Announce New Partnership to Further Cooperation on Renewable Energy Modeling and Forecasting

WASHINGTON - The Department of Energy and the Department of Commerce today announced a new agreement to further collaboration between the agencies on renewable energy modeling and weather forecasting, which will help enable the nation's renewable energy resources to be used more effectively by business and entrepreneurs. The Memorandum of Understanding signed by Acting Under Secretary of Energy Cathy Zoi and Under Secretary of Commerce for Oceans and Atmosphere and Administrator of the National Oceanic and Atmospheric Administration Jane Lubchenco, Ph.D., will encourage the two agencies to work together to develop and disseminate weather and climate information needed for renewable energy technologies that are dependent on short-term weather and longer-term climate trends. Better information on weather patterns and improved modeling of the variability of the wind, sun, water, ocean currents and other sources of renewable energy will ultimately increase the country's ability to efficiently and reliably integrate renewable energy into the electrical grid.

"This collaboration will bring together scientists and experts across the federal government to support our efforts to integrate renewable energy into our power system," said Zoi. "By providing us with a deeper understanding of how weather impacts the generation of renewable energy, this partnership will help to more effectively deploy these important resources across America."

"Our ability to increase America's supply of renewable energy is based in part on our ability to predict and harness precipitation, wind and cloud patterns," said Lubchenco. "Observations, forecasts and climate information tailored to the needs of the renewable energy industry will promote growth of this vital sector."

The agreement announced today builds on reports from both agencies that recognize the need for improved meteorological, oceanic, and climatological observations, modeling, and forecasting to expand the efficient use of renewable energy sources and further integrate these energy sources into the U.S. energy system. For example, DOE's 20% Wind Energy by 2030 report identifies several key research areas, such as improved wind forecasting techniques, that would enhance electrical grid system operations. NOAA's Next Generation Strategic Plan states that NOAA will develop integrated environmental information services for the unique needs of weather-sensitive sectors, including solar, wind, and oceanographic information critical to the development, production, and transmission of renewable energy.

The partnership will help renewable energy system designers, operators, and electric power system administrators in improving the cost effectiveness and reliability of weather-dependent renewable energy technologies. The collaboration includes a working group from DOE's Office of Energy Efficiency and Renewable Energy and the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA) that will identify areas for continued focus and research and help lay out next steps for improving the efficiency of renewable resources and better integrating renewable energy sources onto the electrical grid.

The group will produce an Action Plan in the coming months that will address:

- Improving renewable resource characterization models and methodologies for optimizing system reliability and performance
- Advancing meteorological and oceanic forecasting technologies, models and methodologies
- Defining national weather and oceanic monitoring systems needed to support renewable energy
- Predicting climate effects on renewable energy resources
- Coordinating both public and private sector contributions to addressing renewable resource needs.

Under the partnership, both agencies agree to provide the necessary resources to coordinate or carry out the designated tasks outlined in the Action Plan.

To learn more about wind as a renewable energy source, please visit DOE's Wind Program website (http://www1.eere.energy.gov/windandhydro/) .

Read more on NOAA's renewable energy program (http://www.esrl.noaa.gov/research/renewable_energy/) .

View the full text of the Memorandum of Understanding (http://www.noaanews.noaa.gov/stories2011/images/28812.pdf) (pdf - 316kb).

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