## **Department of Energy Announces More Than \$104 Million for National Laboratory Facilities**

## *Eight Projects Will Support Growth of Clean Energy and Efficiency through Research, Development and Testing*

ALBUQUERQUE, NM – While visiting Sandia National Laboratories, Deputy Secretary of Energy Daniel Poneman today announced \$104.7 million in funding from the American Recovery and Reinvestment Act for eight new projects to establish critical research and testing facilities at seven DOE National Laboratories , including Idaho National Laboratory. The projects will support the development and improvement of clean energy and efficiency technologies of strategic national interest. Specifically, the funding will go toward reducing the production cost of carbon fiber manufacturing, to help in reducing the weight of vehicles; improved efficiency and lower costs for car batteries; and net-zero energy building technologies. This effort will leverage the combined intellectual and technical resources of DOE National Laboratories to support technologies that will help transform the economy and create jobs, while decreasing carbon emissions.

"Our National Laboratories are national treasures and home to world-leading science," said Deputy Secretary Poneman. "As they have since their founding, they are helping us tackle the great challenges of our day, including on energy and climate. Their innovation and ingenuity are helping jumpstart American manufacturing, accelerate job creation and lay the foundation for a clean energy economy."

Projects announced today have been selected in three areas:

- Carbon Fiber Manufacturing and Processing Technologies: Carbon fiber is a light weight, high-strength material that has the potential to revolutionize the automobile and wind industries. Low-cost carbon fiber is critical to reducing the weight of vehicles and thereby raising their fuel efficiency, while maintaining the strength and safety found in steel autobodies.
- Advanced Battery Prototype Fabrication and Testing Facilities: Energy storage technologies, especially batteries and electric drive components, are critical enabling technologies for developing advanced, fuel-efficient vehicles and meeting the Administration's goal of putting 1 million Plug-In Electric Vehicles on the road by 2015.
- Development of Integrated Building Systems: Buildings account for 40 percent of carbon emissions in the United States. Net-zero energy buildings those that generate as much energy as they use on an annual basis through high efficiency and on-site renewable energy generation are a key way to address and reduce these emissions. New laboratory facilities will develop the technologies and design approaches that enable net-zero energy buildings (N-ZEB) at low incremental cost.

The Department of Energy solicited applications from eligible National Laboratories nationwide. Applications underwent a thorough technical review process.

Laboratories selected today include:

- Oak Ridge National Laboratory (Oak Ridge, TN) will receive \$34.7 million for carbon fiber manufacturing and processing to construct the Carbon Fiber Technology Center. The Center will investigate novel manufacturing processes and alternative feedstocks in order to lower the cost of carbon fiber from the current \$10-\$20 per pound to under \$5 per pound.
- Oak Ridge National Laboratory (Oak Ridge, TN) will receive \$20.2 million to develop an Integrated Net-Zero Energy Buildings Research Laboratory that includes a commercial building field research platform.
- Lawrence Berkeley National Laboratory (Berkeley, CA) will receive \$15.9 million to build and operate a National User Facility for Net-Zero Energy Buildings Research that will contain a series of coordinated integration test beds that address key technical challenges for net-zero energy buildings.
- National Energy Technology Laboratory (Morgantown, WV) will receive \$13.9 million to construct a 35,000 square foot Performance Verification Laboratory to perform nearly 17,000 verifications tests per year on a broad range of residential and commercial appliances.
- Argonne National Laboratory (Argonne, IL) will receive \$8.8 million to construct three battery research and development facilities: a Battery Prototype Cell Fabrication Facility, a Materials Production Scale-Up Facility, and a Post-Test Analysis Facility.
- Idaho National Laboratory (Idaho Falls, ID) will receive \$5 million to establish a High Energy Battery Test Facility. The High Energy Battery Test Facility will possess capabilities that will enable development of low cost batteries that meet real world performance requirements.
- Sandia National Laboratories (Albuquerque, NM) will receive \$4.2 million to modify and enhance its Battery Abuse Testing Laboratory. Abusive testing includes such conditions as over charging, over discharge, short circuits, fire and external heat exposure. The improved battery abuse testing facilities will possess capabilities critical for developing low cost batteries that meet real world performance requirements.
- National Renewable Energy Laboratory (Golden, CO) will receive \$2 million to establish a Battery Thermal and Life Test Facility. The Battery Thermal and Life Test Facility will enable researchers to develop lower cost, more robust battery thermal management systems and battery designs.

-DOE-

Editorial Date November 19, 2009 By Timothy Jackson