

BCSE: America Recovery and Reinvestment Act Report, July 6th 2009

This report presents recent announcement and implementation activities associated with ARRA-funded programs.

Highlights include:

- Funding Announcements:
 - DOE Announces \$45M for Large Wind Turbine Drivetrain Testing Facility
 - DOE Announces \$7.5M to Train Commercial Building Energy Specialists
 - DOE Announces \$25M to Build America Energy Efficient Housing Partnership
 - DOE Announces \$25-75M to develop Advanced Energy Efficient Building Tech
- Administration Announces \$346M in New Energy Efficiency Efforts
- Administration Highlights FOA's Expiring in August for \$3.9B in Smart Grid Technologies and Electric Transmission Infrastructure
- Administration Awards \$204M for State Energy Programs in 10 States

Funding Announcements:

DOE Announces \$45M for Large Wind Turbine Drivetrain Testing Facility:

This FOA is for the design and construction of a large dynamometer facility for testing 5 to 15 MW rated drivetrains, with supporting systems, and the operation and maintenance of these facilities for the benefit of wind stakeholders nationwide. The proposed facility can be new construction or involve the design and modification of an existing building suitable for electrical, mechanical, and other physical needs associated with a dynamometer test stand. Applicants will be required to submit detailed multi-phase plans including concept designs, preliminary designs, engineering procurement and construction contract management, and operation and maintenance. DOE envisions awarding a single \$45 Million financial assistance grant award on a competitive basis. Independent accreditation of the facility to conduct certification testing in accordance with applicable wind turbine design standards will be required.

For full text of this announcement, please visit:

<http://www.grants.gov/search/search.do?mode=VIEW&flag2006=false&oppId=48091>

DOE Announces \$7.5M to Train Commercial Building Energy Specialists

The DOE National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy (EERE) Building Technologies Program (BTP), is seeking applications for projects that focus on developing training programs for various building specialists. The programs shall use existing curricula or develop new training curricula for their course content. The BTP intends to award a number of cooperative agreements through this FOA to develop training programs for implementation upon completion of awarded project(s).

Training programs are needed for three types of commercial building specialists: equipment technicians, operators, and energy commissioning agents/auditors. The objective is to enable the development of a workforce that can bring existing commercial buildings up to their energy

performance potential and to help ensure that new commercial buildings do not fall below their expected optimal level of performance.

For full text of this announcement, please visit:

<http://www07.grants.gov/search/search.do;jsessionid=MGMKKKvhm0F1MNZpRtx2C1QFyTQjPpNJp0FO2KvQCzOzOmlGPTQT!1277565875?oppId=48217&mode=VIEW>

DOE Announces \$25M to Build America Energy Efficient Housing Partnerships

DOE's National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy (EERE) Building Technologies (BT) Program, is seeking applications for Industry Teams to implement the Building America Program's research program for new and existing homes. This Funding Opportunity Announcement also offers a limited opportunity for Industry Teams to focus on stimulating the existing home retrofit market. This FOA includes two (2) Program Areas of Interest: Building America Teams and Building America Retrofit Teams.

For full text of this announcement, please visit:

<http://www07.grants.gov/search/search.do;jsessionid=MGMKKKvhm0F1MNZpRtx2C1QFyTQjPpNJp0FO2KvQCzOzOmlGPTQT!1277565875?oppId=48215&mode=VIEW>

DOE Announces \$25-75M to develop Advanced Energy Efficient Building Technologies

The DOE National Energy Technology Laboratory (NETL), on behalf of the Office of Energy Efficiency and Renewable Energy (EERE) Building Technologies Program (BTP), is seeking applications under six broad Areas of Interest: **1)** Advanced Building Control Strategies, Communications and Information Technologies for Net-Zero Energy Buildings; **2)** Analysis, Design and Technical Tools; **3)** Building Envelope and Windows; **4)** Residential and Commercial HVAC and Crosscutting Air Conditioning and Refrigeration Research; **5)** Water Heating, Residential and Commercial Appliances and MELs; **6)** Solar Heating and Cooling (SHC). DOE estimates that approximately \$25-\$75 million shall be available for awards under this FOA. DOE will seek at least 20-50 percent applicant cost share with performance periods between 1 to 3 years.

For full text of this announcement, please visit:

<http://www07.grants.gov/search/search.do;jsessionid=MGMKKKvhm0F1MNZpRtx2C1QFyTQjPpNJp0FO2KvQCzOzOmlGPTQT!1277565875?oppId=48220&mode=VIEW>

Administration Announces \$346M in New Energy Efficiency Efforts

Building on the action by the U.S. House of Representatives in passing historic legislation that will pave the way for the transition to a clean energy economy, President Obama and U.S. Energy Secretary Chu announced June 29th actions to promote energy efficiency.

More Energy Efficient Lighting:

The June 29th announcement included major changes to energy conservation standards for numerous household and commercial lamps and lighting equipment.

The final rule, as issued by the Secretary of Energy on June 26, 2009, can be viewed and downloaded from the [Office Energy Efficiency and Renewable Energy's website](#).

Building Efficiency Initiatives:

President Obama and Secretary Chu today announced a \$346 million investment from the ARRA to expand and accelerate the development, deployment, and use of energy efficient technologies in commercial buildings as well as new and existing homes. This funding includes:

Advanced Building Systems Research (\$100 million) □ These projects will address research focused on the systems design, integration, and control of both new and existing buildings. Buildings need to be designed, built, operated, and maintained as an integrated system in order to achieve the potential of energy efficient and eventually net zero-energy buildings. These projects will move beyond component-only driven research and address the interactions in buildings as a whole, in order to progress development of integrated, high performance buildings and achieve net zero- energy buildings.

Residential Buildings Development and Deployment (\$70 million) □ Expanded work in Residential Buildings will increase homeowner energy savings by supporting energy efficient retrofits and new homes while raising consumer awareness of the benefits of increased health, safety, and durability of energy efficiency. The projects will provide technical support to train workers and create jobs, developing a new workforce equipped to improve the Nation's homes and will permit a major initiative to provide builders with technical assistance and training through states, utilities, and existing programs to increase the market share of new homes achieving substantial whole house energy savings. To address existing homes, DOE will work with municipalities with a variety of housing types and vintages as well as subdivisions with similar housing stock to encourage a large number of energy efficiency retrofits.

Commercial Buildings Initiative (\$53.5 million) □ These Recovery Act funds will be used to accelerate and expand partnerships with major companies that design, build, own, manage, or operate large fleets of buildings and that commit to achieving exemplary energy performance. This funding will be used to expand the number of these partnerships from 23 to about 75 through a competitive process beginning in September 2009.

Buildings and Appliance Market Transformation (\$72.5 million) □ In order to achieve energy savings, and ultimately lead to zero energy buildings, the marketplace must be conditioned to accept the necessary advanced technologies and activities and ensure that the current technologies are performing as intended via current energy efficiency standards. Key activities include expanding ENERGY STAR to accelerate development of energy efficient products and expand the ENERGY STAR brand into new areas; preparing the design, construction, and enforcement community to implement commercial building energy codes that require a 30 percent improvement in energy efficiency over the 2004 code in 2010; and accelerating and expanding DOE's Appliance Standards program to evaluate innovative technologies and develop new test procedures that are more representative of today's energy use and equipment.

Solid State Lighting Research and Development (\$50 million) □ The objective of the solid state lighting activities is to advance state-of-the-art solid-state lighting (SSL) technology and to move those advancements more rapidly to market through a coordinated development of advanced manufacturing techniques. This project will both aid in the development and reduce the first cost of high performance lighting products. Continuing advances can accelerate progress towards creating a U.S.-led market for high efficiency light sources that save more energy, reduce costs, and have less environmental impact than other conventional light sources.

Read more information on these and other [Funding Opportunities under the Recovery Act](#).

Update: Administration Highlights \$3.9B in FOA's Expiring in August for Smart Grid Technologies and Electric Transmission Infrastructure

Energy Secretary Chu announced the release of the *final* Funding Opportunity Announcements (FOAs) for \$3.9 billion in ARRA funds. Approximately \$3.3 billion for the Smart Grid Investment Grant Program and \$615 million for smart grid demonstration projects will help develop and implement smart grid technologies across the country.

As part of the Smart Grid Investment Grant Program, DOE will provide cost-shared grants to support manufacturing, purchasing and installation of existing smart grid technologies that can be deployed on a commercial scale. Funding under the Smart Grid Demonstration Program will be used to demonstrate how emerging technologies can be applied in innovative ways within the electric delivery system to provide integrated and economically feasible solutions. The Investment Grant program is intended to enable smart grid functions on the electric system as soon as possible, while the Demonstration program is aimed at identifying and developing new and more cost-effective smart grid equipment, tools, techniques, and system configurations that can significantly improve upon today's technologies.

These final FOAs reflect the more than 600 comments DOE received on the draft solicitations. The Department previously announced that while the maximum award limits for both programs were being increased and that the Department will support projects of all sizes. Under the final solicitations, the maximum award for the Smart Grid Investment Grants will be \$200 million; the maximum award for the Smart Grid Demonstrations will be \$100 million.

The final FOAs are available at:

www.fedconnect.net: Search public opportunities for Smart Grid Investment Program (DE-FOA-0000058) and Smart Grid Demonstrations (DE-FOA-0000036).

Additional information on the final FOAs is also available at:

<http://www.energy.gov/recovery/funding.htm>

Update: \$204 Million in ARRA State Energy Program (SEP) funds dispersed to 10 States

On June 24th, Energy Secretary Chu announced more than \$204 million in ARRA funding to support energy efficiency and renewable energy projects in ten states (Arizona, Connecticut, Florida, Idaho, Kansas, Minnesota, South Carolina, South Dakota, Utah, and Washington).

Under DOE's State Energy Program (SEP), these states already received 10% of their funds to develop and propose statewide plans that prioritize energy savings, create or retain jobs, increase the use of renewable energy, and reduce greenhouse gas emissions. They have now received an additional 40% of their total SEP funding authorized under the ARRA. The remaining 50% of funds will be released once states meet reporting, oversight, and accountability milestones required by ARRA. The following states received awards on June 24th:

ARIZONA - \$22.2 million awarded June 24th

Arizona will use its SEP funding for a series of innovative programs aimed at advancing energy efficiency and renewable energy investments statewide, while supporting renewable energy manufacturers and products made in the state. Arizona will establish a revolving loan program in order to provide a sustainable financing mechanism for small business owners who are looking to fund energy efficient building improvements or install solar projects at their facilities. The state will offer revolving loan funds for energy efficiency and renewable energy projects in commercial buildings, along with loans to manufacturers of renewable energy or energy efficiency equipment and technologies. After demonstrating successful implementation of its plan, the state will receive an additional \$27 million, for a total of \$55 million.

CONNECTICUT - \$15.4 million awarded June 24th

Connecticut will use its SEP funding to create or protect jobs and save energy with several projects, including in-home energy audits and the deployment of a variety of technologies, such as alternative-fuel vehicles. In one project, Recovery Act funds will enable more residents to take advantage of inexpensive in-home energy audits designed to reduce energy bills and encourage energy efficiency. For each home, a specialist will perform an energy assessment, find and professionally seal critical leaks and drafts, replace incandescent bulbs with compact fluorescent lamps, provide and install water conservation devices, and check insulation and appliances. The state will also use funding to support four Clean Cities coalitions – Greater New Haven, Clean Cities of Southwestern Connecticut, Norwich Clean Cities and Capital Clean Cities – to support their efforts to facilitate the adoption of alternate fuels and petroleum-reducing technologies in Connecticut. After demonstrating successful implementation of its plan, the state will receive an additional \$19 million, for a total of \$38 million.

FLORIDA - \$50.4 million awarded June 24th

With its Recovery Act SEP funding, Florida will advance energy efficiency efforts and encourage the production, availability and use of renewable energy and alternative fuels. Under the program Florida will create several loan and grant programs to promote investment and commercialization of various energy efficiency and renewable energy technologies. After demonstrating successful implementation of its plan, the state will receive an additional \$63 million, for a total of \$126 million.

IDAHO - \$11.4 million awarded June 24th

Idaho will utilize Recovery Act SEP funding to launch a set of programs, including a Renewable

Energy Business Development Program, that will help increase the use of renewable energy while creating new jobs and stimulating the state's economy. Two initiatives encourage state schools to reduce energy costs by adopting renewable energy and energy efficiency projects. Other initiatives seek to stimulate the state's economy by creating new zoning regulations in order to attract renewable energy developers to build new projects. After demonstrating successful implementation of its plan, the state will receive more than \$14 million in additional funding, for a total of more than \$28 million.

KANSAS - \$15.3 million awarded June 24th

Kansas will distribute its SEP funding to several initiatives that will benefit overall efficiency for commercial buildings, increase financial options for investing in renewable energy, and increase costs savings for individual home owners across the state. The funding will also be applied to developing a robust work force of energy auditors. A portion of the funding will go toward developing a new utility rate pricing plan as well as an energy audit rebate plan for home and small-business owners. To improve the quality and breadth of the energy auditor industry, Kansas will subsidize technical audit equipment and also provide scholarships for additional professional training. After demonstrating successful implementation of its plan, the state will receive more than \$19 million in additional funding, for a total of more than \$38 million.

MINNESOTA - \$21.7 million awarded June 24th

Minnesota will put its Recovery Act funds to use improving energy efficiency in residential, commercial and government buildings, as well as increasing the amount of renewable energy produced in state. Minnesota will award grants to small, medium, and large businesses to help provide for the design, financing and installation of various energy efficiency improvements and retrofits. The state will also administer grants to work with utilities to develop programs that leverage Recovery Act funds to promote energy efficiency with customers, such as low-interest loans and grants. Minnesota is also prioritizing community outreach and trainings for energy professionals to ensure broad participation in its SEP programs. For example, the State Energy Information Center will organize Clean Energy Resource Teams comprised of local organizations and citizens to perform outreach and communications about the programs. After demonstrating successful implementation of its plan, the state will receive more than \$27 million in additional funding, for a total of more than \$54 million.

SOUTH CAROLINA - \$20.2 million awarded June 24th

South Carolina will use its Recovery Act SEP funding to provide grants and loans to improve energy efficiency in public school districts, public colleges and universities, and state agencies to reduce the burden of energy bills for taxpayers, while creating jobs and reducing greenhouse gas emissions. South Carolina also intends to provide financial assistance to various industrial, commercial and small business entities to support energy efficiency and renewable energy projects. This financial assistance, along with education and training programs included in the SEP, will help create clean energy jobs in the state and make business and industry more economically stable. After demonstrating successful implementation of its plan, the state will receive more than \$25 million in additional funding, for a total of over \$50 million.

SOUTH DAKOTA - \$9.5 million awarded June 24th

South Dakota will use its SEP funding to support the Energy Efficient Government program and to provide revolving energy loans to state institutions. The programs will promote energy efficiency efforts while reducing energy costs in state owned buildings, which will directly benefit state residents. The state's energy office will administer the funds, provide technical guidance, and assure accountability and transparency for the state institutions that apply for the two programs. These programs coordinate with South Dakota's energy goals to promote and encourage energy conservation, energy efficiency, renewable energy and alternative fuels. After demonstrating successful implementation of its plan, the state will receive more than \$11 million in additional funding, for a total of more than \$23 million.

UTAH - \$14.1 million awarded June 24th

Utah will utilize Recovery Act funds to improve energy efficiency in residential, commercial, public education, and government buildings. The state will provide financial incentives to low-income housing developments and commercial and government buildings that perform energy efficiency upgrades. For instance, low-income housing units will qualify for free insulation upgrades and builders working on new construction developments will qualify for rebates if they build high performance buildings. Utah will also use funding to collect more accurate data about the potential renewable energy resources in the state that can then be used to identify potential Renewable Energy Zones. After demonstrating successful implementation of its plan, the state will receive more than \$17 million in additional funding, for a total of more than \$35 million.

WASHINGTON STATE - \$24.3 million awarded June 24th

Washington will use Recovery Act funding to implement two major programs: the Community-Wide Urban Residential and Commercial Energy Efficiency Program and the Energy Efficiency and Renewable Energy Loans and Grants Program Fund. These two programs, along with several more to develop clean energy policy and promote energy assessments in the agricultural sector, will result in significant job creation and energy savings across the state. The Community-Wide Urban Residential and Commercial Energy Efficiency Program will enhance financial and technical assistance programs by directing municipal, state, and federal funds, as well as electric and gas utility funding, toward greater energy efficiency improvements and home weatherization efforts. After demonstrating successful implementation of its plan, the state will receive more than \$30 million in additional funding, for a total of over \$60 million.

For full text of this announcement, please see:

<http://www.energy.gov/news2009/7491.htm>

For full text of SEP proposals submitted by each state, please see:

[Arizona](#), [Kansas](#), [Massachusetts](#), [Michigan](#), [Utah](#), [Maine](#), [Idaho](#), [Washington](#), [California](#), [Iowa](#), [New York](#), [Colorado](#), [New Hampshire](#), and [Ohio](#)