

# Recovery Act Essentials: New Funding for Solar Energy Announced

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## ENERGY TECHNOLOGY & RENEWABLES ALERT - JUNE 10, 2009

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The U.S. Department of Energy (“DOE”) has [announced](#) \$467 million in [American Recovery and Reinvestment Act](#) (“Recovery Act”) funding to support the development, commercialization, and deployment of solar and geothermal energy technologies. This alert describes the opportunities available to businesses working in the solar energy space and explores how to take advantage of these funds. More information on funding for geothermal projects and technologies is available by reviewing the solicitations available on [FedConnect](#) and [Recovery.gov](#). As with other opportunities created by the Recovery Act, taking full advantage of the solar and geothermal energy funds will require rapid action to develop an application strategy and navigate the submission process in time to meet DOE’s aggressive timeline. The deadlines for applying to the solar funding programs fall in mid to late July 2009 .

### **Photovoltaic Technology Incubator (\$51.5 million)**

DOE, through its National Renewable Energy Laboratory (“NREL”), is launching a Photovoltaic Technology Incubator (the “Incubator”) to speed manufacturing scale-up and commercialization of advanced photovoltaic (“PV”) technologies. The Incubator is aimed at (1) achieving cost parity between PV generated power and electricity costs in grid-tied markets, and (2) expanding domestic PV installed capacity to between 5 and 10 gigawatts. NREL is [soliciting](#) Letters of Interest from individual or teams of small U.S. businesses (500 employees or fewer) that are working on “innovative research and development of demonstrated PV cell and module prototypes” to serve the residential, commercial, and utility market sectors. Funding will be provided for research and development of prototypes and pilot production units and is not intended to cover the costs of acquiring capital equipment. DOE expects to award between 6 and 10 fixed-price subcontracts under this solicitation. The maximum award is \$3 million for an 18-month project duration. Letters of Interest must be submitted by July 13, 2009.

Because the emphasis is on accelerating pre-commercial solar technologies, the Incubator may be an especially attractive funding opportunity for early-stage energy technology companies or those looking to transfer technology from the laboratory to the marketplace. However, the program has an important limitation. There is a 20% “price participation” requirement that limits the grant to 80% of the total project cost, and applicants are prohibited from using other Federal grant or contract money to fund their 20% share.

### **Solar Energy Deployment (\$40.5 million)**

The Solar Energy Deployment [funding opportunity](#) is an expansion of DOE's existing [Solar Market Transformation](#) program, which seeks to reduce market barriers for the widespread adoption of solar energy technologies through non-R&D activities. The Recovery Act funds made available through the program will support two topic areas. Topic 1 makes \$10 million available to cities previously designated as [Solar America Cities](#) (including Boston) in order to scale-up projects and programs that support city-wide urban solar implementation. DOE anticipates making between 5 and 20 awards of up to \$2 million. Only the previously designated cities may apply for funds, and none of the money may be used for payment of financial incentives or rebates. However, the additional funds, and the programs they support, may create business opportunities for private entities. Unlike previous funding for Solar America Cities, these funds are intended to support discrete projects. To leverage the potential opportunities created, project developers, technology companies, and other businesses in the solar energy space should coordinate with senior officials responsible for developing their city's application and solar implementation plan.

Funding under Topic 2 is available to all domestic entities and institutions to promote training and education of solar installers. For 2009-2013, the Solar Energy Deployment program makes up to \$21 million available to provide training and professional development to instructors who are creating or improving PV or solar heating and cooling installation courses. That money will be used to support 6 to 10 awards of \$2 million to \$3.5 million.

DOE also anticipates using between \$2.5 and \$6 million of Topic 2 funds to create and manage a National Consortium for Solar Installer Instructor Training. The Consortium would be a collaboration of solar training experts and stakeholders that would coordinate the training and professional development activities described above. Through this funding opportunity, DOE will be accepting applications for a National Administrator to coordinate and facilitate the Consortium's activities.

Applications for funding under either Topic 1 or Topic 2 must be submitted by July 30, 2009.

### **Foundational Photovoltaics and Concentrating Solar Power Research and Development (\$25.6 million)**

The National Laboratory Call for Foundational Photovoltaics and Concentrating Solar Power Research and Development [program announcement](#) will support the rapid development of next-generation photovoltaic ("PV") and concentrating solar power ("CSP") technologies. Although the money is only directly available to DOE's national laboratories, solar energy businesses could see subawards, technical assistance grants, or other forms of support created by these Recovery Act funds.

Program funds will support research and development in five topic areas:

(1) [Next Generation PV Technologies](#), for research and development of innovative and highly disruptive solar-to-electric conversion technologies. The research would be expected to produce prototype cells or manufacturing processes by 2015, with the potential for full commercialization in the 2020-2030 time period.

(2) PV Supply Chain and Crosscutting Technologies, focusing on component or manufacturing technologies with the potential to affect a substantial portion of the PV industry within 2-6 years. The emphasis of this topic is on cross-cutting cost reduction opportunities that provide a generic benefit across a broad segment of the PV industry.

(3) Advanced Heat Transfer Fluids and Novel Thermal Storage for Concentrating Solar Power, supporting investigations into new fluids for high-temperature heat transfer applications and the development of novel concepts for thermal energy storage.

(4), Testing and Evaluating Advanced CSP Concepts, to address gaps in current testing capabilities in the areas of concentrator optics, advanced receivers, heat transfer fluids, and thermal storage materials.

(5) Advanced Photovoltaics Manufacturing Capability, to enhance the National Laboratories' existing capability to provide test and evaluation support to the solar industry. Projects under this topic should emphasize development of tools for silicon wafer replacement.