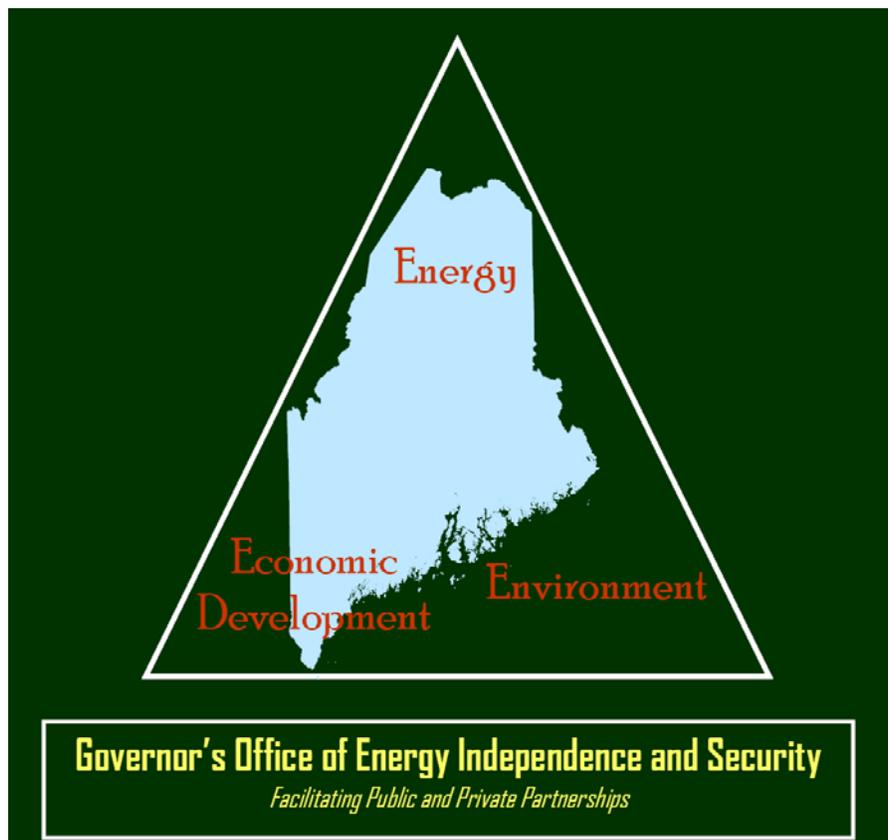


GRANTS CONNECTOR

ENERGY PROJECT GRANTS, INCENTIVES AND OTHER FUNDING OPPORTUNITIES



April 2012

Grants Connector –April 2012 Sample Opportunities

- \$ 2012 Energy Efficiency Tax Incentives for Businesses
- \$ New Funding for Biomass Research and Development Initiative
- \$ \$14.2 Million in New Funding to Develop Lightweight Materials for Advanced Vehicles
- \$ \$5.2 Million to Advance Heating and Cooling Systems and Other Building Efficiency Technologies
- \$ RFP: Eastern Interconnection States' Planning Council
- \$ \$10 Million to Promote Zero Emission Cargo Transport Vehicles
- \$ Army Plans \$7 Billion in Industry Partnerships for Renewables
- \$ \$15 Million Multi-Agency Challenge To Foster Job Creation and Business Innovation in Rural Communities Nationwide
- \$ SBIR/STTR Phase I Release 3 Technical Topics Announced, Fuel Cells and Hydrogen Storage Included
- \$ Renewable Energy RFPs
- \$ Up to \$2 Million to Collect Data from Hydrogen Fueling Stations and Demonstrate Innovations in Hydrogen Infrastructure Technologies
- \$ Request for Proposals for Innovation Program – Efficiency Maine Trust
- \$ Competitive Incentive Program for Large Electrical Efficiency and Distributed Generation Projects \$100,000 to \$500,000 – Efficiency Maine Trust
- \$ Ocean Wind Energy
- \$ \$6 Million for Fuel Cell EV Data Collection
- \$ DE-FOA-0000661: Regional Test Centers: Validation of Photovoltaic (PV) Modules and Systems
- \$ ARPA-E Issues Call for Transformational Energy Technologies
- \$ USDA Seeks Applications for Economic Development Funding to Create Jobs In Rural Areas
- \$ Funding for Breakthroughs in Natural Gas and Biofuels as Alternative Fuels for Vehicles
- \$ MTI Funding available to build collaborative initiatives & strengthen technology industries
- \$ DOE Launches New Research Program to Advance Solar Technologies
- \$ Refrigerator Recycling Program – Efficiency Maine
- \$ Over \$12 Million to Spur Solar Energy Innovation
- \$ USDA Invites Applications for Renewable Energy and Energy Efficiency Projects
- \$ Multidisciplinary University Research Initiative: High Operating Temperature Fluids
- \$ Efficiency Maine Trust – Maine PACE Financing
- \$ Maine Small Business Credit Initiatives
- \$ Office of Science Financial Assistance Program
- \$ HUD Multifamily Energy Innovation Fund
- \$ Funding for Energy-Saving Lighting Technology Research and Development
- \$ FHA, Fannie Mae Launch Energy Efficiency Retrofit Program
- \$ Tax Credits for Energy Efficiency

Grants Connector is a resource guide only! It does not provide legal or policy guidance or advice. Please contact individual organizations for most current and accurate information.

Grants Connector –April 2012

Efficiency Maine Trust – RFP for Multifamily Weatherization Project Delivery

RFP EM-006-2012, Request for Proposals for Multifamily Weatherization Project Delivery

The Efficiency Maine Trust seeks a contractor or team of contractors to achieve comprehensive retrofits with 20% or greater energy savings in small to medium multifamily buildings (5 units or more) in Maine.

Contact Person for this RFP

Rick Meinking, Business Program Manager

Efficiency Maine Trust

151 Capitol Street, Suite #1, Augusta, ME 04330-0019

Email: rick.meinking@efficiencymaine.com

Phone: (207) 213-4159

Proposals Due: April 12, 2012

2012 Energy Efficiency Tax Incentives for Businesses

Certain business tax incentives can help organizations reduce the cost of energy efficiency. Although the deadline to claim 2011 energy-saving commercial tax incentives was last week, you may already be thinking about making your company more energy efficient in 2012. Several energy efficiency tax incentives for companies have expired, but two are available for 2012: one for buildings and one for electric vehicles.

Energy-Efficient Commercial Buildings Deduction

If you make your building more energy efficient, you can claim the energy-efficient commercial buildings deduction. This tax deduction is available for businesses that improve the performance of:

- Lighting
- Building envelope
- Heating, ventilation and air conditioning (HVAC) systems

The deduction is worth \$1.80 per square foot of the building for retrofits that address all three of the above areas, and \$0.60 per square foot for retrofits that address one of these areas. To qualify for the full \$1.80 deduction, the retrofit must bring the building to performance levels at least 50% better than certain standards set by the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) in the three categories.

Resources for the Energy-Efficient Commercial Buildings Deduction:

For more information on the energy-efficient commercial buildings deduction, check out:

- The buildings section in the Alliance to Save Energy overview of Commercial and Manufacturing Tax Incentives for Energy Efficiency resource at <http://ase.org/resources/commercial-and-manufacturing-tax-incentives-energy-efficiency>.
- New guidance on the 179D commercial buildings deduction
- The National Renewable Energy Laboratory's Energy Savings Modeling and Inspection Guidelines for Commercial Building Federal Tax Deductions on requirements for building retrofits
- IRS notices 2006-52 (http://www.irs.gov/irb/2006-26_IRB/ar11.html) and 2008-40 (http://www.irs.gov/irb/2008-14_IRB/ar12.html).
- The Department of Energy's Building Technologies Program information web page (http://www1.eere.energy.gov/buildings/tax_commercial.html) and Tax Deductions for Commercial Buildings flyer

Electric Vehicles & Refueling Property Tax Credit

Several electric cars and other electric vehicles are eligible for a tax credit. If you or your company bought a battery-powered, plug-in car that can drive on the highway anytime after 2009, you can get a tax credit of up to \$7,500.

Resources for the Electric Vehicle Tax Credit

For more information on the electric vehicles and refueling property tax credit, check out:

- The vehicle section of the Alliance to Save Energy Commercial and Manufacturing Tax Incentives for Energy Efficiency resource (<http://ase.org/resources/commercial-and-manufacturing-tax-incentives-energy-efficiency#30D>)
- The IRS's resource on credit amounts for qualified vehicles bought after Dec. 31, 2009 (<http://www.irs.gov/businesses/article/0,,id=219867,00.html>)
- The FuelEconomy.gov web page on federal tax credits for electric vehicles purchased after 2010 (<http://www.fueleconomy.gov/feg/taxevb.shtml>)
- The IRS web page on the Plug-In Electric Vehicle Credit (IRC 30 and IRC 30D) (<http://www.irs.gov/businesses/article/0,,id=214841,00.html>)

New Funding for Biomass Research and Development Initiative

Up to \$35 million is available over three years to support research and development in advanced biofuels, bioenergy and high-value biobased products. The projects funded through the Biomass Research and Development Initiative (BRDI) – a joint program through the U.S. Department of Agriculture (USDA) and the U.S. Energy Department (DOE) – will help develop economically and environmentally sustainable sources of renewable biomass and increase the availability of renewable fuels and biobased products

that can help replace the need for gasoline and diesel in vehicles and diversify our energy portfolio.

For fiscal year 2012, applicants seeking BRDI funding must propose projects that integrate science and engineering research in the following three technical areas that are critical to the broader success of alternative biofuels production:

- **Feedstock Development**

Funding will support research, development and demonstration activities for improving biomass feedstocks and their supply, including the harvest, transport, preprocessing, and storage necessary to produce biofuels and biobased products.

- **Biofuels and Biobased Products Development**

Research, development and demonstration activities will support cost-effective technologies to increase the use of cellulosic biomass in the production of biofuels and biobased products. Funding will also support the development of a wide range of technologies to produce various biobased products, including animal feeds and chemicals that can potentially increase the economic viability of large-scale fuel production in a biorefinery.

- **Biofuels Development Analysis**

Projects will develop analytical tools to better evaluate the effects of expanded biofuel production on the environment and to assess the potential of using federal land resources to sustainably increase feedstock production for biofuels and biobased products. Integrating multiple technical areas in each project will encourage collaborative problem-solving approaches, enable grantees to identify and address knowledge gaps, and facilitate the formation of research consortia.

Subject to annual appropriations, USDA and DOE plan to contribute up to \$35 million over three years for this year's BRDI solicitation. This funding is expected to support five to seven projects over three to four years. A description of the solicitation, eligibility requirements, and application instructions is available at <https://www.fedconnect.net/> and <http://www.grants.gov/> under Reference Number DE-FOA-0000657. Applications are due April 23, 2012, and must be submitted electronically. It is anticipated that applicants who submit completed applications will be notified of the results by June 15, 2012.

\$14.2 Million in New Funding to Develop Lightweight Materials for Advanced Vehicles

\$14.2 million to accelerate the development and deployment of stronger and lighter materials for advanced vehicles. This funding will support the development of high-strength, lightweight carbon fiber composites and advanced steels and alloys that will help vehicle manufacturers improve the fuel economy of cars and trucks while maintaining and improving safety and performance.

The Energy Department intends to fund projects across three major areas of materials research and development, including developing modeling tools to deliver higher performing carbon fiber composites and advanced steels, as well as researching new

lightweight, high-strength alloys for energy-efficient vehicle and truck engines. The specific research areas include:

- Predictive modeling of carbon fiber composites: Carbon fiber composites are capable of reducing vehicle component weight by up to 50 percent over conventional automotive steel structures. Projects selected in this area will validate modeling tools to optimize the performance and cost-effectiveness of carbon fiber composite materials for vehicle body, chassis, and interior uses.
- Predictive modeling of advanced steels: Advanced high strength steels are capable of reducing vehicle component weight by more than 25 percent. Projects selected in this area will develop modeling tools to optimize the performance and cost-effectiveness of third-generation high strength steels for the vehicle body and chassis.
- Advanced alloy development for automotive and heavy-duty engines: As manufacturers continue to push the limits of engine efficiency, cast engine components must be strong enough to withstand higher cylinder pressures. Projects selected in this area will develop low-cost, high-strength alloys for automotive and heavy duty engine blocks and cylinder heads.

The Energy Department will make up to \$8.2 million available in fiscal year 2012 for selection under this funding opportunity announcement, and subject to congressional appropriations, the Department plans to make an additional \$6 million available in fiscal year 2013 to fully fund these advanced materials projects, which will take 2-4 years to complete.

The Department will accept applications from industry, national laboratories, and university led-teams to address these challenges and enable technologies that will drive innovation in vehicle design. Applications for the solicitation are due May 7, 2012.

For more information and application requirements, please visit <https://eere-exchange.energy.gov/>.

\$5.2 Million to Advance Heating and Cooling Systems and Other Building Efficiency Technologies

The Department of Energy announced the availability of up to \$5.2 million in fiscal year 2012 to develop improved building efficiency technologies, including advanced heating and cooling systems and high efficiency insulation, windows and roofs. This funding will advance the research, development, demonstration, and manufacture of innovative building technologies to speed the commercialization of affordable, high performance products that will save money for American families and businesses.

The department seeks applicants for up to \$5.2 million in funding to support breakthroughs in energy-saving HVAC systems and building envelope solutions. Eligible mechanical HVAC system projects should aim to increase the efficiency of cost-effective systems and components suitable for both existing buildings and new construction. Eligible building envelope projects will focus on advancing high performance, cost-effective and attractive solutions to minimize energy loss in homes and commercial buildings. The Energy Department is particularly interested in proposals for innovative

technologies for use in existing buildings, especially if they can help accelerate adoption of energy efficient building upgrades.

As part of a planned three-year initiative, Congress has appropriated an initial \$5.2 million in fiscal year 2012, including \$1.2 million for HVAC and building envelope projects that develop advanced manufacturing processes or equipment to help lower the life-cycle energy cost of manufactured products and improve the performance of energy efficient building technologies. The Energy Department plans to make additional requests totaling \$10.8 million to Congress over the next two years to support these innovative building efficiency technologies.

Applications will be accepted through 5:00 p.m. Eastern Time on April 17, 2012. For more information on this funding opportunity and others, see DOE's Funding Opportunity Exchange website at <https://eere-exchange.energy.gov/>.

RFP: Eastern Interconnection States' Planning Council

REQUEST FOR PROPOSALS



To assist the Eastern Interconnection States' Planning Council (EISPC) Members with Identification of State-by-State Existing and Potential for **Clean Energy Zones Study**

Request for proposals for a Survey of State Laws, Rules, Regulations and Orders Relevant to the Identification of Energy Zones in the Eastern Interconnection. Responses by 4/18/2012

Request for proposals for a Whitepaper on the Economic Ramifications of Resource Adequacy Requirements. Responses by 4/18/2012

Request for proposals for a Study for the Assessment of Coal Potential (including Carbon Capture, Utilization, and Storage) Responses by 4/18/2012

Request for proposals for a Whitepaper on the Co-Optimization of Transmission and other Supply Resources. Responses by 5/19/2012

Please visit <http://communities.nrri.org/web/eispc/community-home-and-charter> for links to the RFPs.

\$10 Million to Promote Zero Emission Cargo Transport Vehicles

Up to \$10 million available this year to demonstrate and deploy electric transportation technologies for cargo in severe nonattainment areas. The Department of Energy seeks applicants for this funding to demonstrate cost-effective zero emission cargo transport

systems and collect detailed performance and cost data to analyze the benefits and viability of this approach to freight transportation.

This funding opportunity is open to local governments and private companies, with federal funds matched in a 50% cost share. Detailed application instructions, including eligibility, can be found on DOE's Funding Opportunity Exchange website under Reference Number DE-FOA-0000669 <https://eere-exchange.energy.gov/default.aspx#97e671e8-6b9a-4fd9-89c2-23b19f813709>. .

Applications will be accepted until 8 p.m. Eastern Daylight Time on May 15, 2012. DOE anticipates notifying applicants selected for award by the end of July 2012, and making at least one award by September 30, 2012.

Army Plans \$7 Billion in Industry Partnerships for Renewables

The U.S. Army reported on March 19 that it will partner with industry to invest up to \$7 billion over the next 10 years in renewable energy sources, including wind, solar, biomass, and geothermal energy. The military department has released a draft request for proposal (RFP) that could allow multiple projects to begin nationwide. The draft RFP indicates that the Army intends to primarily purchase renewable-generated electricity through power purchase agreements with the project developers.

The investment will help the Army reach its goal of having 25% of its estimated 2.5 million megawatt hours come from renewable sources by 2025. In addition to energy conservation, installations will strive to establish alternative forms of energy that will allow them to "island" or continue to operate should the power grid fail.

The Army's Energy Initiatives Task Force (EITF) serves as the central managing office to plan and execute large-scale renewable energy projects of greater than 10 megawatts (roughly enough to power 30,000 homes) on Army installations, which will be accomplished by leveraging private-sector financing. A renewable-energy project guide will be issued for comment later in the spring.

The task force has been working closely with the U.S. Army Corps of Engineers to develop a request for proposal under the Multiple Award Order Contract (MATOC). The MATOC provides a two-step process. In the first step, companies submit initial proposals and qualifications that are not project-specific. The draft RFP for the MATOC is available at https://www.fbo.gov/index?s=opportunity&mode=form&id=6af3d8417865b78eff12c717e293ea0f&tab=core&_cview=1. The EITF plans to have a summit in May to meet with industry and discuss the renewable-energy development guide as well as specific projects.

\$15 Million Multi-Agency Challenge To Foster Job Creation and Business Innovation in Rural Communities Nationwide

\$15 million multi-agency Rural Jobs and Innovation Accelerator challenge to spur job creation and economic growth in distressed rural communities. This competition, which is being funded by the U.S. Department of Commerce's Economic Development Administration (EDA), the U.S. Department of Agriculture (USDA), the Delta Regional Authority (DRA), and the Appalachian Regional Commission (ARC), was designed by the Taskforce for the Advancement of Regional Innovation Clusters and the White House Rural Council.

The national effort will support rural partnerships by identifying and leveraging local assets and strengthening linkages to industry clusters. Strong industry clusters promote robust economic ecosystems and the development of a skilled workforce, both of which are critical to long-term regional success in rural areas. Last year's 20 challenge winners—both rural and urban public-private partnerships—generated millions in matching funds and their projects are expected to help create hundreds of new businesses and thousands of new jobs.

The Rural Jobs Accelerator Challenge is expected to give out approximately 20 awards, depending on the number of eligible applications. To be eligible for an award, projects must benefit rural communities, but the applicant is not required to be located in a rural area. Nonprofits, higher education institutions, tribes and state and local governments can collaborate to apply for funding. Although businesses are not eligible to apply directly, applicants can also partner with the private sector on implementation.

The deadline for applications is May 9, 2012 and guidelines for submissions are accessible at <http://www.rurdev.usda.gov/RuralJobsAccelerator.html>. In addition to the four funding partners the initiative is supported by nine other Federal agencies: Commerce's U.S. Patent and Trademark Office and National Institute of Standards and Technology Manufacturing Extension Partnership; Denali Commission; U.S. Department of Education; U.S. Department of Labor's Employment and Training Administration; U.S. Department of Energy; Environmental Protection Agency; U.S. Department of Housing and Urban Development; and the Small Business Administration.

SBIR/STTR Phase I Release 3 Technical Topics Announced, Fuel Cells and Hydrogen Storage Included

On Monday, March 5, the U.S. Department of Energy (DOE) announced the Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) Phase I Release 3 technical topics. Topics include transportation fuel cell systems and hydrogen storage research projects.

Key objectives of the Fuel Cell Technologies Program are to reduce fuel cell system cost to \$30/kW (equivalent to the cost of a gasoline internal combustion engine) and improve durability to 5,000 hours (equivalent to 150,000 miles of driving) for automotive fuel cell

systems by 2017. Additionally, the program aims to meet the hydrogen fuel threshold cost of \$2–\$4/gallon gasoline equivalent (gge) by 2020.

In support of those goals, the hydrogen and fuel cell SBIR/STTR topics in the Phase I Release 3 are focused on both transportation fuel cell systems and hydrogen storage and include the following:

- Transportation fuel cell system components that could contribute to an 80 kW (net) fuel cell system cost of \$30/kW, produced at high volume (500,000 systems per year), and 5,000 hours durability (the projected time to 10% voltage degradation).
- Development of fibers, resins, and/or composite additives that will result in composite reinforced gas cylinders for hydrogen storage that meet or exceed the performance specifications of today's carbon fiber composite reinforced cylinders but at a lower cost (at least 25% lower than the projected high volume cost of the carbon fiber layer for a 700 bar tank system).

The full SBIR/STTR Funding Opportunity Announcement will be issued on April 3, 2012. (<http://science.energy.gov/sbir/funding-opportunities/>).

Renewable Energy RFPs

This update contains solicitations for renewable energy generation, renewable energy certificates, and green power as a courtesy to our subscribers. Unless otherwise noted, these requests for proposals and solicitations are neither supported nor endorsed by the U.S. Department of Energy, Green Power Network.

Deadline: March 30, 2012

U.S. Department of Energy (DOE) RFI (DE-SOL-0003702) seeking financing alternatives and criteria for energy savings performance contract projects and other government performance-based contracting for energy savings.

Contact: Eric Brandenburg, 720-356-1495

Deadline: April 3, 2012

GreenCo Solutions RFP (RFP #1012) seeking renewable energy certificates (RECs) from qualified solar resources totaling up to 10 MW to be used toward compliance with the solar requirements set forth in NC Session Law 2007-397 (Senate Bill 3). The request may be met by one or more suppliers, potentially with varying start dates and terms. The minimum project size that will be considered as part of any proposal is 500 kW.

Contact: Jay Nemeth

Deadline: April 18, 2012

California Energy Commission RFP (RFP # 600-11-601) seeking proposals from full-service advertising and social marketing agencies to develop and execute a comprehensive outreach and marketing campaign to advance the transition of the transportation fuels market to non-petroleum, lower carbon, clean alternative fuels and advanced vehicle technologies.

Contact: Coco Worthy, 916-654-5833

Deadline: April 20, 2012

Arizona Public Service Company (APS) RFI seeking vendor proposals related to the future implementation of innovative early-commercial renewable technology projects to be located on APS customer sites and on the customer side of the electric meter.

Technologies that will be considered include, but are not limited to, concentrating photovoltaics, solar thermal systems, unique end-use tracking applications, building integrated products, pole-mounted PV, thermal storage and waste-to-energy.

Contact: Paul Baker

Deadline: April 27, 2012

California Department of General Services (DGS) RFQ (Bid # 1202-024) seeking interested solar PV developers for the establishment of a new list of qualified bidders for subsequent RFQs.

Deadline: April 30, 2012

Arizona Public Service Company (APS) RFP seeking competitive proposals for the complete development, construction and startup of a 14 MW utility-scale photovoltaic solar facility. This project will be financed through the APS AZ Sun Program. (PDF 301 KB)

Deadline: April 30, 2012

U.S. Department of Energy (DOE) Advanced Research Projects Agency-Energy (APRA-E) RFI (DE-FOA-0000671) seeking information regarding the development of technologies to support transformational research and development of chemo/electro-autotrophic fuel production beyond bench-scale.

Contact: ARPA-E-RFI-FUELS@hq.doe.gov

Deadline: May 29, 2012

U.S. Department of Energy Funding Opportunity Announcement (FOA) (DE-FOA-0000651) seeking applications for the development of solar hardware and solar non-hardware solutions for the SunShot Incubator Program. Areas of interest include, but are not limited to: photovoltaics, balance of systems, power electronics, concentrating solar power, tools to address non-hardware costs of solar energy, plug-and-play wiring and installation techniques and energy storage.

Contact: SunShot.Incubator@ee.doe.gov

Deadline: June 5, 2012

New York City Department of Sanitation (DSNY) RFP seeking proposals from qualified contractors to develop facilities demonstrating the application of new and emerging technology in the processing of DSNY managed waste. Eligible proposers must demonstrate a proven, reliable, cost-effective, sustainable and environmentally sound conversion technology that uses waste collected by DSNY as a feedstock for generating renewable energy.

Contact: Kathleen Feeley, 212-437-5057

A complete list of active RFPs can found at
<http://apps3.eere.energy.gov/greenpower/financial/>.

Up to \$2 Million to Collect Data from Hydrogen Fueling Stations and Demonstrate Innovations in Hydrogen Infrastructure Technologies

The Energy Department announced up to \$2 million available this year to collect and analyze performance data for hydrogen fueling stations and advanced refueling components. By collecting data from advanced hydrogen fueling stations, the Energy Department will track the performance and technical progress of innovative refueling systems operating in real-world environments to find ways to lower costs and improve operation. Many automotive original equipment manufacturers (OEMs) have announced production plans for fuel cell electric vehicles (FCEVs) for retail sale or lease as early as 2015 in the U.S. and other countries, and some states are investing in hydrogen fuel infrastructure to accommodate these vehicles. The funding announced will support projects to monitor the performance of multiple hydrogen fueling stations and advanced components for up to five years to demonstrate technology innovations, gauge progress toward technical targets, and help identify and focus future research and development efforts. The data and resulting analyses from this initiative will also help hydrogen fueling equipment manufacturers improve the designs of existing systems to optimize performance and test new system components.

The department seeks applicants to this funding opportunity to test new refueling component technologies that could substantially reduce the cost of hydrogen. These include, but are not limited to, advanced compressor designs that could reduce the number or size of compressors required at commercial refueling sites; hydrogen delivery tanks with higher capacity and optimal tank pressure—which could reduce the need for compressors and the frequency of deliveries at refueling sites; and advanced electrolyzers that can produce hydrogen at higher pressures, potentially lowering the cost of hydrogen by reducing the amount of post-production compression required.

As part of a planned two-year initiative, the Energy Department will make up to \$2 million available in fiscal year 2012. The department plans to make an additional request for \$2.2 million to Congress next year to support these innovative hydrogen fueling technologies. For more information, including application requirements and instructions, please visit the [Funding Opportunity Exchange website](https://eere-exchange.energy.gov/default.aspx#905c617f-ed00-4bf8-a111-4e4c340e9a27) at <https://eere-exchange.energy.gov/default.aspx#905c617f-ed00-4bf8-a111-4e4c340e9a27>. Responses are due by Friday, May 11.

Request for Proposals for Innovation Program – Efficiency Maine Trust

RFP EM-003-2012
Date Issued: February 29, 2012
Closing Date: April 11, 2012
Closing Time: 3:00 PM

Efficiency Maine's Innovation Program aims to support pilot programs for commercialized energy efficiency products or new ways of delivering cost-effective measures. Through the Innovation Program, Efficiency Maine is particularly interested in

demonstration projects for technologies or program designs that, if they were deployed at scale, could show substantial energy cost savings opportunities for the state, as well as reducing greenhouse gases in the event Regional Greenhouse Gas Initiative (RGGI) funds are utilized. The purpose of this RFP is to encourage the development, review, and eventual implementation of successful new ideas.

Designated Contact Person for this Solicitation:

Tim Vrabel, Strategic Initiatives Specialist
Efficiency Maine Trust
Physical delivery: 151 Capitol Street, Suite 1, Augusta, Maine 04330-6262
Mail delivery: 151 Capitol Street, Suite 1, Augusta, Maine, 04330-6262
Email: timothy.j.vrabel@efficiencymaine.com
Phone: (207) 213-4161

More information at <http://www.efficiencymaine.com/opportunities>.

Competitive Incentive Program for Large Electrical Efficiency and Distributed Generation Projects \$100,000 to \$500,000 – Efficiency Maine Trust

Round 2

RFP EM-001-2012

Date Issued: February 1st, 2012

Closing Date: March 30, 2012

Closing Time: 2:00 PM, EST

Through this Request for Proposals (RFP), the Efficiency Maine Trust (the Trust) is seeking proposals for large electrical efficiency and distributed generation projects from customers within the State of Maine and served by a Maine electric utility. This Competitive Incentive Program is funded through the Regional Greenhouse Gas Initiative (RGGI) and funds from the Maine Power Reliability Program (MPRP). Funding from the MPRP will be restricted to projects within Central Maine Power Company's service territory.

Pursuant to this competitive incentive program, the Trust is seeking proposals for large electrical efficiency and distributed generation projects with the goal of reducing kilowatt hour (kWh) consumption from businesses that use electricity delivered through Maine's electrical grid.

Incentive awards are anticipated to be from \$100,000 to \$500,000 per facility.

The Trust's designated contact for this RFP is as follows:

Ian Burnes, Business Program Manager
Efficiency Maine Trust
151 Capitol Street, Suite 1

Augusta, ME 04330-6262
ianburnes@efficiencymaine.com
207-213-4149

All information at <http://www.efficiencymaine.com/opportunities>.

Ocean Wind Energy

The U.S. Department of Energy (DOE) announced six-year, \$180 million initiative to support up to four innovative offshore wind energy installations. An initial \$20 million will be available this year.

The demonstration projects are intended to address key challenges associated with installing utility-scale offshore wind turbines, connecting offshore turbines to the power grid, and navigating new permitting and approval processes. In addition to the new funding, DOE is continuing to work with partners across the federal government to implement a comprehensive offshore wind energy strategy, conduct resource assessments, and streamline siting and permitting processes.

Applicants to the competitive solicitation are expected to form consortia of energy project developers, equipment suppliers, research institutions, and marine-installation specialists. DOE funds may be used to cover up to 80% of a project's design costs and 50% of the hardware and installation costs. Applications are due on May 31, 2012.

CONTACT INFORMATION

- oswdemo@go.doe.gov

For questions regarding the content of the announcement. All questions must be submitted at least 3 business days prior to each submission deadline.

- EERE-ExchangeSupport@hq.doe.gov

For questions regarding the submission of applications through EERE Exchange. All questions must be submitted at least 3 business days prior to each submission deadline.

SUBMISSION DEADLINES

- Letter of Intent Submission Deadline: 3/30/2012 11:59 PM ET
- Full Application Submission Deadline: 5/31/2012 11:59 PM ET

Funding opportunity details at <https://eere-exchange.energy.gov/#5bfa6fc8-0b9b-4983-868d-5ec8537a585a>.

\$6 Million for Fuel Cell EV Data Collection

DOE announced on March 1 that up to \$6 million will be available this year to collect and analyze valuable performance and durability data for light-duty fuel cell electric vehicles (FCEVs). Projects selected will gather data from next-generation FCEVs as they are operated in real-world conditions. The goal is to identify ways to lower costs, improve fuel cell durability, and increase overall vehicle performance.

DOE seeks applicants to design and implement projects to monitor the performance and durability of advanced FCEVs for up to five years. The projects—which share costs equally—will supply information on fuel cell system operation and other vehicle data to the Hydrogen Secure Data Center at DOE's National Renewable Energy Laboratory (NREL) for analysis and comparison. Data will be collected from various makes and models of FCEVs so that engineers and scientists can measure the performance and technical progress of a range of fuel cell systems. The conclusions drawn from the data by NREL will help identify and focus future research and development efforts and gauge progress toward fuel cell performance and cost targets.

Additional information at <https://eere-exchange.energy.gov/#8cb62689-d772-4fad-b990-1889cdda0b96>. Application deadline is April 30, 2012.

DE-FOA-0000661: Regional Test Centers: Validation of Photovoltaic (PV) Modules and Systems

Under this Notice of Opportunity for Technical Assistance (NOTA), the U.S. Department of Energy (DOE) will provide technical assistance to the photovoltaic (PV) industry and other stakeholders in the form of validation testing and systems monitoring through DOE Regional Test Centers (RTCs). While the primary mission of the RTCs is to develop standards and establish the technical basis for bankability, the RTCs will also function as test beds for large-scale systems and provide independent validation of PV performance and reliability. Recipients of technical assistance will install PV modules and/or systems at all three RTC sites, if appropriate. Technologies may include photovoltaic (PV) and concentrating photovoltaic (CPV) applications. The DOE/RTCs would provide the land, the grid tie, and the testing / data monitoring required to support an assessment of product/system performance, consistency of PV module quality, degradation rates, and/or PV system reliability issues.

Through this effort, the RTCs will develop standards and guidelines for validating the performance and operation of PV modules and systems. Recipients will benefit by acquiring third-party validation of the module or system performance which they may then compare with their prediction of performance. Recipients may also propose to ask the RTCs to develop models for predicting module or system performance instead of asking for verification of their own predictions.

Technical assistance will not be provided for research, development, or early-stage testing and evaluation. The focus of the RTCs is to accelerate adoption of renewable energy generation sources by helping U.S. PV manufacturers validate new commercially ready technologies.

DOE will not purchase hardware or otherwise provide direct funding to organizations selected from this Notice. Agreements are comprised of Technical Assistance only.

Applicants are requested to submit a Letter of Intent via email to RTC@go.doe.gov 30 days before the submission due date (See Section III.C of the NOTA). Letters of Intent and accompanying abstracts will be used by DOE to organize and expedite the merit review process. Failure to submit such letters will not negatively affect a responsive application submitted in a timely fashion.

Full applications must be submitted through the EERE Exchange website to be considered for award. The applicant must first register and create an account on the EERE Exchange website. The Users' guide for applying to Department of Energy (DOE), Energy Efficiency and Renewable Energy's (EERE) Announcements through the Exchange website can be found at <https://eere-exchange.energy.gov/Manuals.aspx>.

FOA Documents

[Regional Test Centers: Validation of Photovoltaic \(PV\) Modules and Systems](#)

Contact Information

RTC@go.doe.gov

For questions regarding the content of this announcement.

EERE-ExchangeSupport@hq.doe.gov

For questions regarding the submission of applications through EERE Exchange. All questions must be submitted at least 3 business days prior to each submission deadline.

Frequently Asked Questions (FAQs)

Responses to questions are posted to the [FAQs webpage](#).

Submission Deadlines

Full Application Submission Deadline: 5/4/2012 5:00 PM ET

ARPA-E Issues Call for Transformational Energy Technologies

DOE's Advanced Research Projects Agency-Energy (ARPA-E) issued a \$150 million funding opportunity on March 2 that is open to all transformational energy technologies. This Open Funding Opportunity Announcement (FOA) is a call to scientists, engineers, and entrepreneurs to propose early-stage research projects that would not otherwise be able to attract private investment. Such projects could lead to breakthrough energy technologies. This is the second Open FOA released under ARPA-E.

The open call includes electricity generation by renewable means; electricity transmission, storage, and distribution; energy efficiency for buildings, manufacturing and commerce, and personal use; and all aspects of transportation, including the

production and distribution of renewable fuels, electrification, and energy efficiency in transportation. Individual awards under the Open FOA will range between \$250,000 and \$10 million.

CONTACT INFORMATION

- ARPA-E-CO@hq.doe.gov For questions regarding Funding Opportunity Announcements
 - Every Friday, ARPA-E will post responses to any questions that were received by Wednesday at 12 PM ET. (Questions received after Wednesday at 12 PM ET will be answered the following week). Responses are posted to "Frequently Asked Questions" (see hyperlink below).
 - ARPA-E will cease to accept questions 96 hours in advance of the applicable deadline. Responses to the last questions will be posted at least 24 hours in advance of the applicable deadline. ARPA-E may consolidate similar questions for administrative purposes.
- ExchangeHelp@hq.doe.gov For questions regarding ARPA-E's online application portal, ARPA-E eXCHANGE

SUBMISSION DEADLINES

- Letter of Intent Submission Deadline: 3/30/2012 5:00 PM ET
- Concept Paper Submission Deadline: 4/12/2012 5:00 PM ET
- Full Application Submission Deadline: TBD

Additional information at <https://arpa-e-foa.energy.gov/>.

USDA Seeks Applications for Economic Development Funding to Create Jobs In Rural Areas

The USDA is seeking applications for loans and grants to help rural businesses create jobs and spur economic development. The funding is being provided under the Rural Economic Development Loan and Grant (REDLG) program. Eligible recipients are USDA rural utilities program borrowers. Those recipients pass the funds to local organizations. The funding is leveraged to create projects that retain or create jobs and upgrade public infrastructure. The maximum amount of funding for any one project is \$1 million for loans and \$300,000 for grants.

Organizations use REDLG funds to create jobs and improve services. For example, the Utilities District of Western Indiana received a REDLG loan and grant in 2011 to construct an elevated water storage tank and supply lines. The project will serve a technology park and two communities, creating nearly 400 jobs. USDA plans to award up to \$79 million in loan and \$10 million in grants through the program. The deadline for submitting applications is the last business day of each month through September 30th of

2012. Applications must be submitted to the Rural Development state office where the project will be located. A list of these offices is available on the USDA Rural Development web site, <http://www.rurdev.usda.gov/StateOfficeAddresses.html>, or on page 12792 of the March 2 Federal Register, <http://www.gpo.gov/fdsys/pkg/FR-2012-03-02/pdf/2012-5043.pdf>.

Funding for Breakthroughs in Natural Gas and Biofuels as Alternative Fuels for Vehicles

\$30 Million Will Fund Breakthrough Natural Gas Vehicles Technologies, \$14 Million to Support Development of Transportation Fuels from Algae

New funding to catalyze breakthrough technologies for two key alternative fuels—natural gas and biofuels. Through its Advanced Research Projects Agency—Energy (ARPA-E), the Energy Department will make \$30 million available for a new research competition in the coming months that will engage our country's brightest scientists, engineers, and entrepreneurs to find ways to harness our abundant supplies of domestic natural gas for vehicles. The Department of Energy will also make \$14 million available to support research and development into biofuels from algae.

Funding Breakthroughs in Natural Gas Vehicles

ARPA-E's \$30 million funding announcement for natural gas breakthroughs. ARPA-E's projects under this new program, titled Methane Opportunities for Vehicular Energy—or "MOVE"—will focus on overcoming these barriers by developing innovative, low-cost natural gas storage technologies and methods to lower pressure in vehicle tanks that will help enable the widespread adoption of natural gas vehicles.

Specifically, ARPA-E seeks to fund projects that will develop lightweight tanks for cars that can run on natural gas and fit into modern passenger vehicles. This approach includes developing affordable natural gas compressors that can efficiently fuel a natural gas vehicle at home. ARPA-E also seeks to fund projects that will develop absorbing materials that are able to hold gas, similar to how a sponge holds water. These materials could lower pressure in vehicle tanks that hold and release natural gas, making them safer and more affordable for American consumers.

For more information and application requirements for the Funding Opportunity Announcement, please visit the [ARPA-E Funding Opportunity Exchange website](https://arpa-e-foa.energy.gov/) at <https://arpa-e-foa.energy.gov/>.

Funding to Develop Homegrown Transportation Fuels from Algae

The Energy Department's \$14 million funding announcement to develop transportation fuels from algae builds on an Administration-wide commitment to biofuels research, development, and demonstration that includes support for the construction of

commercial-scale, next-generation biorefineries. Part of the Department's sustained investment in biofuels technologies focuses on unlocking the potential for homegrown transportation fuels from algae, which have the potential to replace up to 17% of the United States' imported oil for transportation. In addition, algae feedstocks offer additional benefits, such as an ability to be grown in ponds near industrial facilities where algae can feed off the carbon emissions from power plants or digest nitrogen and phosphorous from municipal waste water. Through the new funding announcement, the Department will seek proposals from small businesses, universities, and national laboratories to modify existing facilities for long-term algae research and test new production processes that could lead to commercial biofuels made from algae. Specifically, the new projects will establish and operate research "test beds" for algal biofuels that can facilitate development, test new approaches to algae production, and discover innovative ways to minimize the water and nutrients needed to mass produce algae for commercial biofuels. These advanced research projects will aim to significantly improve the sustainability of algae-based biofuels and accelerate technological breakthroughs. These awards represent the first phase in a total \$30 million investment in algal biofuels in fiscal year 2012.

The competitively selected projects will receive up to \$14.3 million in fiscal year 2012 funds, with an additional \$6.7 million available in fiscal year 2014 funding, subject to Congressional appropriations, for projects that meet rigorous performance criteria. Applications are due on April 18, 2012. For more information and application requirements for the Funding Opportunity Announcement, please visit the [Funding Opportunity Exchange website](https://eere-exchange.energy.gov/) at <https://eere-exchange.energy.gov/>.

MTI Funding available to build collaborative initiatives & strengthen technology industries

The Maine Technology Institute invites proposals for collaborative, industry-led activities designed to help Maine's technology-intensive industries grow and create good jobs across the state.

Proposed initiatives are encouraged to identify ways for businesses to learn from and work with each other, to boost innovation and jobs, and tackle challenges while pursuing new opportunities for industry growth. Eligible applicants include businesses, trade associations, universities and non-profit research institutions across Maine. Two types of awards are available:

- **Applications for cluster feasibility and planning** awards of up to \$50,000 may be submitted at any time and will be reviewed on a rolling basis.

All Cluster Initiative awards require at least 1:1 in matching funding.

Visit <http://www.mainetechnology.org/> for more information.

DOE Launches New Research Program to Advance Solar Technologies

DOE announced on February 23 that \$3 million is available this year to support research to significantly lower the cost of solar energy. The Bridging Research Interactions through Collaborative Development Grants in Energy (BRIDGE) funding will enable collaborative research teams from industry, universities, and national laboratories to work together in DOE's research centers. The research teams will support the goal of DOE's SunShot Initiative to make solar energy cost competitive with other forms of energy by the end of the decade.

The BRIDGE funding will enable researchers to leverage the tools and expertise of scientists at DOE research facilities so that fundamental scientific discoveries can be rapidly transitioned to existing product lines and projects. The BRIDGE program is the first to provide engineers and scientists developing photovoltaic and concentrating solar power technologies with the tools and expertise of DOE's research facilities. Those will include major facilities for x-ray and neutron scattering, nanoscale science, advanced microcharacterization, environmental molecular sciences, and advanced scientific computing. This collaborative approach will accelerate innovations to lower the cost of photovoltaic and concentrating solar power technologies. Full applications are due May 21, 2012.

See the [DOE Office of Energy Efficiency and Renewable Energy progress alert](#), the [Funding Opportunity Exchange Web page](#) for details, and the [SunShot Initiative website](#).
<https://eere-exchange.energy.gov/#15a78564-c474-4af1-a25b-6ba0a0f627f5>.

Refrigerator Recycling Program – Efficiency Maine

It's called The Refrigerator Recycling Program and it's simple:

- Let us recycle your old, working, full-sized refrigerator or freezer.
- We'll pick it up for free.
- We'll send you a \$50 rebate.
- You'll save up to \$250/yr in electricity.

You can schedule a free pickup on the Efficiency Maine website:
<http://www.energymaine.com/at-home/refrigerator-recycling-program>.

Over \$12 Million to Spur Solar Energy Innovation

The U.S. Department of Energy announced over \$12 million to speed solar energy innovation from the lab to the marketplace through the Energy Department's SunShot Incubator program. The funding will accelerate American innovation in solar energy and manufacturing by supporting advancements in hardware, reductions in soft costs, and the development of pilot manufacturing and production projects.

The SunShot Incubator program helps launch new startups and business units within existing companies to accelerate the innovative solar technology development. Since 2007, DOE has invested \$60 million through the Incubator in promising technologies as they are brought from the lab to the marketplace. These investments have catalyzed \$1.6 billion in private sector support. The federal investment in these projects has been leveraged at a rate of more than 26-to-1.

The SunShot Incubator funding will support innovations in the development of hardware and non-hardware approaches from the proof-of-concept stage to prototype demonstration, including advances in photovoltaics, concentrating solar power and power electronics, as well as streamlined permitting, inspection and financing approaches, and to shorten the timeline for awardees to transition innovative prototypes produced at lab-scale into pilot and eventually full-scale manufacturing, production, or deployment. Each of the investments will require significant cost-share commitments from the awardees.

Applications are due on April 9, 2012. For more information and application requirements for the Funding Opportunity Announcement, please visit the [Funding Opportunity Exchange website](https://eere-exchange.energy.gov/) at <https://eere-exchange.energy.gov/>.

USDA Invites Applications for Renewable Energy and Energy Efficiency Projects

The U.S. Department of Agriculture (USDA) recently announced the availability of funding from the Rural Energy for America Program (REAP) authorized by the Food, Conservation, and Energy Act of 2008 (Farm Bill). REAP is designed to help agricultural producers and rural small businesses reduce energy costs and consumption and help meet the Nation's critical energy needs. For 2012, USDA has approximately \$25.4 million budget authority available to fund REAP activities, which will support at least \$12.5 million in grant and approximately \$48.5 million in guaranteed loan program level awards. USDA is accepting the following applications:

- renewable energy system and energy efficiency improvement guaranteed loan only applications on a continuous basis up to June 29, 2012;

More information on how to apply for funding is available in the January 20, 2012 [Federal Register](#), pages 2948 through 2954.

Maine Rural Energy Development Coordinator

Beverly Stone, USDA Rural
Development, 967 Illinois Avenue,
Suite 4, P.O. Box 405, Bangor, ME
04402-0405, (207) 990-9125,

Multidisciplinary University Research Initiative: High Operating Temperature Fluids

The objective of the Multidisciplinary University Research Initiative (MURI): High Operating Temperature Fluids (“HOT Fluids”) Funding Opportunity Announcement (FOA) is to support research into fluid materials development that will enable Concentrating Solar Power (CSP) systems to integrate with energy conversion devices capable of thermal to electric conversion efficiencies greater than 50%. DOE anticipates providing up to \$10M in funding for up to 2 awardees to accomplish the goals of this funding opportunity. This FOA directly supports the goals of the Department of Energy’s Office of Energy Efficiency and Renewable Energy, Solar Energy Technologies Program and the SunShot Initiative.

Full Application Submission Deadline: 4/19/2012 5:00 PM ET

More information at <https://eere-exchange.energy.gov/Default.aspx#3dd3ebbe-c301-48b3-9b51-4c5d7151acdf>

Efficiency Maine Trust – Maine PACE Financing

Borrow up to \$15,000, at 4.99% for 15 years, for energy efficiency upgrades that make your home more comfortable. Upgrade your heating system, weatherize your home, and make other improvements to cut your heating bills month after month.

Please visit:

<http://www.energymaine.com/pace>.

Find a participating energy advisor at:

<http://www.energymaine.com/at-home/hesp-program/find-an-energy-advisor>.

Find a registered Maine PACE vendor at:

<http://www.energymaine.com/docs/PACE/DownloadsForms/Maine-PACE-Registered-Vendor-List.pdf>.

Participating towns at:

<http://www.energymaine.com/docs/PACE/DownloadsForms/List-of-PACE-municipalities.pdf>.

Low Monthly Payments Mean Big Energy Savings!

Months	60	120	180
\$6,500	\$123	\$69	\$51
\$7,500	\$141	\$80	\$59
\$8,500	\$160	\$90	\$67
\$9,500	\$179	\$101	\$75
\$10,500	\$198	\$111	\$83
\$11,500	\$217	\$122	\$91
\$12,500	\$236	\$133	\$99
\$13,500	\$255	\$143	\$107
\$14,500	\$274	\$154	\$115
\$15,000	\$283	\$159	\$119

"Ballpark" payments based on 4.99% APR. Final payment depends on actual loan amount.

APPLY ONLINE at

<https://www.afcfirst.com/application/index.php?programid=642e92efb79421734881b53e1e1b18b6> OR CALL 1-866-ES-MAINE TO APPLY TODAY.

Borrow up to \$15,000, at 4.99% for 15 years, for energy efficiency upgrades that make your home more comfortable. Upgrade your heating system, weatherize your home, and make other improvements to cut your heating bills month after month.

Maine Small Business Credit Initiatives

On September 16, 2011, the U.S. Department of the Treasury and Maine Governor Paul LePage announced the approval of Maine's State Small Business Credit Initiative (SSBCI) application (see Governor's press release at <http://www.maine.gov/tools/whatsnew/index.php?topic=Portal+News&id=304431&v=Article-2008>). The \$13.2 million in funds will help create new private sector jobs and spur more than \$132 million in additional small-businesses lending in that state. The funding will take place in three stages, with the first allocation of \$4.3 million now taking place.

The SSBCI funds will be used to recapitalize three existing, successful programs:

1. \$7 million will be available to a group of 15 regional economic development agencies to make loans to businesses in their area. See FAME's Regional Economic Development Revolving Loan Program.
2. \$3.2 million will be allocated to FAME for the Economic Recovery Loan Program – loans of up to \$1 million that meet the program's underwriting requirements, which can be used statewide;
3. \$3 million will be allocated to the Small Enterprise Growth Fund – Maine's state-run venture capital fund.

For more information, please contact FAME's Bob Corey at (207) 620-3524.

Office of Science Financial Assistance Program

The U.S. Department of Energy announces its continuing interest in receiving applications for the Office of Science Financial Assistance Program. Areas of interest include, but are not limited to: Basic Energy Sciences and Biological and Environmental Research, and Workforce Development for Teachers and Scientists. Subtopics include Solar Photochemistry Research, and Climate Sciences. \$400 million expected to be available, multiple awards anticipated. Responses due 9/30/12. For more info, contact Kimberlie Laing at kim.laing@science.doe.gov or go to: <https://www.fedconnect.net/fedconnect/?doc=DE-FOA-0000660&agency=DOE>. Refer to Sol# DE-FOA-0000600.

HUD Multifamily Energy Innovation Fund

The Department of Housing and Urban Development's (HUD) Office of Affordable Housing Preservation (OAHP) is issuing a notice of fund availability (NOFA) for the Multifamily Energy Innovation Fund. This fund provides a total of \$25 million in grants to be used for the purpose of energy efficiency upgrades at multifamily properties. The goals of this NOFA are to:

1. Demonstrate solutions to the primary and longstanding challenges to implementing energy efficiency and renewable energy improvements, in existing affordable multifamily properties.
2. Leverage private capital and additional public funding to demonstrate "proof of concept" of specific models.
3. Conduct applied research to document and disseminate mainstream, scalable approaches to retrofitting affordable multifamily properties.

The overall objective of the Energy Innovation Fund is to help catalyze a home energy retrofit market in the United States by accelerating private investment in cost-saving energy efficiency retrofits in the residential sector. Innovative and replicable strategies to improve the usefulness of existing HUD programs--as well as developing new financing tools--will lead to significant reductions in energy consumption, operating costs, and the carbon footprint of both affordable and market-rate housing. More information can be found here: <http://www.hud.gov/offices/adm/grants/nofa10/grpeif.cfm>.

FHA, Fannie Mae Launch Energy Efficiency Retrofit Program

The U.S. Housing and Urban Development Department (HUD) announced on May 31 its Green Refinance Plus, a program between HUD's Federal Housing Administration (FHA) and Fannie Mae to boost energy efficiency in older affordable housing. The program will allow owners of existing affordable rental housing properties to refinance into new mortgages that include funding for energy- and water-saving upgrades, along with other needed property renovations.

Under the program, FHA and Fannie Mae will share the risk on loans to refinance existing rent-restricted projects while permitting owners to borrow additional funds to make energy-saving improvements to their properties. Owners of existing multifamily affordable properties typically refinance their mortgages every 10 to 15 years. In older apartment buildings, however, owners are often hard-pressed to find additional financing to maintain or improve the physical condition of their properties, including making energy-efficient upgrades. Soon, Fannie Mae and its participating lenders will begin accepting applications to refinance owners' debt and improve the energy efficiency of their properties.

The initiative is intended to refinance the expiring mortgages of Low Income Housing Tax Credit properties, and other affordable projects, and to lower annual operating costs by reducing energy consumption. Fannie Mae and HUD anticipate approximately \$100 million in initial refinance volume with an average loan amount of \$3.5 to \$5 million.

http://portal.hud.gov/hudportal/HUD?src=/press/press_releases_media_advisories/2011/HUDNo.11-106.

Tax Credits for Energy Efficiency
(<http://www.energysavers.gov/financial/70010.html>)

If you purchase an energy-efficient product or renewable energy system for your home, you may be eligible for a federal tax credit. Below is an overview of the federal tax credits for energy efficiency that are currently available.

Some energy efficiency tax credits are available through 2016 as noted below.

How to Claim Your Tax Credit

- Visit the **IRS website** <http://www.irs.gov/> to obtain the correct forms for the tax year you are filing.
- Use the following forms:
 - For renewable and efficiency credits: **IRS Form 5695** 
 - For alternative motor vehicle credits: **IRS Form 8910**. Also download instructions for form 8910.
 - For qualified plug-in electric drive motor vehicle credits: **IRS Form 8936** .
- Save your receipts, or make copies of them, and the Manufacturer Certification Statement for your records.
- **NOTE:** The credits are nonrefundable—in other words, the credits are only available to the extent you have a tax liability. The credits for home energy improvement products eligible through 2011 may be limited if you are subject to the AMT.
- Tax credits can only be claimed once, and are limited to the year in which they are purchased: If you claimed a home energy improvement tax credit on your 2010 taxes, you cannot take an additional credit for the same purchase on your 2011 taxes.
- There is a \$500 lifetime limit on the federal tax credits that expire in December 2011 (not those that expire in 2016). If you have received a total of \$500 or more in these tax credits from 2006-2010, you are not eligible for any more.

Products Eligible for Tax Credits Through 2011
Products Eligible for Tax Credits Through 2016

Tax credits for these products are available at 30% of the cost, with no upper limit, through 2016 (Select "See Details" for more information on each product, or see the [printable version](#)).

Geothermal Heat Pump



Credit: Bruce Green

Credit: 30% of cost, with no upper limit

When and Where:

- Must be "placed in service" by Dec. 31, 2016
- Available on principal home or second home.
- New and existing homes

- See details

Product	Requirements	More Information
Geothermal Heat Pump	Closed Loop: EER \geq 14.1; COP \geq 3.3 Open Loop: EER \geq 16.2; COP \geq 3.6 Direct Expansion: EER \geq 15; COP \geq 3.5 Credit includes installation costs.	Learn more about geothermal heat pumps , including: <ul style="list-style-type: none"> • Types of geothermal heat pumps • Efficiency ratings of geothermal heat pumps All ENERGY STAR geothermal heat pumps qualify.

Solar Energy Systems



Credit: Cheryl Unger

Credit: 30% of cost, with no upper limit

When and Where:

- Must be "placed in service" by Dec. 31, 2016
- Available on principal home or second home.
- New and existing homes

- See details

Product	Requirements	More Information
Solar Water Heating Property	<p>At least half of the energy generated by the "qualifying property" must come from the sun.</p> <p>The system must be certified by the <u>Solar Rating and Certification Corporation</u> (SRCC).</p> <p>Credit includes installation costs.</p>	<p>Learn more about <u>solar water heaters</u>. All <u>ENERGY STAR solar water heaters</u> qualify.</p> <p>The water must be used in the dwelling. The credit is not available for expenses for swimming pools or hot tubs.</p> <p>Tax credits are only available for the solar water heating system property, not the entire water heating system of the household.</p>
Photovoltaic Systems (Solar Electric Property)	<p>Photovoltaic systems must provide electricity for the residence and must meet applicable fire and electrical code requirement.</p>	<p>Learn more about:</p> <ul style="list-style-type: none"> • <u>Small solar electric systems</u> • Things to consider when <u>making your own electricity</u> with renewable energy systems

Wind Energy Systems



Credit: Bergey WindPower

Credit: 30% of cost, with no upper limit

When and Where:

- Must be "placed in service" by Dec. 31, 2016
- Available on principal home or second home.
- New and existing homes

- See details

Product	Requirements	More Information
Residential Small Wind Turbines	Nameplate capacity of not more than 100 kilowatts. Credit includes installation costs.	Learn more about: <ul style="list-style-type: none"> • <u>Small wind electric systems</u> • Things to consider when <u>making your own electricity</u> with renewable energy systems

Fuel Cells



Credit: Capstone Turbine Corporation

Credit: 30% of cost, up to \$500 per .5 kW of power capacity

When and Where:

- Must be "placed in service" by Dec. 31, 2016
- Primary residence
- New and existing homes

- See details

Product	Requirements	More Information
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Residential Fuel Cell Systems	Efficiency of at least 30% and must have a capacity of at least 0.5 kW. Credit includes installation costs.	<ul style="list-style-type: none"> Learn more about fuel cells
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Vehicle Tax Credits

Tax credits are also available for some vehicles (Select "See Details" for more information on each product, or see the [printable version](#)).

Plug-In Electric Vehicles



Credit: ©iStockphoto.com

Credit: Varies, see below.

When:

- See below; credits phased-out after certain number of vehicles are sold.

- See details

Product	Requirements	More Information
Plug-in electric and small neighborhood electric vehicles	Credit: Up to \$7,500, based on capacity of the battery system.	<p>The first 200,000 vehicles sold get the full tax credit before the credit begins phasing out. Use IRS Form 8936 .</p> <p>See Fueleconomy.gov to find out which vehicles qualify for the credit.</p> <p>See the IRS information on the Plug-in Electric Vehicle Credit.</p> <p>Also see credits for alternative fuel vehicle refueling property.</p>