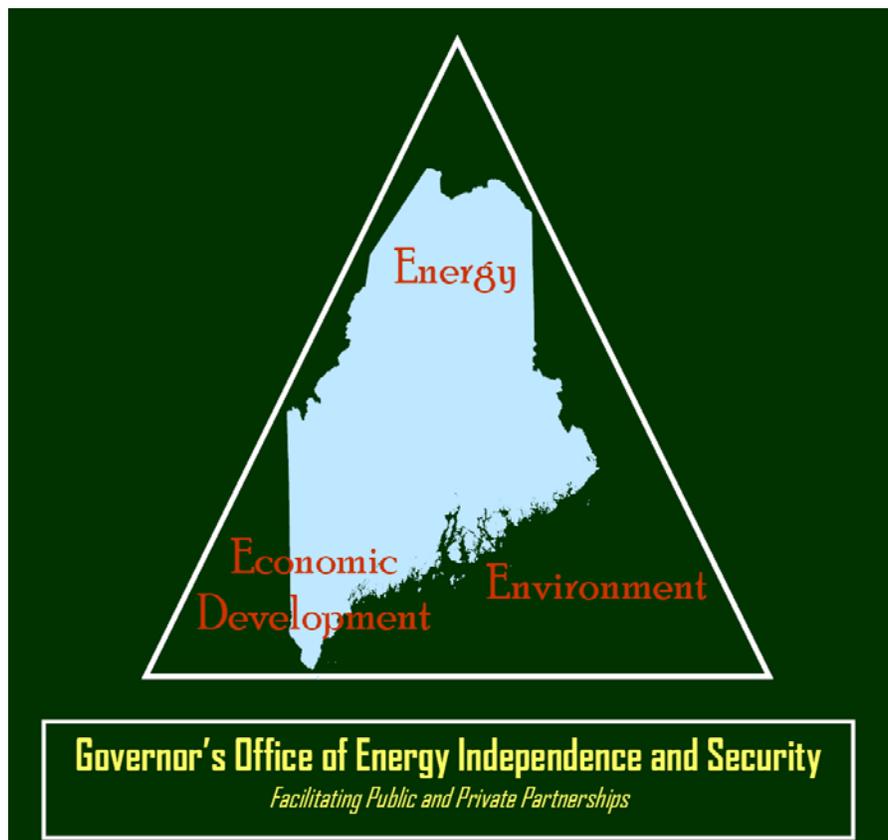


GRANTS CONNECTOR

ENERGY PROJECT GRANTS, INCENTIVES AND OTHER FUNDING OPPORTUNITIES



October 2011

Grants Connector – October 2011 Sample Opportunities

- \$ Request for Proposals for Evaluation of the Maine PACE Loan Program
- \$ Efficiency Maine – Project Funding for Large Electrical Energy Efficiency and Distributed Generation Projects
- \$ RFP Database Management and Technical Analysis Services – Efficiency Maine
- \$ Energy Efficiency Innovation – Efficiency Maine
- \$ Request for Proposals for Efficiency Maine's Residential and Renewable Energy Technical Services
- \$ Refrigerator Recycling Program – Efficiency Maine
- \$ Efficiency Maine Trust – Maine PACE Financing
- \$ Maine Small Business Credit Initiatives
- \$ National Student Design Competition for Sustainability
- \$ Sustainable Energy Pathways
- \$ Solid State Lighting Manufacturing
- \$ Solid State Lighting Product Development
- \$ Solid State Lighting Core Technologies
- \$ Office of Science Financial Assistance Program
- \$ Graduate Fellowships for the Environment
- \$ Agriculture Fellowships
- \$ Sustainable Bioenergy
- \$ Climate Variability and Change
- \$ Wood Pellet Boiler Heating Demo - New York
- \$ Biomass Heating Roadmap - New York
- \$ Sustainability Research Networks
- \$ University Transportation Centers
- \$ Industry/University Cooperative Research Centers
- \$ HUD Multifamily Energy Innovation Fund
- \$ Funding for Energy-Saving Lighting Technology Research and Development
- \$ PV Manufacturing Initiative Part 2: SUNPATH (Scaling Up Nascent PV AT Home)
- \$ FHA, Fannie Mae Launch Energy Efficiency Retrofit Program
- \$ Coastal Climate Adaptation
- \$ Centers for Chemical Innovation
- \$ Energy for Sustainability
- \$ Tax Credits for Energy Efficiency

Grants Connector – September 2011

Request for Proposals for Evaluation of the Maine PACE Loan Program

The Efficiency Maine Trust seeks a qualified bidder or team of bidders to perform an independent evaluation of the Trust's Maine PACE Loan Program. Deadline is October 20, 2011 at 2 p.m. All information at <http://www.energymaine.com/opportunities/rfp-em-022-2011>.

Efficiency Maine – Project Funding for Large Electrical Energy Efficiency and Distributed Generation Projects

Efficiency Maine has issued an RFP for a new Competitive Program to allow Maine businesses to compete for project funding for large electrical energy efficiency and distributed generation projects. Funding levels will range from minimum of \$100,000 to a maximum of \$500,000 per facility up to 50 percent of the total project costs. Proposals will be scored based upon cost effectiveness in reducing kilowatt hour consumption; management and resource adequacy and readiness; and economic viability. For more information, visit <http://www.energymaine.com/at-work/business-programs/competitive-program> for the RFP. Closing date is 10/31/11 at 2 p.m.

RFP Database Management and Technical Analysis Services – Efficiency Maine

The Efficiency Maine Trust seeks a bidder or team of bidders to provide database management and technical analysis services as they relate to the maintenance and continued development of Efficiency Maine database systems and the collection, storage, reporting and analysis of energy efficiency data across all activities of EM programs. The RFP and related documents are posted at <http://www.energymaine.com/opportunities>. All proposals are due November 18, 2011 at 3:00 p.m.

Energy Efficiency Innovation – Efficiency Maine

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 savings opportunities for the state. The purpose of this RFP is to encourage the development, review, and eventual implementation of these new ideas. Closing Date is December 16, 2011. RFP at <http://www.energymaine.com/opportunities/em-rfp-020-2011>.

Request for Proposals for Efficiency Maine's Residential and Renewable Energy Technical Services

The Efficiency Maine Trust seeks a qualified contractor or team of contractors to provide residential weatherization technical support services and quality assurance services as they relate to the Home Energy Savings Program and weatherization projects financed by Efficiency Maine and to provide support for Efficiency Maine's renewable energy initiatives. Closing date is November 10, 2011 at 2:00 p.m. Information at <http://www.efficiencymaine.com/opportunities/rfp-em-024-2011>.

Refrigerator Recycling Program – Efficiency Maine

Efficiency Maine seeks a contractor or team of contractors to develop and implement a program that cost effectively removes and recycles inefficient, working refrigerators and freezers from customers' homes. The program objective is to save homeowners money and reduce power demand. Proposals are due 10/31/11 at 3 p.m. Go to <http://www.efficiencymaine.com/opportunities/rfp-em-023-2011> for RFP and supporting documents.

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.efficiencymaine.com/pace>.

Find a participating energy advisor at: [http://www.efficiencymaine.com/at-home/hesp_program/find an energy advisor](http://www.efficiencymaine.com/at-home/hesp_program/find_an_energy_advisor).

Find a registered Maine PACE vendor at:

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

Participating towns at:

<http://www.efficiencymaine.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.

National Student Design Competition for Sustainability

The U.S. Environmental Protection Agency requests proposals for the National Student Design Competition for Sustainability Focusing on People, Prosperity and the Planet (P3). The P3 Awards program was developed to foster progress toward sustainability by achieving the mutual goals of economic prosperity, protection of the planet, and improved quality of life for its people. Areas of interest include: Energy; Built Environment; Materials and Chemicals; Water; Agriculture; Green Infrastructure; and Clean Cookstoves. \$1.05 million expected to be available, up to 45 awards anticipated. Responses due 12/22/11. For more info, contact Cynthia Nolt-Helms at nolt-

helms.cynthia@epa.gov or go to: http://www.epa.gov/ncer/rfa/2012/2012_p3.html. Refer to EPA-G2012-P3.

Sustainable Energy Pathways

The National Science Foundation requests proposals for Sustainable Energy Pathways. This RFP will support interdisciplinary efforts by teams of researchers to address the challenges of developing efficient pathways towards a sustainable energy future. \$34 million expected to be available. Responses due 2/1/12. For more info, including agency contacts, go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf11590. Refer to Sol# 11-590.

Solid State Lighting Manufacturing

The U.S. Department of Energy requests proposals for Solid State Lighting Manufacturing Research and Development - Round 3. This RFP will support R&D to achieve cost reduction of solid-state lighting for general illumination through improvements in manufacturing equipment, processes, or techniques. \$10 million expected to be available, up to 4 awards anticipated. Responses due 12/15/11. For more info, contact SSLManufacturingFOA@netl.doe.gov or go to: <https://eere-exchange.energy.gov/>. Refer to Sol# DE-FOA-0000561.

Solid State Lighting Product Development

The U.S. Department of Energy requests proposals for Solid State Lighting Product Development - Round 8. This RFP will support the development or improvement of commercially viable materials, devices, or systems for solid state lighting general illumination applications. \$6 million expected to be available, up to 6 awards anticipated. Responses due 11/3/11. For more info, contact SSLProductFOA@netl.doe.gov or go to: <https://eere-exchange.energy.gov/>. Refer to Sol# DE-FOA-0000563. (Grants.gov 8/12/11)

Solid State Lighting Core Technologies

The U.S. Department of Energy requests proposals for Solid State Lighting Core Technologies - Round 8. This RFP will support applied research for technology development, with particular emphasis on meeting efficiency, performance, and cost targets. \$6 million expected to be available, up to 6 awards anticipated. Responses due 11/3/11. For more info, contact SSLCoreFOA@netl.doe.gov or go to: <https://eere-exchange.energy.gov/>. Refer to Sol# DE-FOA-0000564. (Grants.gov 8/12/11)

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.

Graduate Fellowships for the Environment

The U.S. Environmental Protection Agency requests proposals for Graduate Fellowships, for master's and doctoral level students in environmental fields of study. Areas of interest include, but are not limited to: Environmental Entrepreneurship; Global Change; Built Environment and Land Use/ Protection; Tribes and American Indian/Alaska Native/Pacific Islander Communities; Green Energy/Natural Resources Production & Use; and Green Engineering/Building/Chemical Products & Processes/Materials Development. \$4.5 million expected to be available, 80 fellowships anticipated. Responses due 11/8/11. For more info, including contacts, go to: http://www.epa.gov/ncer/rfa/2012/2012_star_gradfellow.html. Refer to Sol# EPA-F2012-STAR.

Agriculture Fellowships

The U.S. Department of Agriculture requests proposals for Agriculture and Food Research Initiative Fellowships. This program will provide fellowships to pre- and postdoctoral students in the agricultural, forestry, and food sciences. Priority research areas include, but are not limited to, securing America's energy future through renewable biofuels, and mitigating and adapting agriculture to variations in climate. \$12 million expected to be available. Letters of Intent are required and are due 11/8/11, final proposals due 1/19/12. For more info, contact AFRI@nifa.usda.gov or go to: <http://www.csrees.usda.gov/funding/rfas/afri.html>. Refer to Sol# USDA-NIFA-AFRI-003538.

Sustainable Bioenergy

The U.S. Department of Agriculture requests proposals for the Agriculture and Food Research Initiative - Sustainable Bioenergy. This program will support projects that target the development of regional systems for the sustainable production of bioenergy and biobased products. Areas of interest include, but are not limited to: Impacts of Regional Bioenergy Feedstock Production Systems on Wildlife and Pollinators; Socioeconomic Impacts of Biofuels on Rural Communities; and Environmental Implications of Direct and Indirect Land Use Change. \$11 million expected to be available. Letters of Intent are required, and are due 10/25/11, final proposals due 12/15/11. For more info, contact AFRI@nifa.usda.gov or go to: <http://www.csrees.usda.gov/funding/rfas/afri.html>. Refer to Sol# USDA-NIFA-AFRI-003536.

Climate Variability and Change

The U.S. Department of Agriculture requests proposals for the Agriculture and Food Research Initiative: Agriculture and Natural Resources Science for Climate Variability and Change. This program will support project to advance the understanding of the impacts of climate variability and change on agriculture, forestry, natural resources, and the environment. Areas of interest include: 1) Integrated Approaches to Climate Adaptation and Mitigation in Agroecosystems. Letters of Intent are required, and are due 10/20/11, final proposals due 12/16/11. 2) Regional Approaches for Adaptation to and Mitigation of Climate Variability and Change. Letters of Intent are required, and are due 10/28/11, final proposals due 1/13/12. For more info, contact AFRI@nifa.usda.gov or go to: <http://www.csrees.usda.gov/funding/rfas/afri.html>. Refer to USDA-NIFA-AFRI-003537.

Wood Pellet Boiler Heating Demo - New York

The New York State Energy Research and Development Authority requests proposals for the High Efficiency Wood Pellet Boiler Heating Demonstration. This RFP will support the demonstration and evaluation of high-efficiency and low emission wood-pellet boiler heating systems with hydronic thermal-storage and bulk pellet storage; air pollution control technology for commercial wood pellet systems; and pneumatic bulk pellet distribution systems. \$1 million expected to be available. Responses due 11/30/11. For more info, contact Ellen Burkhard at nar@nyserda.org or go to: <http://www.nyserda.org/funding/2357pon.asp>. Refer to PON# 2357.

Biomass Heating Roadmap - New York

The New York State Energy Research and Development Authority requests proposals for the Development of a Biomass Heating Roadmap for New York. The Roadmap will address feedstocks and technologies that are currently being used, near-term technologies that are expected to significantly contribute, and promising future technologies that may make significant contributions in more than ten years. \$350K expected to be available, 1 award anticipated. Responses due 12/6/11. For more info, contact Judy Jarnefeld at jj1@nyserda.org or go to: <http://www.nyserda.org/funding/2329rfp.asp>. Refer to RFP# 2329.

Sustainability Research Networks

The National Science Foundation requests proposals for the Sustainability Research Networks Competition. Through this competition, NSF, in partnership with other agencies, international efforts, and the private sector, aims to support members of the academic research community for projects which produce discoveries and knowledge that will inform decisions leading to environmental, energy, social and cultural sustainability. \$36 million expected to be available, up to 4 awards anticipated. Preliminary proposals due 12/1/11, final proposals due 4/1/12. For more info, including contacts, go to:

http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf11574. Refer to NSF 11-574.

University Transportation Centers

The U.S. Department of Transportation requests proposals for the University Transportation Centers Program Open Competition. The purpose of the Centers is to advance U.S. technology and expertise in transportation through research, education, and technology transfer; and to provide a critical transportation knowledge base outside the DOT; and to address vital workforce needs for the next generation of transportation leaders. \$80 million expected to be available, up to 22 awards anticipated. Responses due 10/26/11. For more info, contact UTCgrants@dot.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=108433>. Refer to Sol# UTCOPENCOMP2011.

Industry/University Cooperative Research Centers

The National Science Foundation requests proposals for Fundamental Research Program for Industry/University Cooperative Research Centers. Areas of interest include, but are not limited to: Energy and Environment; Advanced Manufacturing; Biotechnology; Advanced Materials; and Fabrication and Process Technology. \$1.6 million expected to be available, up to 10 awards anticipated. Responses due 2/1/12. For more info, contact Rathindra DasGupta at rdasgupt@nsf.gov or go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf11570. Refer to NSF 11-570.

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>.

PV Manufacturing Initiative Part 2: SUNPATH (Scaling Up Nascent PV AT Home)

Funding: Up to \$50M total; maximum \$25M per award

Open Date: 08/02/2011

Close Date: 10/28/2011

Funding Organization: Solar Energy Technologies Program

Funding Number: DE-EE0000566

Summary:

The U.S. Department of Energy is requesting applications for the first industrial-scale demonstration of the applicant's photovoltaic (PV) module, cells, substrates, or module components that will achieve lower cost per watt. The applicant must demonstrate lower cost targets over the next two years than the current market-leading technology and enable the path to \$1/watt system costs by 2020.

Significant non-federal cost share is required, to be achieved in partnership with sources of private capital and state and regional funds. This funding opportunity will address the currently unfulfilled and urgent need for a significant investment to assist the first industrial-scale manufacturing of a new PV technology.

For more information, go to <https://eere-exchange.energy.gov/#521ef7df-e162-4db5-9cf1-7dafd431307f>. Funding amounts and schedules are subject to change.

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.

Coastal Climate Adaptation

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration, requests proposals for the Sea Grant Community Climate Adaptation Initiative 2011. This initiative will fund climate adaptation efforts as part of an overall plan to enhance climate adaptation in coastal communities. \$1 million expected to be available, individual awards NTE \$100K. Responses due 11/22/11. For more info, contact oar.hq.sg.competitions@noaa.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=103673>. Refer to Sol# NOAA-OAR-SG-2011-2002930.

Centers for Chemical Innovation

The National Science Foundation requests proposals for Centers for Chemical Innovation. For the FY 2012 Phase I competition, only projects addressing sustainable chemistry will be considered. Areas of interest include, but are not limited to: Developing clean, safe, and economical alternatives to traditional chemical products and practices; Exploring alternatives to petroleum as a source of feedstock chemicals, including biorenewables; Exploring earth-abundant, inexpensive and benign alternatives to rare, expensive and toxic chemicals; and Developing efficient recognition/sequestration and recycling of key elements essential for sustainability, for example phosphorus and rare earth elements. \$15 million expected to be available, up to 7 awards anticipated. Responses due 10/25/11. For more info, contact Katharine Covert at kcovert@nsf.gov or go to: http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf11552. Refer to Sol# 11-552.

Energy for Sustainability

The National Science Foundation requests proposals for Energy for Sustainability. This program supports fundamental research and education in energy production, conversion, and storage and is focused on energy sources that are environmentally friendly and renewable. Sources of sustainable energy include: Sunlight, Wind/Wave, Biomass, and Geothermal. \$9.2 million expected to be available, up to 42 awards anticipated. Responses due 2/17/12. For more info, contact Gregory Rorrer at grorrer@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501026. Refer to Sol# PD-12-7644. (Grants.gov 6/8/11)

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.

While some energy efficiency tax credits are available through 2011, others 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

Biomass Stoves



Credit: ©iStockphoto.com/JillKyle

Credit: \$300

When and Where:

- 2011 only
- Existing primary residence

- See details

Product	Requirements	More Information
Biomass stoves	<p>Thermal efficiency rating of at least 75% as measured using a lower heating value.</p> <p>Credit includes installation costs.</p>	<p>Biomass stoves burn biomass fuel to heat a home or heat water.</p> <p>"Biomass fuel" includes agricultural crops and trees, wood and wood waste and residues (including wood pellets), plants (including aquatic plants), grasses, residues, and fibers.</p> <p>Learn more about:</p> <ul style="list-style-type: none"> • Wood and pellet heating systems • Burning wood safely and efficiently

HVAC



Credit: ©iStockphoto.com/Kameleon007

Credit: See details

When and Where:

- 2011 only
- Existing primary residence

- See details

Product	Requirements	More Information
Central Air Conditioning Credit = \$300	Split Systems: EER >=13; SEER >= 16 Package systems: EER >= 12; SEER >= 14 Credit includes installation costs.	Learn more about: <ul style="list-style-type: none">• Air conditioners and efficiency ratings• Split systems vs. package systems You may need to replace both your heating and cooling systems to qualify for the tax credit. Learn why. Not all ENERGY STAR products qualify.
Electric Heat Pumps Credit = \$300	Split Systems: HSPF >= 8.5; EER >= 12.5; SEER >= 15 Package systems: HSPF >= 8; EER >= 12; SEER >= 14 Credit includes installation costs.	Learn more about: <ul style="list-style-type: none">• Air-source heat pumps and efficiency ratings• Split systems vs. package systems Not all ENERGY STAR products qualify.
Furnaces and Boilers Credit = \$150	Natural Gas or Propane Furnace: AFUE >= 95 Oil Furnace: AFUE >= 90 Gas, Propane, or Oil Hot Water Boiler: AFUE >= 90 Credit includes installation costs.	Learn more about: <ul style="list-style-type: none">• Furnaces and boilers and efficiency ratings Not all ENERGY STAR products qualify.

Advanced Main Air Circulating Fan
Credit = \$50

No more than 2% of furnace total energy use.

If the fan is qualified but the furnace is not, you can get a 30% tax credit on the cost of the fan alone. Ask your contractor to break out the cost.

Insulation



Credit: @iStockphoto.com/DonNichols

Credit: 10% of the cost, up to \$500

When and Where:

- 2011 only
- Existing primary residence

- See details

Product	Requirements	More Information
<p>Insulation material or system</p>	<p>Insulation material or system specifically and primarily designed to reduce the heat loss or gain of your home. Primary purpose must be to insulate (example: insulated siding does not qualify).</p> <p>Must meet 2009 International Energy Conservation Code (IECC) & Amendments</p> <p>Credit does not include installation and labor costs.</p>	<p>Learn more about insulation:</p> <ul style="list-style-type: none"> • Insulating an existing home • Where to insulate • Types of insulation • R-Value recommendations for your area <p>Learn more about air sealing:</p> <ul style="list-style-type: none"> • Air sealing an existing home • Caulking and weatherstripping

Roofing



Credit: ©iStockphoto.com/Ju-Lee

Credit: 10% of cost, up to \$500

When and Where:

- 2011 only
- Existing primary residence

- See details

Product	Requirements	More Information
Metal roofs, asphalt roofs	All ENERGY STAR qualified metal and reflective asphalt shingles. Materials only; installation or labor costs are not eligible for the 10% tax credit.	The credit is for "Any metal roof or asphalt roof installed on a dwelling unit, but only if such roof has appropriate pigmented coatings or cooling granules which are specifically and primarily designed to reduce the heat gain of such dwelling unit."

Water Heaters (non-solar)



Credit: ©iStockphoto.com/Andrew_Howe

Credit: \$300

When and Where:

- 2011 only
- Existing primary residence

- See details

Product	Requirements	More Information
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Gas, Oil, Propane Water Heater	<p>Energy Factor \geq 0.82 or a thermal efficiency of at least 90%.</p> <p>Credit includes installation costs.</p>	<ul style="list-style-type: none"> All ENERGY STAR gas tankless water heaters qualify for the tax credit. Learn more about tankless water heaters Most storage tank water heaters will not qualify for the credit. Electric storage tank and electric tankless water heaters are not eligible for tax credits.
Electric Heat Pump Water Heater	<p>Energy Factor \geq 2.0.</p> <p>Credit includes installation costs.</p>	<p>Learn more about heat pump water heaters.</p> <p>All ENERGY STAR heat pump water heaters will qualify.</p>

Windows, Doors, and Skylights



Credit: ©iStockphoto.com/Skyak

Credit: 10% of the cost, up to \$500, but windows are capped at \$200

When and Where:

- 2011 only
- Existing primary residence

- See details

Product	Requirements	More Information
Exterior windows, doors, and skylights	<p>Must be ENERGY STAR labeled.</p> <p>Credit does not include installation and labor costs.</p>	<p>Learn more about:</p> <ul style="list-style-type: none"> • Energy performance ratings for windows, doors, and skylights (including U factor and SHGC)

- Selecting energy-efficient windows
- Selecting energy-efficient exterior doors
- Selecting energy-efficient skylights

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 Solar Rating and Certification Corporation (SRCC).</p> <p>Credit includes installation costs.</p>	<p>Learn more about solar water heaters.</p> <p>All ENERGY STAR solar water heaters 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"> • Small solar electric systems • Things to consider when making your own electricity 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"> • Small wind electric systems • Things to consider when making your own electricity 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>