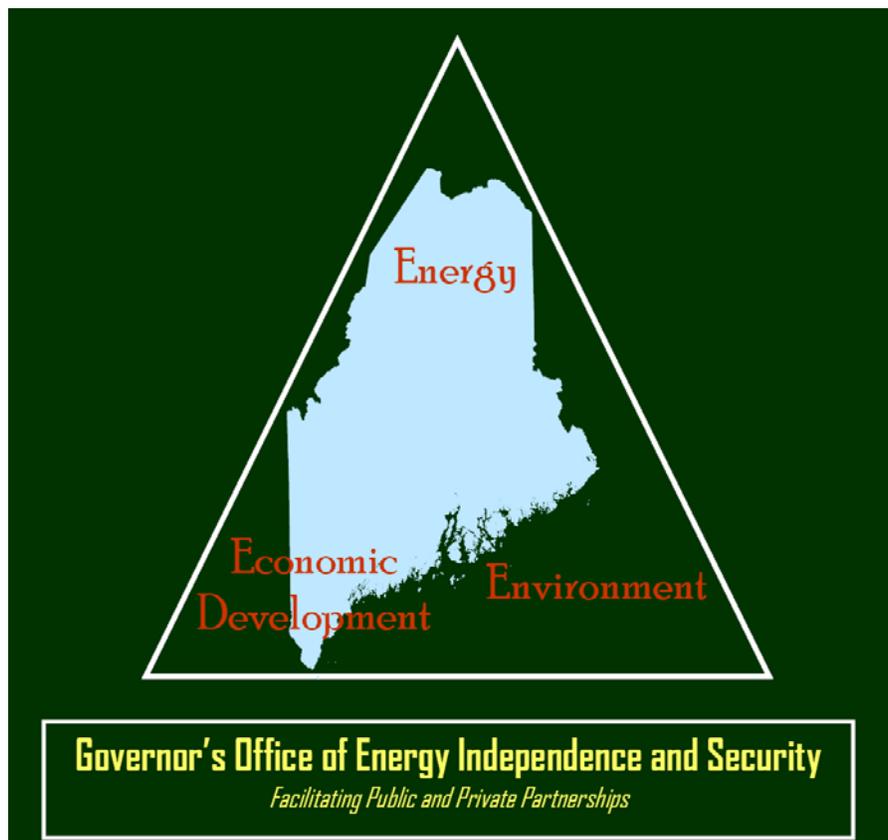


GRANTS CONNECTOR

ENERGY PROJECT GRANTS, INCENTIVES AND OTHER FUNDING OPPORTUNITIES



August 2011

Grants Connector – August 2011 Sample Opportunities

- \$ Funding for Energy-Saving Lighting Technology Research and Development
- \$ Campus Ventures Program
- \$ PV Manufacturing Initiative Part 2: SUNPATH (Scaling Up Nascent PV AT Home)
- \$ Notice of RFP for Residential Lighting Program Evaluation - Efficiency Maine Trust
- \$ DOE Offers Support for Student-Focused Clean Energy Business Contests
- \$ ITP's Innovative Manufacturing Initiative Funding Opportunity
- \$ Efficiency Maine Trust – Maine PACE Financing
- \$ FHA, Fannie Mae Launch Energy Efficiency Retrofit Program
- \$ SunShot Initiative: Rooftop Solar Challenge to Induce Market Transformation
- \$ Clean Fuel Buses and Facilities
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- \$ Atmospheric System Research
- \$ NOAA Climate Programs
- \$ Coastal Climate Adaptation
- \$ HOPE VI
- \$ Centers for Chemical Innovation
- \$ Biotechnology, Biochemical, and Biomass Engineering
- \$ Energy for Sustainability
- \$ Energy Efficient Affordable Housing - Maine to Florida
- \$ Small Business Innovation Research: Biofuels and Biobased Products
- \$ Tax Credits for Energy Efficiency (<http://www.energysavers.gov/financial/70010.html>)

Grants Connector – August 2011

DOE Announces up to \$12 Million in Funding for Energy-Saving Lighting Technology Research and Development

The U.S. Department of Energy (DOE) announced the availability of up to \$12 million in funding for energy-saving lighting technologies. The Energy Department will invest in projects to accelerate research and development of solid-state lighting technologies – semiconductor devices such as light-emitting diodes (LEDs) and organic light-emitting diodes (OLEDs).

DOE is seeking applications for solid-state lighting projects in the following categories:

- Core Technology – Between two and six projects to receive up to \$6 million, will be selected to focus on applied research to develop lighting technologies that increase efficiency, improve performance, and reduce costs. Selected projects will fill technology gaps or provide enabling knowledge or data to drive these energy-saving technologies forward.
- Product Development – Between two and six projects to receive up to \$6 million, will be selected to build on the knowledge gained from basic or applied research to move materials, devices, or systems in to the market faster. Selected projects will develop targeted, market-ready products with the competitive price, performance, and efficiency needed for successful commercialization.

This is the eighth round of funding directed toward these two well established solid-state lighting research and development program areas. Over the course of the program, the Core Technology area has been funded with \$68.7 million and Product Development with \$56.1 million for a total of \$124.8 million in federal funding.

For more information on these funding opportunities, see DOE's Funding Opportunity Exchange website at <https://eere-exchange.energy.gov/>. Applications will be accepted through 5 p.m. Eastern Time on November 3, 2011. DOE anticipates notifying applicants selected for award by the end of June 2012 and making awards by no later than September 30, 2012.

Campus Ventures Program

A Technology Commercialization & Entrepreneurial Development Program.

Proposals Due August 15th at 5pm

In late 2010, the University of Southern Maine (USM) Office of External Programs was awarded Maine Economic Improvement Fund (MEIF) monies aimed at creating public/private collaboration to enhance technology commercialization in Maine. This funding is being used to support the operations of a new collaborative effort between USM and the Maine Center for Enterprise Development (MCED), a Portland-based early

stage business incubator. In December 2010, USM and MCED initiated a Memorandum of Understanding to create a joint technology commercialization and entrepreneurial development program, subsequently dubbed "Campus Ventures." The program was created to address two primary goals:

1. Support technology innovation in Maine with meaningful, targeted services aimed at entrepreneurs and small businesses.
2. Create opportunities for rich experiential learning for USM students.

The program supports commercialization efforts through the creation of professionally managed project teams built specifically to provide technical and business development assistance directly for early-stage companies.

For a full program description, eligibility and application please contact:

Gregory S. Cavanaugh, Program Manager
University of Southern Maine Department of External Programs
216 John Mitchell Center
37 College Ave Gorham, ME 04038
207-780-5450
gcavanaugh@usm.maine.edu.

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.

Notice of RFP for Residential Lighting Program Evaluation - Efficiency Maine Trust

The Efficiency Maine Trust issued a Request for Proposals (RFP) for an independent impact and process evaluation of its Residential Lighting Program (RFP EM-019-2011).

A copy of the RFP and related documents are posted on the Opportunities page of the Efficiency Maine website: <http://www.energymaine.com/opportunities>

Proposals in response to RFP EM-019-2011 are due August 25, 2011, 4:00pm local time.

Student-Focused Clean Energy Business Contests

DOE on July 21 announced \$2 million in funding to support up to six regional competitions that will inspire, mentor, and train students from across the country to develop successful business plans for a new generation of U.S. clean energy companies. Under a new nationwide initiative called the National University Clean Energy Business Challenge, regional competitions will take place before May 1, 2012. Winners of the regional competitions will compete for a national grand prize at DOE headquarters in Washington, D.C., in early summer 2012. This national initiative will enable student participants to gain the skills required to build new businesses and transform promising innovative energy technologies from U.S. universities and national laboratories into innovative new energy products that will solve our nation's energy challenges.

For its new funding opportunity announcement (FOA), DOE will consider applications that propose annual university-based business creation competitions for student entrepreneurs with business ideas in energy efficiency and renewable energy. Student teams that participate in the competitions will work with experienced mentors from the energy industry and start-up community, along with university and national lab-based researchers, to develop creative business plans for transforming groundbreaking energy technologies into high-impact market solutions. The new initiative, facilitated by DOE's Office of Energy Efficiency and Renewable Energy, aims to increase the number and quality of start-up businesses created with university-based energy technologies and to promote a new generation of energy entrepreneurs. Applications are due August 22, and DOE expects to make its selections before the end of September.

See <https://www.fedconnect.net/FedConnect/?doc=DE-FOA-0000570&agency=DOE> posted on the FedConnect website.

ITP's Innovative Manufacturing Initiative Funding Opportunity

An extension has been granted for all applicants to the Innovative Manufacturing Initiative funding opportunity announcement posted by DOE's Industrial Technologies Program (ITP). This FOA was initially released on June 24 as part of President Obama's Advanced Manufacturing Partnership. Under the new extended deadlines, applicants must submit a **Letter of Intent by September 1, 2011**, to be eligible to submit a **Full Application by October 5, 2011**.

This solicitation seeks applications in line with ITP's mission to invest in manufacturing, engineering, and development to enable rapid, low-cost, energy-efficient manufacturing. Up to \$120 million will be available over three years to develop transformational manufacturing technologies and innovative materials to reduce time, cost, and energy requirements associated with manufacturing. Projects involving innovations in the earlier stages of development, such as applied research or proof-of-concept projects, will be eligible for awards of up to \$1 million. Projects that are further along in their development, such as laboratory testing or verification of a prototype system, will be eligible for awards of up to \$9 million.

DOE expects to select 35-50 cost-shared projects involving innovative manufacturing and novel materials concepts that are revolutionary in their design or impact and capable of addressing manufacturing energy productivity. Applicants are encouraged to form collaborative teams equipped with both technical and commercial capabilities to enhance their prospects for success.

See the [funding announcement on the EERE EXCHANGE](https://eere-exchange.energy.gov/#ab715a26-d038-4642-815d-9742570b7e9e) at <https://eere-exchange.energy.gov/#ab715a26-d038-4642-815d-9742570b7e9e>.

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>.

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.

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.

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.

SunShot Initiative: Rooftop Solar Challenge to Induce Market Transformation

Funding: Up to \$12.5M to be distributed between a maximum of 25 awardees

Open Date: 06/01/2011

Close Date: 08/31/2011

Funding Organization: Solar Energy Technologies Program

Funding Number: DE-FOA-0000549

Summary:

The goal of the Rooftop Solar Challenge is to achieve measurable improvements in market conditions for rooftop photovoltaic across the United States, with an emphasis on streamlined and standardized permitting and interconnection processes. This opportunity directly supports the goals of the U.S. Department of Energy (DOE) Office of Energy Efficiency and Renewable Energy, Solar Energy Technologies Program <http://www1.eere.energy.gov/solar/>, and the SunShot Initiative.

This FOA will take a phased approach, addressing four main action areas (listed below), designed so awardees that succeed in all action areas will have the necessary policy and process framework in place to support a robust solar market in their region:

- Permitting and Interconnection Processes
- Net Metering and Interconnection Standards
- Financing Options
- Planning and Zoning.

Letter of Intent Due Date: July 29, 2011

Application Due Date: August 31, 2011**

**Applicants must submit a Letter of Intent by the due date to be eligible to submit a full application.

A webinar series will be offered to help potential applicants understand the scope and purpose of this FOA. Details about the webinar series can be found within the Funding Opportunity Announcement.

For more information, see the full solicitation at <https://eere-exchange.energy.gov/Default.aspx#d7fc28a9-cd94-4548-b0ea-4713432c90fd>.

Clean Fuel Buses and Facilities

The U.S. Department of Transportation requests proposals for the Clean Fuels/Bus and Bus Facilities Program. This program will support: 1) The purchase or leasing of clean fuel buses, including buses that employ a lightweight composite structure, 2) Construction or leasing of clean fuel bus facilities or electrical recharging facilities and related equipment, and 3) Projects relating to clean fuel, biodiesel, hybrid electric, or zero emissions technology buses that exhibit equivalent or superior emissions reductions to existing clean fuel or hybrid electric technologies. \$51.5 million expected to be available. Responses due 8/23/11. For more info, contact Vanessa Williams at Vanessa.williams@dot.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=101474>. Refer to Sol# FTA-2011-019-CLNF.

Transit, GHG, and Energy Reduction

The U.S. Department of Transportation requests proposals for Transit Investments for Greenhouse Gas and Energy Reduction (TIGGER). This program supports: 1) Capital investments that will assist in reducing the energy consumption of transit systems, and 2) Capital investments that will reduce GHG emissions in public transportation systems. \$49.9 million expected to be available, individual awards NTE \$15 million. Responses due 8/23/11. For more info, contact Walter Kulyk at walter.kulyk@dot.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=101453>. Refer to Sol# FTA-2011-018-TIGGER.

Atmospheric System Research

The U.S. Department of Energy requests proposals for Atmospheric System Research. This RFP will support clouds, aerosol, and radiative transfer research that has the potential to improve the accuracy of regional and global climate models. \$3 million expected to be available, up to 25 awards anticipated. Pre-applications are required, and are due 7/15/11, final proposals due 9/6/11. For more info, contact Ashley Williamson at

Ashley.Williamson@science.doe.gov or go to:
<https://www.fedconnect.net/fedconnect/?doc=DE-FOA-0000556&agency=DOE>. Refer to Sol# DE-FOA-0000556.

NOAA Climate Programs

The U.S. Department of Commerce, National Oceanic and Atmospheric Administration, requests proposals for the Climate Program Office. Areas of interest include, but are not limited to: Climate Impacts on Water Resources; Coasts and Climate Resilience; Sustainability of Marine Ecosystems; Changes in Extremes of Weather and Climate; and Information for Mitigating Climate Change. \$15.5 million expected to be available, up to 60 awards anticipated. Letters of Intent are required, and are due 7/26/11, final proposals due 10/3/11. For more info, contact Diane Brown at diane.brown@noaa.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=103313>. Refer to Sol# NOAA-OAR-CPO-2012-2003041.

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.

HOPE VI

The U.S. Department of Housing and Urban Development requests proposals for the HOPE VI Main Street Program. This program provide grants to small communities to assist in the rejuvenation of an historic or traditional central business district or “Main Street” area by replacing unused commercial space in buildings with affordable housing units. HUD encourages activities that actively promote sustainability through enhancing energy efficient measures. \$500K expected to be available, 1 award anticipated. Responses due 8/22/11. For more info, contact Lawrence Gnessin at lawrence.gnessin@hud.gov or go to: <http://www.grants.gov/search/search.do?mode=VIEW&oppId=100915>. Refer to Sol# FR-5500-N-18.

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.

Biotechnology, Biochemical, and Biomass Engineering

The National Science Foundation requests proposals for Biotechnology, Biochemical, and Biomass Engineering. This program addresses fundamental problems involved in the processing and manufacturing of products of economic importance by effectively utilizing renewable resources of biological origin and bioinformatics originating from genomic and proteomic information. \$8.2 million expected to be available, up to 34 awards anticipated. Responses due 9/15/11. For more info, contact Theresa Good at tgood@nsf.gov or go to: http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=501024. Refer to Sol# PD-12-1491. (Grants.gov 6/8/11)

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)

Energy Efficient Affordable Housing - Maine to Florida

The TD Charitable Foundation, TD Bank, requests proposals for the “Building for the Future” competition, in support of affordable housing initiatives. This competition focuses on areas including but not limited to: Energy efficiency, including weatherization initiatives, HVAC improvements, or implementation of alternative or renewable energy sources. 25 awards of \$100K each are anticipated. Responses due 9/2/11. For more info, go to: http://www.tdbank.com/community/housing_grant_competition.html. (Foundation Center RFP Bulletin 7/8/11)

Small Business Innovation Research: Biofuels and Biobased Products

This is one of 10 topic areas in the USDA SBIR program. Its objective is to promote the use of biofuels and non-food biobased products by developing new or improved technologies that will lead to increased production of industrial products from agricultural materials. This research will lead to new opportunities to diversify agriculture and enhance agriculture's role as a reliable supplier of raw industrial materials. Specifically for FY2008, this program's focus will be sustainable production of biofuels and related co-products and development of new industrial crops. Click the More SBIR information link for additional information including eligibility requirements.

Small Business

Small businesses and small proprietorships that are in business for profit are eligible to submit applications to this program. Each organization submitting a proposal must qualify as a small business concern for research or research and development purposes.

[Request for Application \(RFA\)](#) | [Apply: Electronic](#) | [Abstracts of Funded Projects](#)

Solicitation Date (Opening)	July 13, 2011
Letter of Intent Due Date	None
Due Date (Closing) <i>Phase I</i>	September 1, 2011
Anticipated Award Date <i>Phase I</i>	May 15, 2012
Estimated Total Program Funding	\$19,000,000.00
Range of Awards	\$70,000.00 to \$100,000.00
Percent of Applications Funded Last Fiscal Year	11%
Cost Sharing Requirements	None
For More Information Contact	William Goldner
Funding Opportunity Number	USDA-NIFA-SBIR-003497
CFDA Number	10.212 Small Business Innovation Research
Contact for Electronic Access Problems	webcomments@nifa.usda.gov

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	<p>Split Systems: EER >=13; SEER >= 16</p>	<p>Learn more about:</p> <ul style="list-style-type: none"> • Air conditioners and

	<p>Package systems: EER >= 12; SEER >= 14</p> <p>Credit includes installation costs.</p>	<p>efficiency ratings</p> <ul style="list-style-type: none"> • Split systems vs. package systems <p>You may need to replace both your heating and cooling systems to qualify for the tax credit. Learn why.</p> <p>Not all ENERGY STAR products qualify.</p>
<p>Electric Heat Pumps Credit = \$300</p>	<p>Split Systems: HSPF >= 8.5; EER >= 12.5; SEER >= 15</p> <p>Package systems: HSPF >= 8; EER >= 12; SEER >= 14</p> <p>Credit includes installation costs.</p>	<p>Learn more about:</p> <ul style="list-style-type: none"> • Air-source heat pumps and efficiency ratings • Split systems vs. package systems <p>Not all ENERGY STAR products qualify.</p>
<p>Furnaces and Boilers Credit = \$150</p>	<p>Natural Gas or Propane Furnace: AFUE >= 95</p> <p>Oil Furnace: AFUE >= 90</p> <p>Gas, Propane, or Oil Hot Water Boiler: AFUE >= 90</p> <p>Credit includes installation costs.</p>	<p>Learn more about:</p> <ul style="list-style-type: none"> • Furnaces and boilers and efficiency ratings <p>Not all ENERGY STAR products qualify.</p>
<p>Advanced Main Air Circulating Fan Credit = \$50</p>	<p>No more than 2% of furnace total energy use.</p>	<p>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.</p>

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
Insulation material or system	<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	The credit is for "Any metal roof or

and reflective asphalt shingles.
Materials only; installation or labor costs are not eligible for the 10% tax credit.

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
Gas, Oil, Propane Water Heater	Energy Factor ≥ 0.82 or a thermal efficiency of at least 90%. Credit includes installation costs.	<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	Energy Factor ≥ 2.0 . Credit includes installation costs.	Learn more about heat pump water heaters . All ENERGY STAR heat pump

water heaters will qualify.

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	Must be ENERGY STAR labeled. Credit does not include installation and labor costs.	Learn more about: <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	At least half of the energy generated	Learn more about solar water

	<p>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>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	Nameplate capacity of not more	Learn more about:

Turbines	<p>than 100 kilowatts.</p> <p>Credit includes installation costs.</p>	<ul style="list-style-type: none"> • Small wind electric systems • Things to consider when making your own electricity with renewable energy systems
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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
Residential Fuel Cell Systems	<p>Efficiency of at least 30% and must have a capacity of at least 0.5 kW.</p> <p>Credit includes installation costs.</p>	<ul style="list-style-type: none"> • Learn more about fuel cells

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>