

ENERGY INCENTIVES & PROGRAMS



List as of 06/2009

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BUSINESS LENDING & DEVELOPMENT SERVICES

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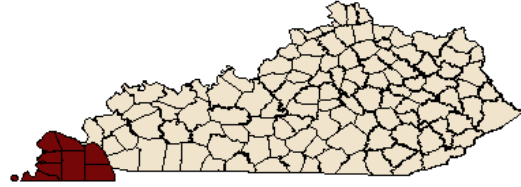
- Service of the Purchase Area Development District -

List as of 05/2009



INCENTIVES AND PROGRAMS FOR BUSINESSES: - RENEWABLE ENERGY & ENERGY EFFICIENCY

The following guide lists tax incentives, grants, loan and loan guarantee programs for investments in renewable energies or energy efficiency upgrades for the eight county region of western Kentucky (“Purchase Area”), consisting of the counties Ballard, Calloway, Carlisle, Fulton, Graves, Hickman, Marshall and McCracken. Some programs listed are multi-county, statewide or federal and could therefore apply to regions outside the Purchase Area as well.



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The Purchase Area Development District as well as all technical or informational sources referred to in this booklet do not:

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- Assume any liabilities with respect to the use of, or for damages resulting from the use of any information, apparatus, method or process disclosed in this booklet.



INCENTIVES AND PROGRAMS FOR BUSINESSES: - RENEWABLE ENERGY & ENERGY EFFICIENCY

Local and State Incentives and Policies

A. Corporate Tax Credits



1. Energy Efficiency Tax Credits (Corporate)

Incentive Type:	Corporate Tax Credit
Eligible Efficiency Technologies:	Water Heaters, Lighting, Lighting Controls/Sensors, Boilers, Heat pumps, Air conditioners, Energy Star Homes, Energy Star Manufactured Homes
Applicable Sectors:	Commercial, Industrial, Construction, Installer / Contractor, Agricultural
Amount:	30% of installed cost
Maximum Incentive:	Energy Efficient Lighting System: \$500 Energy Efficient HVAC System: \$500 Energy Star Manufactured Home sold by the taxpayer: \$400
Carryover Provisions:	For all measures excluding the Energy Star homes tax credits, the tax credit may be carried forward for one year.
Authority 1:	KRS § 141.435 et seq.
Date Effective:	01/01/2009
Expiration Date:	12/31/2015

Summary:

In April 2008, Kentucky enacted legislation ([HB 2](#)) establishing a 30% state income tax credit for taxpayers that install certain energy efficiency measures on commercial property. The 30% credit (up to \$500) is allowable against individual, corporate income or limited liability income taxes for any of the following equipment:

- Energy-Efficient Heating Ventilating and Air Conditioning (HVAC) or Hot Water System
- Interior Lighting Systems

The total tax credit may not exceed \$1,000 for any combination of HVAC, hot water, and lighting systems. There is also a \$400 credit allowed for taxpayers who sell an Energy Star manufactured home.

The legislation defines an energy efficient lighting system as an interior lighting system that meets the maximum reduction in lighting power density requirements for the federal energy efficient commercial building deduction under 26 U.S.C. sec. 179D, as in effect December 31, 2007; and it defines an energy-efficient heating, cooling, ventilation, or hot water system as a system that meets the requirements for the federal energy-efficient commercial building deduction under 26 U.S.C. sec. 179D, as in effect December 31, 2007. Kentucky also allows 30% tax credit for energy efficiency improvements made to the taxpayer's principal residence. Eligible energy efficiency measures include:

- Qualified Energy Property Installation:* Water Heaters, Heat Pumps, Central Air Conditioners, Advanced Main Air Circulating Fans
- Weatherization Measures: Windows and Storm Doors, Added Insulation

The tax credit may not exceed \$100 for insulation, and \$250 for qualified energy property, windows and storm doors. The total tax credit may not exceed \$500 for any combination of qualified energy property and weatherization measures. There is also an \$800 tax credit for taxpayers who build a new Energy Star home for use as a principal residence, but this credit might not be permitted if the taxpayer claims the credit for energy efficiency measures.

These credits may be applied during taxable years 2009-2015.

* "Qualified Energy Property" must meet the [efficiency guidelines](#) specified in the federal tax credit for residential energy property.

Contact:



Taxpayer Services
Kentucky Department of Revenue
501 High Street
Frankfort, KY 40620
Phone: (502) 564-4581
Fax: (502) 564-3875
Web: <http://revenue.ky.gov>

2. Renewable Energy Tax Credit (Corporate)

Incentive Type: Corporate Tax Credit
Eligible Renewable/Other Technologies: Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaic, Wind, Geothermal Heat Pumps, Combination Active Solar Space-Heating and Water Heating System
Applicable Sectors: Commercial, Industrial, Agricultural
Amount: \$3.00/watt (DC) for rated capacity for PV systems; 30% for all other eligible systems
Maximum Incentive: \$250 for geothermal installations; \$500 for solar and wind installations for single residential rental units; \$1,000 for multi-family residential units or commercial property
Carryover Provisions: Excess credit may be carried forward for one year
Equipment/Installation Requirements: Solar hot water and active solar space heating systems must be installed by NABCEP- certified installer; solar water heaters must use OG-100 SRCC certified collectors with minimum five-year warranty. PV systems must be installed by NABCEP certified installer, meet the requirements of Article 690 of the National Electrical Code, and use solar photovoltaic panels and inverters that are rated and listed by Underwriters Laboratories. Closed loop geothermal heat pumps must have EER of 14.1 and COP of 3.6. Open loop geothermal heat pump must have EER of 16.2 and COP of 3.5. DX geothermal heat pump must have EER of 15 and COP of 3.5
Project Review/Certification: Solar hot water systems must use collectors certified by the SRCC under OG-100. Wind turbines must meet AWEA's wind industry consensus standards.
Authority 1: [KRS § 141.435 et seq.](#)
Date Effective: 01/01/2009
Expiration Date: 12/31/2015

Summary:

In April 2008, Kentucky enacted legislation ([H.B. 2](#)) establishing a 30% state income tax credit for certain solar, wind and geothermal installations on single or multi-family residences and on commercial property. Kentucky taxpayers may take the 30% credit on any of the following equipment installed on commercial property:

- Active or passive solar space-heating systems
- Combined active solar space-heating and water-heating systems
- Solar hot water systems
- Wind turbines
- Closed-loop geothermal heat pumps
- Open-loop geothermal heat pumps
- Direct expansion (DX) geothermal heat pumps

In addition, Kentucky taxpayers may take a credit equal to \$3.00 per watt (DC) of rated capacity for the installation of a photovoltaic (PV) system. The maximum tax credit for geothermal technologies is \$250. Solar hot water and wind technologies have a maximum tax credit of \$500 if installed on a residential rental unit and \$1,000 for multi-family residential rental units or commercial property.

To be eligible, wind and solar hot water equipment must have a manufacturer’s warranty of five years or more. Solar hot water systems must also have an installer’s warranty of two years or more, and must use collectors certified by the Solar Rating and Certification Corporation (SRCC) under OG-100. Solar energy systems must be installed by a North American Board of Certified Energy Practitioners (NABCEP)-certified installer. PV panels and inverters must meet article 690 of the National Electrical Code (NEC) and be certified by Underwriters Laboratories (UL).

Wind turbines must meet the wind industry consensus standards developed by the American Wind Energy Association (AWEA) and U.S. Department of Energy. Wind turbines must also meet the requirements of article 705 of the NEC, and must be UL-certified. Geothermal systems must meet certain guidelines for their Energy Efficiency Ratio (EER) and Coefficient of Performance (COP).

The credit may be carried forward for one year. It is effective for taxable years 2009-2015.

Contact:



Taxpayer Services
 Kentucky Department of Revenue
 501 High Street
 Frankfort, KY 40620
 Phone: (502) 564-4581
 Fax: (502) 564-3875
 Web: <http://revenue.ky.gov>

3. Tax Credit for Renewable Energy Facilities

Incentive Type:	Corporate Tax Credit
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaic, Landfill Gas, Wind, Biomass, Hydroelectric
Applicable Sectors:	Commercial
Amount:	100% state income or limited liability tax 4% wage assessment
Maximum Incentive:	50% of capital investment
Carryover Provisions:	Negotiated incentive package may not exceed 25 years

Eligible System Size: 50 kW minimum for solar power, 1 MW minimum for wind power, biomass, landfill gas, hydropower or similar resource

Authority 1: [KRS § 154.27-010 et seq.](#)

Date Enacted: 08/30/2007

Date Effective: 01/01/2008

Summary:

In August 2007 Kentucky established the *Incentives for Energy Independence Act* to promote the development of renewable energy and alternative fuel* facilities, energy efficient buildings, alternative fuel vehicles, research & development activities and other energy initiatives. For renewable energy facilities, the bill provides incentives to companies that build or renovate facilities that utilize renewable energy, which may include:

- up to 100% of the Kentucky income tax or the limited liability entity tax;
- sales and use tax incentives of up to 100%;
- a wage assessment of up to 4% for associated employees

A renewable energy facility is defined as one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower or similar renewable resources. The electricity must be sold to an unrelated party. The minimum investment in any renewable energy facility must be \$1 million in capital expenditure which is defined to include various non-capital costs such as labor.

The tax credit allows approved facilities to receive a credit up to 100% of Kentucky income tax and the limited liability tax for projects that construct, retrofit or upgrade facilities that generate power from renewable resources.

In addition, companies may also receive a sales tax incentive of up to 100% of the Kentucky sales and use tax paid (on or after the activation date) on materials, machinery and equipment used to construct, retrofit or upgrade an eligible project.

Approved companies may also require that employees whose jobs were created as a result of the associated project, as a condition of employment, agree to pay a wage assessment of up to 4% of their gross wages. Employees will be allowed a Kentucky income tax credit equal to the assessment withheld from their wages.

The maximum recovery for a single project from all incentives, including the income and liability entity tax credit, sales tax refund and the wage assessment, may not exceed 50% of the capital investment. Prior to making any capital investments in a project, each eligible company must submit an application for incentives to the Kentucky Economic Development Finance Authority. Each incentive contract is negotiated on a case-by-case basis to determine the conditions and termination date of the project, not to exceed 25 years from the project's activation date.

* *Alternative transportation fuel and vehicle policy is outside the scope of DSIRE. For information on these policies, please visit the [U.S. Department of Energy's Alternative Fuels Data Center](#)*

Contact:



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500 Mero Street
Frankfort, KY 40601
Phone: (502) 564-7192
E-Mail: james.bush@ky.gov
Web: <http://www.energy.ky.gov>

B. Sales Tax Exemptions



1. Sales Tax Exemption for Large-Scale Renewable Energy Projects

Incentive Type:	Sales Tax Exemption
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaic, Landfill Gas, Wind, Biomass, Hydroelectric, similar renewable resources
Applicable Sectors:	Commercial
Amount:	100% of sales and use tax
Maximum Incentive:	50% of capital investment
Equipment Requirements:	>50 kW for solar power, >1 MW for wind power, biomass, landfill gas, hydropower or similar resource
Authority 1:	KRS § 154.27-010 et seq.
Date Enacted:	08/30/2007
Date Effective:	01/01/2008

Summary:

In August 2007 Kentucky established the *Incentives for Energy Independence Act* to promote the development of renewable energy and alternative fuel* facilities, energy efficient buildings, alternative fuel vehicles, research & development activities and other energy initiatives. For renewable energy facilities, the bill provides incentives to companies that build or renovate facilities that utilize renewable energy, which may include:

- up to 100% of the Kentucky income tax or the limited liability entity tax;
- a wage assessment of up to 4% for associated employees

A renewable energy facility is defined as one that generates at least 50 kW of electricity from solar power or at least 1 MW from wind power, biomass resources, landfill gas, hydropower or similar renewable resources. The electricity must be sold to an unrelated party. The minimum investment in any renewable energy facility must be \$1 million in capital expenditure which is defined to include various non-capital costs such as labor.

Companies may receive a sales tax incentive of up to 100% of the Kentucky sales and use tax paid (on or after the activation date) on materials, machinery and equipment used to construct, retrofit or upgrade an eligible project.

In addition the tax credit for renewable energy facilities allows approved facilities to receive a credit up to 100% of Kentucky income tax and the limited liability tax for projects that construct, retrofit or upgrade facilities that generate power from renewable resources.

Approved companies may also require that employees whose jobs were created as a result of the associated project, as a condition of employment, agree to pay a wage assessment of up to 4% of their gross wages. Employees will be allowed a Kentucky income tax credit equal to the assessment withheld from their wages.

The maximum recovery for a single project from all incentives, including the income and liability entity tax credit, sales tax refund and the wage assessment, may not exceed 50% of the capital investment. Prior to making any capital investments in a project, each eligible company must submit an application for incentives to the Kentucky Economic Development Finance Authority. Each incentive contract is negotiated on a case-by-case basis to determine the conditions and termination date of the project, not to exceed 25 years from the project's activation date.

* *Alternative transportation fuel and vehicle policy is outside the scope of DSIRE. For information on these policies, please visit the [U.S. Department of Energy's Alternative Fuels Data Center](#)*

Contact:



James Bush
Office of Energy Policy
Capital Plaza Tower, 12th Floor
500 Mero Street
Frankfort, KY 40601
Phone: (502) 564-7192
E-Mail: james.bush@ky.gov
Web: <http://www.energy.ky.gov>

2. Sales Tax Exemption for Manufacturing Facilities

Incentive Type:	Sales Tax Exemption
Eligible Efficiency Technologies:	Energy efficient manufacturing machinery and equipment
Applicable Sectors:	Industrial
Amount:	100% sales and use tax refund
Maximum Incentive:	50% of capital investment
Equipment Requirements:	Must reduce energy consumption by 15%
Authority 1:	KRS § 139.518
Date Effective:	07/01/2008

Summary:

In August 2007 Kentucky established the [Incentives for Energy Independence Act](#) to promote the development of renewable energy and alternative fuel facilities, energy efficient buildings, alternative fuel vehicles, research & development activities and other energy initiatives. This includes a sales tax exemption which allows manufacturers to apply for a refund for the amount of sales or use tax paid on the purchase of new or replacement equipment for an energy efficiency project. The project must decrease the measurable amount of energy used by the facility by at least 15% percent while maintaining or increasing the production for the same period.

The types of equipment that are allowable under this policy are not specified but **exclude** windows, lighting or other improvements to buildings and repair, replacement and spare parts. The manufacturer must file an application for preapproval with the Department of Revenue prior to purchasing new or replacement equipment, and should initiate the process with the [Kentucky Cabinet for Economic Development](#). This incentive applies to equipment purchased on or after July 1, 2008.

Contact:



Don Goodin
Kentucky Cabinet for Economic Development
Department of Financial Incentives
Old Capitol Annex
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Frankfort, KY 40601
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E-Mail: Don.Goodin@ky.gov
Web: <http://www.thinkkentucky.com>

C. Local Loan Programs



1. PADD Revolving Loan Fund (RLF)

Incentive Type:	Low Interest Loan
Use of Proceeds:	Land, Building, and Equipment, including energy efficiency and renewable energy technologies
Applicable Sectors:	Commercial & Industrial
Interest Rate:	Tied to Prime Rate
Eligible Companies:	Start-Up or Expanding
Maximum Incentive:	\$200,000 or 25% of the Project Cost
Min. Loan Amount / Cost per Job:	\$10,000 per job created
Payback Period:	Up to 25 years
Authority:	Public Works and Development Act (PWEDA) of 1965; Title IX Addition of 1974

Summary:

The purpose of the Revolving Loan Fund Program (RLF) is to finance business startups and expansions and community development projects in rural areas. The primary purpose is to create and maintain employment and to improve the economic climate in rural communities. The maximum RLF loan is generally \$200,000. While not initially designed to support investments in energy efficiency or renewable energy technologies, the program can be used to finance such projects if the applicant can show the creation or retention of employment.

Contact:



Purchase Area Development District
Business Lending & Development
1002 Medical Drive
Mayfield, KY 42066
Phone: (270) 251-6118
E-Mail: bizloans@purchaseadd.org
Web: <http://www.purchaseadd.org>

2. PADD Intermediary Relending Program (IRP)

Incentive Type:	Low Interest Loan
Use of Proceeds:	Land, Building, and Equipment, including energy efficiency and renewable energy technologies
Applicable Sectors:	Commercial & Industrial
Interest Rate:	Tied to Prime Rate
Eligible Companies:	Start-Up or Expanding
Maximum Incentive:	\$250,000 or 25% of the Project Cost
Min. Loan Amount / Cost per Job:	\$25,000 per job created
Payback Period:	Up to 25 years
Authority:	Health and Human Services Act of 1986, Section 407, Public Law 99-425, 7 U.S.C. 1932 note; Food Security Act of 1985, Section 1323, as amended, Public Law 99-198, 7 U.S.C. 1631; Community Economic Development Act of 1981, Section 623, as amended, Public Law 97-35, 42 U.S.C. 9812.

Summary:

The revolving loan funds are used to assist with financing business and economic development activity to create or retain jobs in disadvantaged and remote communities. Ultimate recipients may borrow up to \$250,000.

Who can apply for loan funds?

The following entities are generally eligible to apply for loans from intermediary lenders provided they owe no delinquent debt to the Federal Government:

- Individual citizens or individuals who have been legally admitted to the U.S.,
- Those located in a rural area defined as an area with a population of 25,000 or less,
- An entity that is able to incur debt, give security, and repay the loan,
- A corporation, partnership, LLC, individual, non-profit corporation, public body.

What types of projects are eligible?

IRP funding may be used for a number of purposes but to be eligible, ultimate recipients must be located in a rural area. Under the IRP, a rural area is any area that is not inside a city with a population of 25,000 or more according to the latest decennial census. Some examples of eligible projects are:

- The acquisition, construction, conversion, enlargement, or repair of a business or business facility, particularly when jobs will be created or retained.
- The purchase or development of land (easements, rights of way, buildings, facilities, leases, materials)
- The purchase of equipment, (leasehold) improvements, machinery, supplies; includes investments in energy efficiency and renewable energy technologies (if applicant can show employment retention and/or creation)
- Pollution control and abatement
- Transportation Services
- Feasibility studies

Contact:



Purchase Area Development District
Business Lending & Development
1002 Medical Drive
Mayfield, KY 42066
Phone: (270) 251-6118
E-Mail: bizloans@purchaseadd.org
Web: <http://www.purchaseadd.org>

D. Production Incentives



1. TVA - Green Power Switch Generation Partners Program

Incentive Type: Production Incentive
Eligible Renewable/Other Technologies: Photovoltaic, Landfill Gas, Wind, Biomass, Municipal Solid Waste, Small Hydroelectric
Applicable Sectors: Commercial, Residential
Amount: \$1000 plus \$0.12/kWh above the retail rate for solar and \$0.03/kWh above the retail rate for all other eligible renewable energies
Maximum Incentive: None specified
Web Site: <http://www.gpsgenpartners.com>

Summary:

Tennessee Valley Authority (TVA), through participating TVA power companies, offers a production-based incentive program for the installation of solar photovoltaic (PV), wind, low-impact hydropower, and biomass to customers of the Tennessee Valley called Green Power Switch Generation Partners. The energy generated from participating projects is counted towards the green power resources for TVA's green pricing program, Green Power Switch.

TVA purchases the entire output of a qualifying system at \$0.12 per kilowatt-hour (kWh) above the retail rate for solar and \$0.03/kWh above the retail rate for all other eligible renewables. TVA retains sole rights to any renewable energy credits. The power is purchased through a participating power company and payment is made in the form of a credit issued by the local power company on the monthly power bill for the home or business where the generation system is located. If a system produces more electricity than it consumes, payment for the excess generation will be issued either monthly or annually, at the discretion of the power company. All new participants in the Generation Partners program will receive a \$1000 incentive to offset the upfront cost of the system.

The installed capacity goal for the entire program is 200 megawatts (MW). The production incentive is available for a minimum of 10 years from the signing of the contract, regardless of the amount produced. Systems must have a minimum output of 500 watts AC and a maximum output of 999 kilowatts. Installations must also comply with local codes and adhere to guidelines established by the program. All equipment must be in compliance with environmental regulations and national standards, certified by a licensed electrician, and meet all applicable codes. Systems are dual-metered and must have an external disconnect switch, must complete an interconnection agreement, and be grid-tied.

As of March 2009, there were 71 distributors in seven states participating in the Generation Partners program; participation is at the discretion of the power company. For a current list of power companies participating in the program, refer to the Green Power Switch Generation Partners program [web site](#).

Contact:



Tennessee Valley Authority
400 W. Summit Hill Dr.
Knoxville, TN 37902-1499
Phone: (865) 632-2101
E-Mail: tvainfo@tva.com
Web: <http://www.tva.com>
Web: <http://www.gpsgenpartners.com>

E. Utility Loan Programs 

... Currently no programs available for our region.

F. Utility Rebate Programs 

... Currently no programs available for our region.

Federal Incentives and Policies

A. Corporate Deduction / Depreciation / Exemption



1. Energy Efficient Commercial Buildings Tax Deduction

Incentive Type:	Corporate Deduction
Eligible Efficiency Technologies:	Equipment Insulation, Water Heaters, Lighting, Lighting Controls / Sensors, Chillers, Furnaces, Boilers, Heat pumps, Air conditioners, CHP / Cogeneration, Caulking / Weather-stripping, Duct / Air sealing, Building Insulation, Windows, Doors, Siding, Roofs, Comprehensive Measures / Whole Building
Applicable Sectors:	Commercial, Construction, State Government, Fed. Government, (Deductions associated with government buildings are transferred to the designer)
Amount:	\$0.30-\$1.80 per square foot, depending on technology and amount of energy reduction
Maximum Incentive:	\$1.80 per square foot
Equipment Requirements:	Must meet certification requirements
Web Site:	http://www.efficientbuildings.org
Authority 1:	26 USC § 179D
Date Enacted:	08/08/2005 (Amended 2008)
Date Effective:	01/01/2006
Expiration Date:	12/31/2013
Authority 2:	H.R. 1424: Div. B, Sec. 303 (The Energy Improvement and Extension Act of 2008)
Date Enacted:	10/03/2008
Expiration Date:	12/31/2013

Summary:

The federal Energy Policy Act of 2005 established a tax deduction for energy-efficient commercial buildings applicable to qualifying systems and buildings placed in service from January 1, 2006, through December 31, 2007. This deduction was subsequently extended through 2008, and then again through 2013 by Section 303 of the federal Energy Improvement and Extension Act of 2008 (H.R. 1424, Division B), enacted in October 2008.

A tax deduction of \$1.80 per square foot is available to owners of new or existing buildings who install (1) interior lighting; (2) building envelope, or (3) heating, cooling, ventilation, or hot water systems that reduce the building's total energy and power cost by 50% or more in comparison to a building meeting minimum requirements set by ASHRAE Standard 90.1-2001.

Energy savings must be calculated using qualified computer software approved by the IRS. Click [here](#) for the list of approved software.

Deductions of \$0.60 per square foot are available to owners of buildings in which individual lighting, building envelope, or heating and cooling systems meet target levels that would reasonably contribute to an overall building savings of 50% if additional systems were installed.

The deductions are available primarily to building owners, although tenants may be eligible if they make construction expenditures. In the case of energy efficient systems installed on or in government property, tax deductions will be given to the person primarily responsible for the systems' design. Deductions are taken in the year when construction is completed.

The IRS released interim guidance ([IRS Notice 2006-52](#)) in June 2006 to establish a process to allow taxpayers to obtain a certification that the property satisfies the energy efficiency requirements contained in the statute. [IRS Notice 2008-40](#) was issued in March of 2008 to further clarify the rules. NREL published a report ([NREL/TP-550-40228](#)) in February 2007 which provides guidelines for the modeling and inspection of energy savings required by the statute.

Click [here](#) for answers to frequently asked questions provided by the *Commercial Building Tax Deduction Coalition*. For more information, visit the [Energy Star Web site](#).

Contact:



Public Information – IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
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Phone: (800) 829-1040
Web: <http://www.irs.gov>

2. Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation (2008-2009)

Incentive Type: Corporate Depreciation
Eligible Renewable/Other Technologies: Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaic, Landfill Gas, Wind, Biomass, Renewable Transportation Fuels, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Solar Hybrid Lighting, Direct Use Geothermal, Anaerobic Digestion, Micro-turbines
Applicable Sectors: Commercial, Industrial
Authority 1: [26 USC § 168](#)
Date Effective: 1986
Authority 2: [26 USC § 48](#)

Summary:

Under the federal Modified Accelerated Cost-Recovery System (MACRS), businesses may recover investments in certain property through depreciation deductions. The MACRS establishes a set of class lives for various types of property, ranging from three to 50 years, over which the property may be depreciated. A number of renewable energy technologies are classified as five-year property (26 USC § 168(e)(3)(B)(vi)) under the MACRS, which refers to 26 USC § 48(a)(3)(A), often known as the energy investment tax credit or ITC to define eligible property.

Such property currently includes:

- a variety of solar electric and solar thermal technologies
- fuel cells and micro-turbines
- geothermal electric
- direct-use geothermal and geothermal heat pumps
- small wind (100 kW or less)
- Combined heat and power (CHP).
- The provision which defines ITC technologies as eligible also adds the general term "wind" as an eligible technology, extending the five-year schedule to large wind facilities as well.

In addition, for certain other biomass property, the MACRS property class life is seven years. Eligible biomass property generally includes assets used in the conversion of biomass to heat or to a solid, liquid or gaseous fuel, and to equipment and structures used to receive, handle, collect and process biomass in a water-wall, combustion system, or refuse-derived fuel system to create hot water, gas, steam and electricity.

The 5-year schedule for most types of solar, geothermal, and wind property has been in place since 1986. The federal Energy Policy Act of 2005 (EPAct 2005) classified fuel cells, micro-turbines and solar hybrid lighting technologies as five-year property as well by adding them to § 48(a)(3)(A). This section was further expanded in October 2008 by the addition of geothermal heat pumps, combined heat and power, and small wind under The Energy Improvement and Extension Act of 2008.

The federal Economic Stimulus Act of 2008, enacted in February 2008, included a 50% bonus depreciation (26 USC § 168(k)) provision for eligible renewable-energy systems acquired and placed in service in 2008. This provision was extended (retroactively to the entire 2009 tax year) under the same terms by [The American Recovery and Reinvestment Act of 2009](#) enacted in February 2009. To qualify for bonus depreciation, a project must satisfy these criteria:

- The property must have a recovery period of 20 years or less under normal federal tax depreciation rules;
- The original use of the property must commence with the taxpayer claiming the deduction;
- The property generally must have been acquired during 2008 or 2009; and
- The property must have been placed in service during 2008 or 2009 (or, in certain limited cases, in 2010).

If property meets these requirements, the owner is entitled to deduct 50% of the adjusted basis of the property in 2008 and 2009. The remaining 50% of the adjusted basis of the property is depreciated over the ordinary depreciation schedule. The bonus depreciation rules do not override the depreciation limit applicable to projects qualifying for the federal business energy tax credit. Before calculating depreciation for such a project, including any bonus depreciation, the adjusted basis of the project must be reduced by one-half of the amount of the energy credit for which the project qualifies.

For more information on the federal MACRS, see *IRS Publication 946, IRS Form 4562: Depreciation and Amortization, and Instructions for Form 4562*. The [IRS web site](#) provides a search mechanism for forms and publications. Enter the relevant form, publication name or number, and click "GO" to receive the requested form or publication.

* *Note that the definitions of eligible technologies included in this entry are somewhat simplified versions of those contained in tax code, which often contain additional caveats, restrictions, and modifications. Those interested in this incentive should review the relevant sections of the code in detail prior to making business decisions.*

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3. Residential Energy Conservation Subsidy Exclusion (Corporate)

Incentive Type:	Corporate Exemption
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Photovoltaic
Applicable Sectors:	Residential, Multi-Family Residential
Amount:	100% of the subsidy
Terms:	Applies to energy conservation measures on dwelling units only
Web Site:	http://www.irs.gov/publications/p525/index.html
Authority 1:	26 USC § 136

Summary:

According to Section 136 of the IRS Code, energy conservation subsidies provided by public utilities,* either directly or indirectly, are nontaxable: "Gross income shall not include the value of any subsidy provided (directly or indirectly) by a public utility to a customer for the purchase or installation of any energy conservation measure."

The term "energy conservation measure" includes installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. Eligible dwelling units include houses, apartments, condominiums, mobile homes, boats and similar properties. If a building or structure contains both dwelling and other units, any subsidy must be properly allocated.

Given the definition of "energy conservation measure," there is strong evidence that utility rebates for residential solar thermal and solar electric projects may be nontaxable. However, the IRS has not ruled definitively on this issue. For taxpayers considering using this provision for renewable energy systems, consultation with a tax attorney is advised.

Other types of utility subsidies that may come in the form of credits or reduced rates may also be nontaxable, according to IRS Publication 525:

"Utility rebates. If you are a customer of an electric utility company and you participate in the utility's energy conservation program, you may receive on your monthly electric bill either: a reduction in the purchase price of electricity furnished to you (rate reduction), or a nonrefundable credit against the purchase price of the electricity. The amount of the rate reduction or nonrefundable credit is not included in your income."

* *The term "public utility" is defined as an entity "engaged in the sale of electricity or natural gas to residential, commercial, or industrial customers for use by such customers." The term includes federal, state and local government entities.*

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B. Corporate Tax Credits



1. Business Energy Investment Tax Credit (ITC)

Incentive Type:	Corporate Tax Credit
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaic, Wind, Biomass, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, CHP / Cogeneration, Solar Hybrid Lighting, Direct Use Geothermal, Micro-turbines
Applicable Sectors:	Commercial, Industrial, Utility
Amount:	30% for solar, fuel cells and small wind; 10% for geothermal, micro-turbines and CHP
Maximum Incentive:	Fuel cells: \$1,500 per 0.5 kW Micro-turbines: \$200 per kW Small wind turbines placed in service 10/4/08 - 12/31/08: \$4,000 Small wind turbines placed in service after 12/31/08: no limit
Eligible System Size:	All other eligible technologies: no limit Small wind turbines: 100 kW or less Fuel cells: 0.5 kW or greater Micro-turbines: 2 MW or less CHP: 50 MW or less
Equipment/Installation Requirements:	Fuel cells, micro-turbines and CHP systems must meet specific energy-efficiency criteria
Authority 1:	26 USC § 48

Summary:

Note: The American Recovery and Reinvestment Act of 2009 (H.R. 1) allows taxpayers eligible for the federal [renewable electricity production tax credit \(PTC\)](#) to take the federal business energy investment tax credit (ITC) or to receive a [grant](#) from the U.S. Treasury Department instead of taking the PTC for new installations. The new law also allows taxpayers eligible for the business ITC to receive a [grant](#) from the U.S. Treasury Department instead of taking the business ITC for new installations.

The federal business energy investment tax credit available under 26 USC § 48 was expanded significantly by the [Energy Improvement and Extension Act of 2008](#) (H.R. 1424), enacted in October 2008. This law extended the duration -- by eight years -- of the existing credits for solar energy, fuel cells and micro-turbines; increased the credit amount for fuel cells; established new credits for small wind-energy systems, geothermal heat pumps, and combined heat and power (CHP) systems; extended eligibility for the credits to utilities; and allowed taxpayers to take the credit against the alternative minimum tax (AMT), subject to certain limitations. The credit was further expanded by [The American Recovery and Reinvestment Act of 2009](#), enacted in February 2009.

In general, credits are available for eligible systems placed in service on or before December 31, 2016:*

- **Solar.** The credit is equal to 30% of expenditures, with no maximum credit. Eligible solar energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible. (Passive solar systems and solar pool-heating systems are *not* eligible.)

- **Fuel Cells.** The credit is equal to 30% of expenditures, with no maximum credit. However, the credit for fuel cells is capped at \$1,500 per 0.5 kilowatt (kW) of capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher. (Note that the credit for property placed in service before October 4, 2008, is capped at \$500 per 0.5 kW.)
- **Small Wind Turbines.** The credit is equal to 30% of expenditures, with no maximum credit for small wind turbines placed in service after December 31, 2008. Eligible small wind property includes wind turbines up to 100 kW in capacity. (In general, the maximum credit is \$4,000 for eligible property placed in service after October 3, 2008, and before January 1, 2009. *The American Recovery and Reinvestment Act of 2009* removed the \$4,000 maximum credit limit for small wind turbines.)
- **Geothermal Systems.** The credit is equal to 10% of expenditures, with no maximum credit limit stated. Eligible geothermal energy property includes geothermal heat pumps and equipment used to produce, distribute or use energy derived from a geothermal deposit. For electricity produced by geothermal power, equipment qualifies only up to, but not including, the electric transmission stage. For geothermal heat pumps, this credit applies to eligible property placed in service after October 3, 2008
- **Micro-turbines.** The credit is equal to 10% of expenditures, with no maximum credit limit stated (explicitly). The credit for micro-turbines is capped at \$200 per kW of capacity. Eligible property includes micro-turbines up to two megawatts (MW) in capacity that have an electricity-only generation efficiency of 26% or higher.
- **Combined Heat and Power (CHP).** The credit is equal to 10% of expenditures, with no maximum limit stated. Eligible CHP property generally includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the credit may be reduced for less-efficient systems. This credit applies to eligible property placed in service after October 3, 2008.

In general, the original use of the equipment must begin with the taxpayer, or the system must be constructed by the taxpayer. The equipment must also meet any performance and quality standards in effect at the time the equipment is acquired. The energy property must be operational in the year in which the credit is first taken.

Significantly, *The American Recovery and Reinvestment Act of 2009* repealed a previous limitation on the use of the credit for eligible projects also supported by "subsidized energy financing." For projects placed in service after December 31, 2008, this limitation no longer applies. Businesses that receive other incentives are advised to consult with a tax professional regarding how to calculate this federal tax credit.

History

The federal [Energy Policy Act of 2005](#) (EPAAct 2005) expanded the existing federal business energy tax credit for solar and geothermal energy property to include fuel cells, micro-turbines and hybrid solar lighting systems installed on or after January 1, 2006, and raised the credit for solar to 30%. Prior to the provisions of EPAAct 2005, a 10% credit was available to businesses that invested in or purchased solar or geothermal energy property.

* *Note that the credit for geothermal property, with the exception of geothermal heat pumps, has no stated expiration date. The credit for solar energy property reverts to 10% after December 31, 2016.*

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2. Energy Efficient Appliance Tax Credit for Manufacturers

Incentive Type:	Corporate Tax Credit
Eligible Efficiency Technologies:	Clothes Washers / Dryers, Dishwasher, Refrigerators / Freezers
Applicable Sectors:	Industrial, Appliance Manufacturers
Amount:	Dishwashers: \$45 or \$75 per unit, varies by energy and water efficiency; Clothes washers: \$75 - \$250 per unit, varies by type, and energy and water efficiency; Refrigerators: \$50 - \$200, depending on energy efficiency rating
Maximum Incentive:	The aggregate amount of credit allowed is \$75 million per taxpayer. Certain refrigerators and clothes washers will not add to the aggregate credit amount. See summary below for more details.
Carryover Provisions:	Not specified
Equipment/Installation Requirements:	Appliances must meet Energy Star 2007 requirements; must be new and in compliance with all applicable performance and safety standards
Authority 1:	26 USC § 45M
Date Enacted:	08/08/2005
Date Effective:	01/01/2006
Expiration Date:	12/31/2007
Authority 2:	H.R. 1424: Div. B, Sec. 305 (The Energy Improvement and Extension Act of 2008)
Date Enacted:	10/03/2008
Date Effective:	01/01/2007
Expiration Date:	Varies by appliance and efficiency level

Summary:

The Energy Policy Act of 2005 established tax credits for manufacturers of high-efficiency residential clothes washers, refrigerators, and dishwashers produced in calendar years 2006 and 2007. The Energy Improvement and Extension Act of 2008 (H.R. 1424, Division B) extended the credits for additional years depending on the efficiency rating of the manufactured appliance. Manufacturers only receive these credits for the increase in production of qualifying appliances over a two-year rolling baseline, and only appliances produced in the United States are eligible.

Credits available to manufacturers are as follows:

Dishwashers

- \$45 for models manufactured in calendar year 2008 or 2009 which use no more than 324 kilowatt hours (kWh) per year and 5.8 gallons per cycle.
- \$75 for models manufactured in calendar year 2008, 2009, or 2010 which use no more than 307 kWh per year and 5.5 gallons per cycle.

Clothes Washers

- \$75 for residential top-loading models manufactured in 2008 which meet or exceed a 1.72 modified energy factor (MEF) and do not exceed a 8.0 water consumption factor (WCF).
- \$125 for residential top-loading models manufactured in 2008 or 2009 which meet or exceed a 1.8 MEF and do not exceed a 7.5 WCF.
- \$150 for a residential or commercial model manufactured in 2008, 2009, or 2010 which meet or exceed a 2.0 MEF and does not exceed a 6.0 WCF.
- \$250 for residential or commercial models manufactured in 2008, 2009, or 2010 which meet or exceed a 2.2 MEF and do not exceed a 4.5 WCF.

Refrigerators

- \$50 for models manufactured in 2008 which are between 20% and 22.9% more efficient than the 2001 energy conservation standards.
- \$75 for models manufactured in 2008 or 2009 which are between 23% and 24.9% more efficient than the 2001 energy conservation standards.
- \$100 for models manufactured in 2008, 2009, or 2010 which are between 25% and 29.9% more efficient than the 2001 energy conservation standards.
- \$200 for models manufactured in 2008, 2009, or 2010 which are at least 30% more efficient than the 2001 energy conservation standards.

Each manufacturer is limited to a total of \$75 million for all credits under this provision. However, refrigerators manufactured in 2008, 2009, or 2010 which consume at least 30% less energy than the 2001 energy conservation standards will not add to the aggregate credit amount and have no separate credit limit.

Residential and commercial clothes washers manufactured in 2008, 2009 or 2010 which meet or exceed a 2.2 MEF and do not exceed a 4.5 WCF also will not add to the aggregate limit and have no separate credit limit. The 2007 IRS Form 8909 is available [here](#). For more information on qualifying products, visit the [Energy Star Web site](#).

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3. Energy-Efficient New Homes Tax Credit for Home Builders

Incentive Type:	Corporate Tax Credit
Eligible Efficiency Technologies:	Comprehensive Measures / Whole Building
Applicable Sectors:	Construction
Amount:	\$1,000 - \$2,000, depending on savings / home type
Maximum Incentive:	\$2,000
Web Site:	http://www.irs.gov/businesses/small/industries/article/0,,id=155445,00.html
Authority 1:	26 USC § 45L
Date Enacted:	08/08/2005 (Amended 2008)
Date Effective:	01/01/2006
Expiration Date:	12/31/2009
Authority 2:	H.R. 1424: Div. B, Sec. 304 (The Energy Improvement and Extension Act of 2008)
Date Enacted:	10/03/2008
Expiration Date:	12/31/2009

Summary:

The federal Energy Policy Act of 2005 established tax credits of up to \$2,000 for builders of all new energy-efficient homes, including manufactured homes constructed in accordance with the Federal Manufactured Homes Construction and Safety Standards. Initially scheduled to expire at the end of 2007, the tax credit was extended through 2008 by Section 205 of the [Tax Relief and Health Care Act of 2006 \(H.R. 6111\)](#), and then extended again through December 31, 2009 by Section 304 of [The Energy Improvement and Extension Act of 2008 \(H.R. 1424\)](#).

The home qualifies for the credit if:

- It is located in the United States;
- Its construction is substantially completed after August 8, 2005;
- It meets the energy saving requirements outlined in the statute; and
- It is acquired from the eligible contractor after December 31, 2005, and before January 1, 2010, for use as a residence.

Energy Saving Requirements

Site-built homes qualify for a \$2,000 credit if they are certified to reduce heating and cooling energy consumption by 50% relative to the International Energy Conservation Code standard and meet minimum efficiency standards established by the Department of Energy. Building envelope component improvements must account for at least one-fifth of the reduction in energy consumption.

Manufactured homes qualify for a \$2,000 credit if they conform to Federal Manufactured Home Construction and Safety Standards and meet the energy savings requirements of site-built homes described above.

Manufactured homes qualify for a \$1,000 credit if they conform to Federal Manufactured Home Construction and Safety Standards and reduce energy consumption by 30% relative to the International Energy Conservation Code standard. In this case, building envelope component improvements must account for at least one-third of the reduction in energy consumption. Alternatively, manufactured homes qualify if they meet Energy Star Labeled Homes requirements.

Certification

The Internal Revenue Service (IRS) has issued guidance to provide information about the certification process that a builder must complete to qualify for the credit. The guidance also provides for a public list of software programs that may be used in calculating energy consumption for purposes of obtaining a certification.

[IRS Notice 2006-27](#) provides guidance for the credit for building energy-efficient homes other than manufactured homes. [IRS Notice 2006-28](#) provides guidance for the credit for building energy-efficient manufactured homes. Click [here](#) to access IRS Form 8908: Energy Efficient Home Credit.

For more information on this and other energy efficiency tax credits, visit the Energy Star [web site](#).

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4. Renewable Electricity Production Tax Credit (PTC)

Incentive Type:	Corporate Tax Credit
Eligible Renewable/Other Technologies:	Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power (i.e., Flowing Water), Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Commercial, Industrial
Amount:	2.1¢/kWh for wind, geothermal, closed-loop biomass; 1.0¢/kWh for other eligible technologies. Generally applies to first 10 years of operation.
Eligible System Size:	Marine and Hydrokinetic: Minimum capacity of 150 kW Agricultural Livestock Waste: Minimum capacity of 150 kW
Web Site:	http://www.irs.gov/pub/irs-pdf/f8835.pdf
Authority 1:	26 USC § 45
Date Enacted:	1992

Summary:

Note: The American Recovery and Reinvestment Act of 2009 (H.R. 1) allows taxpayers eligible for the federal renewable electricity production tax credit (PTC) to take the federal [business energy investment tax credit \(ITC\)](#) or to receive a [grant](#) from the U.S. Treasury Department instead of taking the PTC for new installations. The new law also allows taxpayers eligible for the business ITC to receive a [grant](#) from the U.S. Treasury Department instead of taking the business ITC for new installations.

The federal renewable electricity production tax credit (PTC) is a per-kilowatt-hour tax credit for electricity generated by qualified energy resources and sold by the taxpayer to an unrelated person during the taxable year. Originally enacted in 1992, the PTC has been renewed and expanded numerous times, most recently by [H.R. 1424 \(Div. B, Sec. 101 & 102\)](#) in October 2008 and again by [H.R. 1 \(Div. B, Section 1101 & 1102\)](#) in February 2009.

The October 2008 legislation extended the in-service deadlines for all qualifying renewable technologies; expanded the list of qualifying resources to include marine and hydrokinetic resources, such as wave, tidal, current and ocean thermal; and made changes to the definitions of several qualifying resources and facilities. The effective dates of these changes vary.

Marine and hydrokinetic energy production is eligible as of the date the legislation was enacted (October 3, 2008), as is the incremental energy production associated with expansions of biomass facilities. A change in the definition of "trash facility" no longer requires that such facilities burn trash, and is also effective immediately. One further provision redefining the term "non-hydroelectric dam," took effect December 31, 2008.

The February 2009 legislation revised the credit by: (1) extending the in-service deadline for most eligible technologies by three years (two years for marine and hydrokinetic resources); and (2) allowing facilities that qualify for the PTC to opt instead to take the federal business energy investment credit (ITC) or an equivalent cash grant from the U.S. Department of Treasury. The ITC or grant for PTC-eligible technologies is generally equal to 30% of eligible costs.*

The tax credit amount is 1.5¢/kWh in 1993 dollars (indexed for inflation) for some technologies and half of that amount for others. The rules governing the PTC vary by resource and facility type. The table below outlines two of the most important characteristics of the tax credit -- in-service deadline and credit amount -- as they apply to different facilities. The table includes changes made by H.R. 1, in February 2009, and the inflation-adjusted credit amounts are current for the 2008 tax year. (See the history section below for information on prior rules.)

Resource Type	In-Service Deadline	Credit Amount
Wind	December 31, 2012	2.1¢/kWh
Closed-Loop Biomass	December 31, 2013	2.1¢/kWh
Open-Loop Biomass	December 31, 2013	1.0¢/kWh
Geothermal Energy	December 31, 2013	2.1¢/kWh
Landfill Gas	December 31, 2013	1.0¢/kWh
Municipal Solid Waste	December 31, 2013	1.0¢/kWh
Qualified Hydroelectric	December 31, 2013	1.0¢/kWh
Marine and Hydrokinetic (150 kW or larger)**	December 31, 2013	1.0¢/kWh

The duration of the credit is generally 10 years after the date the facility is placed in service, but there are two exceptions:

- Open-loop biomass, geothermal, small irrigation hydro, landfill gas and municipal solid waste combustion facilities placed into service after October 22, 2004, and before enactment of the *Energy Policy Act of 2005*, on August 8, 2005, are only eligible for the credit for a five-year period.
- Open-loop biomass facilities placed in service before October 22, 2004, are eligible for a five-year period beginning January 1, 2005.

In addition, the tax credit is reduced for projects that receive other federal tax credits, grants, tax-exempt financing, or subsidized energy financing. The credit is claimed by completing [Form 8835](#), "Renewable Electricity Production Credit," and [Form 3800](#), "General Business Credit." For more information, contact IRS Telephone Assistance for Businesses at 1-800-829-4933.

History

As originally enacted by the *Energy Policy Act of 1992*, the PTC expired at the end of 2001, and was subsequently extended in March 2002 as part of the *Job Creation and Worker Assistance Act of 2002* (H.R. 3090). The PTC then expired at the end of 2003 and was not renewed until October 2004, as part of H.R. 1308, the *Working Families Tax Relief Act of 2004*, which extended the credit through December 31, 2005. The *Energy Policy Act of 2005* (H.R. 6) modified the credit and extended it through December 31, 2007. In December 2006, the PTC was extended for yet another year -- through December 31, 2008 -- by the *Tax Relief and Health Care Act of 2006* (H.R. 6111).

The American Jobs Creation Act of 2004 (H.R. 4520), expanded the PTC to include additional eligible resources -- geothermal energy, open-loop biomass, solar energy, small irrigation power, landfill gas and municipal solid waste combustion -- in addition to the formerly eligible wind energy, closed-loop biomass, and poultry-waste energy resources. The *Energy Policy Act of 2005* (EPAct 2005) further expanded the credit to certain hydropower facilities. As a result of EPAct 2005, solar facilities placed into service after December 31, 2005, are no longer eligible for this incentive. Solar facilities placed in-service during the roughly one-year window in which solar was eligible are permitted to take the full credit (i.e., 2.1¢/kWh) for five years.

* Prior to H.R. 1, geothermal facilities were already eligible for a 10% tax credit under the energy ITC. It is not clear at this time if geothermal electric facilities will be eligible for a 10% tax credit, as defined by the ITC rules, or the full 30% tax credit now available for PTC eligible technologies in general.

** H.R. 1424 added marine and hydrokinetic energy as eligible resources and removed "small irrigation power" as an eligible resource effective October 3, 2008. However, the definition of marine and hydrokinetic energy encompasses the resources that would have formerly been defined as small irrigation power facilities. Thus H.R. 1424 effectively extended the in-service deadline for small irrigation power facilities by 3 years, from the end of 2008 until the end of 2011 (since extended again through 2013).

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C. Federal Grant Programs

1. Tribal Energy Program Grant

Incentive Type: Federal Grant Program
Eligible Renewable/Other Technologies: Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaic, Wind, Biomass, Hydroelectric, Geothermal Electric, Geothermal Heat Pumps
Applicable Sectors: Tribal Government
Amount: Varies by solicitation
Max. Limit: Varies by solicitation
Web Site: <http://www.eere.energy.gov/tribalenergy>

Summary:

The U.S. Department of Energy's (DOE) Tribal Energy Program promotes tribal energy sufficiency, economic growth and employment on tribal lands through the development of renewable energy and energy efficiency technologies. The program provides financial assistance, technical assistance, education and training to tribes for the evaluation and development of renewable energy resources.

DOE's Tribal Energy Program consists of program management through DOE headquarters, program implementation and project management through DOE's field offices, and technical support through DOE laboratories. Program management for the Tribal Energy Program is carried out by DOE's Weatherization and Intergovernmental Program, which provides programmatic direction and funding to DOE field offices for program implementation. DOE's field offices, specifically the Golden Field Office, issue solicitations and manage resulting projects.

Program funding is awarded through a competitive process. Click [here](#) to view current program funding opportunities.

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2. U.S. Department of Treasury - Renewable Energy Grants

Incentive Type:	Federal Grant Program
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaic, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Municipal Solid Waste, CHP / Cogeneration, Solar Hybrid Lighting, Hydrokinetic, Tidal Energy, Wave Energy, Ocean Thermal, Micro-turbines
Applicable Sectors:	Commercial, Industrial, Agricultural
Amount:	30% of property that is part of a qualified facility, qualified fuel cell property, solar property, or qualified small wind property 10% of all other property
Max. Limit:	\$1,500 per 0.5 kW for qualified fuel cell property \$200 per kW for qualified micro-turbine property 50 MW for CHP property, with limitations for large systems
Terms:	Grant applications must be submitted by 10/1/2011. Payment of grant will be made within 60 days of the grant application date or the date property is placed in service, whichever is later.
Web Site:	http://www.treas.gov/recovery
Authority 1:	H.R. 1: Div. B, Sec. 1104 & 1603 (The American Recovery and Reinvestment Act of 2009)
Date Enacted:	02/17/2009
Date Effective:	01/01/2009

Summary:

Note: The American Recovery and Reinvestment Act of 2009 (H.R. 1) allows taxpayers eligible for the federal [business energy investment tax credit](#) (ITC) to take this credit or to receive a grant from the U.S. Treasury Department instead of taking the business ITC for new installations.

The new law also allows taxpayers eligible for the [renewable electricity production tax credit](#) (PTC) to receive a grant from the U.S. Treasury Department instead of taking the PTC for new installations. (It does not allow taxpayers eligible for the [residential renewable energy tax credit](#) to receive a grant instead of taking this credit.) Taxpayers may not use more than one of these incentives.

If an entity receives a grant and has previously received the business ITC or the PTC, the credit will be recaptured through an increase in taxes during the year in which the grant is awarded by the amount of the credit taken in previous years. Receiving a credit in the past does not reduce the amount of the grant. The grant is not included in the gross income of the taxpayer.

The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, created a renewable energy grant program that will be administered by the U.S. Department of Treasury. This cash grant may be taken in lieu of the federal business energy investment tax credit (ITC).

Grants are available to eligible property* placed in service in 2009 or 2010, or placed in service by the specified credit termination date,** if construction began in 2009 or 2010:

- **Solar.** The grant is equal to 30% of the basis of the property for solar energy. Eligible solar-energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Passive solar systems and solar pool-heating systems are *not* eligible. Hybrid solar-lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible.
- **Fuel Cells.** The grant is equal to 30% of the basis of the property for fuel cells. The grant for fuel cells is capped at \$1,500 per 0.5 kilowatt (kW) in capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher.
- **Small Wind Turbines.** The grant is equal to 30% of the basis of the property for small wind turbines. Eligible small wind property includes wind turbines up to 100 kW in capacity.
- **Qualified Facilities.** The grant is equal to 30% of the basis of the property for qualified facilities. Qualified facilities include wind energy facilities, closed-loop biomass facilities, open-loop biomass facilities, geothermal energy facilities, landfill gas facilities, trash facilities, qualified hydropower facilities, and marine and hydrokinetic renewable energy facilities.
- **Geothermal Heat Pumps.** The grant is equal to 10% of the basis of the property for geothermal heat pumps.
- **Micro-turbines.** The grant is equal to 10% of the basis of the property for micro-turbines. The grant for micro-turbines is capped at \$200 per kW of capacity. Eligible property includes micro-turbines up to two megawatts (MW) in capacity that have an electricity-only generation efficiency of 26% or higher.
- **Combined Heat and Power (CHP).** The grant is equal to 10% of the basis of the property for CHP. Eligible CHP property generally includes systems up to 50 MW in capacities that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the grant may be reduced for less-efficient systems.

It is important to note that only tax-paying entities are eligible for this grant. Federal, state and local government bodies, non-profits, qualified energy tax credit bond lenders, and cooperative electric companies are not eligible to receive this grant.

Partners or pass-thru entities for the organizations described above are also not eligible to receive this grant. Grant applications must be submitted by October 1, 2011. The U.S. Treasury Department will make payment of the grant within 60 days of the grant application date or the date the property is placed in service, whichever is later.

The U.S. Department of Treasury has not yet released guidelines and is not accepting applications currently for this grant. It is expected that guidelines will be released by July 2009.

* *Definitions of eligible property types and renewable technologies can be found in the U.S. Code, Title 26, § 45 and § 48.*

** *Credit termination date of January 1, 2013 for wind; January 1, 2014 for closed-loop biomass, open-loop biomass, landfill gas, trash, qualified hydropower, marine and hydrokinetic; January 1, 2017 for fuel cells, small wind, solar, geothermal, micro-turbines, CHP and geothermal heat pumps.*

Contact:



Grant Information
U.S. Department of Treasury
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Washington, DC 20220
Phone: (202) 622-2000
Fax: (202) 622-6415
E-Mail: 1603Questions@do.treas.gov
Web: <http://www.treasury.gov>

3. USDA - Rural Energy for America Program (REAP) Grants

Incentive Type: Federal Grant Program
Eligible Efficiency Technologies: Yes; specific technologies not identified
Eligible Renewable/Other Technologies: Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaic, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP / Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels, Micro-turbines
Applicable Sectors: Commercial, Schools, Local Government, State Government, Tribal Government, Rural Electric Cooperative, Agricultural, Public Power Entities
Amount: Varies
Max. Limit: 25% of project cost
Web Site: <http://www.rurdev.usda.gov/rbs/busp/bprogs.htm>
Authority 1: [7 USC § 8106](#)
Date Enacted: 05/13/2002
Date Effective: FY 2003

Summary:

The Food, Conservation, and Energy Act of 2008 ([H.R. 2419](#)), enacted by Congress in May 2008, converted the federal Renewable Energy Systems and Energy Efficiency Improvements Program,* into the Rural Energy for America Program (REAP). Similar to its predecessor, the REAP promotes energy efficiency and renewable energy for agricultural producers and rural small businesses through the use of (1) grants and loan guarantees for energy efficiency improvements and renewable energy systems, and (2) grants for energy audits and renewable energy development assistance.

Congress has allocated funding for the new program in the following amounts: \$55 million for FY 2009, \$60 million for FY 2010, \$70 million for FY 2011, and \$70 million for FY 2012. The REAP is administered by the U.S. Department of Agriculture (USDA), which will develop regulations to implement the program.

Of the total REAP funding available, 96% is dedicated to grants and loan guarantees for energy efficiency improvements and renewable energy systems. These incentives are available to agricultural producers and rural small businesses to purchase renewable energy systems (including systems that may be used to produce and sell electricity), to make energy efficiency improvements, and to conduct relevant feasibility studies.

Eligible renewable energy projects include wind, solar, biomass and geothermal; and hydrogen derived from biomass or water using wind, solar or geothermal energy sources. These grants are limited to 25% of a proposed project's cost, and a loan guarantee may not exceed \$25 million.

The combined amount of a grant and loan guarantee may not exceed 75% of the project's cost. In general, a minimum of 20% of the funds available for these incentives will be dedicated to grants of \$20,000 or less. The USDA likely will announce the availability of funding for this component of REAP through a Notice of Funds Availability (NOFA).

The USDA will also make competitive grants to eligible entities to provide assistance to agricultural producers and rural small businesses "to become more energy efficient" and "to use renewable energy technologies and resources." These grants are generally available to state government entities, local governments, tribal governments, land-grant colleges and universities, rural electric cooperatives and public power entities, and other entities, as determined by the USDA.

These grants may be used for conducting and promoting energy audits; and for providing recommendations and information related to energy efficiency and renewable energy. Of the total REAP funding available, 4% is dedicated to competitive grants to provide assistance to agricultural producers and rural small businesses.

* *The Renewable Energy Systems and Energy Efficiency Improvements Program was created by the USDA pursuant to Section 9006 of the 2002 federal Farm Security and Rural Investment Act of 2002. Funding in the amount of \$23 million per year was appropriated for each fiscal year from FY 2003-2007.*

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Rural Business - Cooperative Service
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1400 Independence Avenue SW
Washington, DC 20250-3201
Phone: (202) 690-4730
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E-Mail: webmaster@rurdev.usda.gov
Web: <http://www.rurdev.usda.gov/rbs>

D. Federal Loan (Guarantee) Programs



1. Clean Renewable Energy Bonds (CREBs)

Incentive Type: Federal Loan Program
Eligible Renewable/Other Technologies: Solar Thermal Electric, Photovoltaic, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors: Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative
Amount: Varies
Terms: Certain terms for "new" CREBs differ from those for prior allocations. See IRS Notice 2009-33 for details

Web Site:	http://www.irs.gov/irb/2007-14_IRB/ar17.html
Authority 1:	26 USC § 54 (Old CREBs)
Date Effective:	08/08/2005
Expiration Date:	12/31/2009
Authority 2:	26 USC § 54A (New CREBs)
Date Enacted:	10/03/2008
Date Effective:	10/03/2008
Authority 3:	26 USC § 54C (New CREBs)
Date Enacted:	10/03/2008 (subsequently amended)
Date Effective:	10/03/2008
Authority 4:	IRS Notice 2009-33
Date Effective:	04/07/2009
Expiration Date:	08/04/2009

Summary:

Note: The terms "new" and "old" CREBs are used in the following summary to distinguish between prior CREB allocations and the new CREB authorizations made by the U.S. Congress in 2008 and 2009.

The use of the term "new CREBs" has legal significance in that new CREBs authorized under 26 USC § 54A and 54C have substantially different rules than prior CREB allocations authorized under 26 USC § 54.

Clean renewable energy bonds (CREBs) may be used by certain entities -- primarily in the public sector -- to finance renewable energy projects. The list of qualifying technologies is generally the same as that used for the federal renewable energy production tax credit (PTC). CREBs may be issued by electric cooperatives, government entities (states, cities, counties, territories, Indian tribal governments or any political subdivision thereof), and by certain lenders. CREBs are issued -- theoretically -- with a 0% interest rate.* The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest.

The [Energy Improvement and Extension Act of 2008 \(Div. A, Sec. 107\)](#) allocated \$800 million for new Clean Renewable Energy Bonds (CREBs). In February 2009, the [American Recovery and Reinvestment Act of 2009 \(Div. B, Sec. 1111\)](#) allocated an additional \$1.6 billion for new CREBs, for a total new CREB allocation of \$2.4 billion.

The Energy Improvement and Extension Act of 2008 also extended the deadline for previously reserved allocations ("old CREBs") until December 31, 2009, and addressed several provisions in the existing law that previously limited the usefulness of the program for some projects. A separate section of the law extended CREBs eligibility to marine energy and hydrokinetic power projects.

In April 2009 the IRS issued Notice 2009-33 soliciting applications for the new CREB allocation and providing interim guidance on certain program rules and changes from prior CREB allocations. The expiration date for new CREB applications under this solicitation is August 4, 2009. Further guidance on CREBs is available in IRS Notices 2006-7 and 2007-26 to the extent that the program rules were not modified by 2008 and 2009 legislation.

Participation in the program is limited by the volume of bonds allocated by Congress for the program. Participants must first apply to the Internal Revenue Service (IRS) for a CREBs allocation, and then issue the bonds within a specified time period. The new CREBs allocation totaling \$2.4 billion does not have a defined expiration date under the law; however, the recent IRS solicitation for new applications requires the bonds to be issued within 3 years after the applicant receives notification of an approved allocation (see History section below for information on previous allocations).

Public power providers, governmental bodies, and electric cooperatives are each reserved an equal share (33.3%) of the new CREBs allocation. The tax credit rate is set daily by the U.S. Treasury Department. Under past allocations, the credit could be taken quarterly on a dollar-for-dollar basis to offset the tax liability of the bondholder. However, under the new CREBs allocation, the credit has been reduced to 70% of what it would have been otherwise. Other important changes are described in IRS Notice 2009-33.

CREBs differ from traditional tax-exempt bonds in that the tax credits issued through CREBs are treated as taxable income for the bondholder. The tax credit may be taken each year the bondholder has a tax liability as long as the credit amount does not exceed the limits established by the federal *Energy Policy Act of 2005*. Treasury rates for prior CREB allocations, or "old" CREBs are available [here](#), while rates for new CREBs and other qualified tax credit bonds are available [here](#).

History

The federal *Energy Policy Act of 2005* (EPAct 2005) established Clean Energy Renewable Bonds (CREBs) as a financing mechanism for public sector renewable energy projects. This legislation originally allocated \$800 million of tax credit bonds to be issued between January 1, 2006, and December 31, 2007. Following the enactment of the federal *Tax Relief and Health Care Act of 2006*, the IRS made an additional \$400 million in CREBs financing available for 2008 through Notice 2007-26.

In November 2006, the IRS announced that the original \$800 million allocation had been reserved for a total of 610 projects. The additional \$400 million (plus surrendered volume from the previous allocation) was allocated to 312 projects in February 2008. Of the \$1.2 billion total of tax-credit bond volume cap allocated to fund renewable-energy projects, state and local government borrowers were limited to \$750 million of the volume cap, with the rest reserved for qualified mutual or cooperative electric companies.

For further information on CREBs, contact Zoran Stojanovic or Timothy Jones of the IRS Office of Associate Chief Counsel at (202) 622-3980. Questions on recent IRS Notice 2009-33 can be directed to Janae Lemley at (636) 255-1202.

* *In practice, for a variety of reasons bond issuers have sometimes had to issue the bonds at a discount or make supplemental interest payments in order to find a buyer.*

Contact:



Public Information – IRS
U.S. Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web: <http://www.irs.gov>

2. Qualified Energy Conservation Bonds (QECBs)

Incentive Type:	Federal Loan Program
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaic, Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Local Government, State Government, Tribal Government
Amount:	Varies
Authority 1:	26 USC § 54A

Date Enacted: 10/03/2008
Date Effective: 10/03/2008
Authority 2: [26 USC § 54D](#)
Date Enacted: 10/03/2008 (subsequently amended)
Date Effective: 10/03/2008
Authority 3: [IRS Notice 2009-29](#)
Date Effective: 04/07/2009

Summary:

The *Energy Improvement and Extension Act of 2008*, enacted in October 2008, authorized the issuance of Qualified Energy Conservation Bonds (QECBs) that may be used by state, local and tribal governments to finance certain types of energy projects. QECBs are qualified tax credit bonds, and in this respect are similar to new [Clean Renewable Energy Bonds](#) or CREBs.

The October 2008 enabling legislation set a limit of \$800 million on the volume of energy conservation tax credit bonds that may be issued by state and local governments. However, *The American Recovery and Reinvestment Act of 2009*, enacted in February 2009, expanded the allowable bond volume to \$3.2 billion. In April 2009 the IRS issued Notice 2009-29 providing interim guidance on how the program will operate and how the bond volume will be allocated.

The advantage of these bonds is that they are issued -- theoretically -- with a 0% interest rate. The borrower pays back only the principal of the bond, and the bondholder receives federal tax credits in lieu of the traditional bond interest. The tax credit may be taken quarterly to offset the tax liability of the bondholder.

The tax credit rate is set daily by the U.S. Treasury Department; however, energy conservation bondholders will receive only 70% of the full rate set by the Treasury Department under 26 USC § 54A. Credits exceeding a bondholder's tax liability may be carried forward to the succeeding tax year, but cannot be refunded. Energy conservation bonds differ from traditional tax-exempt bonds in that the tax credits issued through the program are treated as taxable income for the bondholder. QECB rates are available [here](#).

In contrast to CREBs, QECBs are not subject to a U.S. Department of Treasury application and approval process. Bond volume is instead allocated to each state based on the state's percentage of the U.S. population as of July 1, 2008. Each state is then required to allocate a portion of its allocation to "large local governments" within the state based on the local government's percentage of the state's population. Large local governments are defined as municipalities and counties with populations of 100,000 or more. Large local governments may reallocate their designated portion back to the state if they choose to do so. IRS Notice 2009-29 contains a list of the QECB allocations for each state and U.S. territory.

The definition of "qualified energy conservation projects" is fairly broad and contains elements relating to energy efficiency capital expenditures in public buildings; renewable energy production; various research and development applications; mass commuting facilities that reduce energy consumption; several types of energy related demonstration projects; and public energy efficiency education campaigns (see H.R. 1424 for additional details). Renewable energy facilities that are eligible for CREBs are also eligible for QECBs.

For more information on QECBs, contact Timothy Jones or David White of the IRS Office of Associate Chief Counsel at (202) 622-3980.

Contact:



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1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web: <http://www.irs.gov>

3. U.S. Department of Energy - Loan Guarantee Program

Incentive Type: Federal Loan Program
Eligible Efficiency Technologies: Lighting, Windows, Roofs, Yes; specific technologies not identified
Eligible Renewable/Other Technologies: Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaic, Wind, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Fuel Cells, Manufacturing Facilities, Day lighting, Tidal Energy, Wave Energy, Ocean Thermal, Biodiesel
Applicable Sectors: Commercial, Industrial, Nonprofit, Schools, Local Government, State Government, Agricultural, Institutional, Any non-federal entity
Amount: Varies. Program focuses on projects with total project costs over \$25 million.
Max. Limit: None stated
Terms: Full repayment is required over a period not to exceed the lesser of 30 years or 90% of the projected useful life of the physical asset to be financed
Web Site: <http://www.lgprogram.energy.gov>
Authority 1: [42 USC § 16511 et seq.](#)
Authority 2: [10 CFR 609](#)

Summary:

Innovative Technology Loan Guarantee Program:

Title XVII of the federal *Energy Policy Act of 2005* (EPAct 2005) authorized the U.S. Department of Energy (DOE) to issue loan guarantees for projects that "avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases; and employ new or significantly improved technologies as compared to commercial technologies in service in the United States at the time the guarantee is issued." The loan guarantee program has been authorized to offer more than \$10 billion in loan guarantees for energy efficiency, renewable energy and advanced transmission and distribution projects. The authority to issue loan guarantees granted by EPAct 2005 expires on September 30, 2009.

DOE actively promotes projects in three categories: (1) manufacturing projects, (2) stand-alone projects, and (3) large-scale integration projects that may combine multiple eligible renewable energy, energy efficiency and transmission technologies in accordance with a staged development scheme. Under the original authorization, loan guarantees were intended to encourage early commercial use of new or significantly improved technologies in energy projects. The loan guarantee program generally does not support research and development projects.

The most recent solicitation for this program was issued in July 2008. The application deadline for stand-alone and manufacturing projects, as well as the Part I applications for large-scale integration projects, was February 26, 2009.

Temporary Loan Guarantee Program:

The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, extended the authority of the DOE to issue loan guarantees and appropriated \$6 billion for this program. Under this act, the DOE may enter into guarantees until September 30, 2011. The act amended EPCA 2005 by adding a new section defining eligible technologies for new loan guarantees. Eligible projects include renewable energy projects that generate electricity or thermal energy and facilities that manufacture related components, electric power transmission systems, and innovative biofuels projects. Funding for biofuels projects is limited to \$500 million. Davis-Bacon wage requirements apply to any project receiving a loan guarantee.

Contact:



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1000 Independence Avenue, SW
Washington, DC 20585-0121
Phone: (202) 586-8336
E-Mail: LGProgram@hq.doe.gov
Web: <http://www.lgprogram.energy.gov>

4. USDA - Rural Energy for America Program (REAP) Loan Guarantees

Incentive Type: Federal Loan Program
Eligible Efficiency Technologies: Yes; specific technologies not identified
Eligible Renewable/Other Technologies: Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaic, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP / Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels, Micro turbines
Applicable Sectors: Commercial, Agricultural
Amount: Varies
Max. Limit: \$25 million per loan guarantee
Web Site: <http://www.rurdev.usda.gov/rbs/busp/bprogs.htm>
Authority 1: [7 USC § 8106](#)
Date Enacted: 05/13/2002
Date Effective: FY 2003

Summary:

The Food, Conservation, and Energy Act of 2008 ([H.R. 2419](#)), enacted by Congress in May 2008, converted the federal Renewable Energy Systems and Energy Efficiency Improvements Program,* into the Rural Energy for America Program (REAP). Similar to its predecessor, the REAP promotes energy efficiency and renewable energy for agricultural producers and rural small businesses through the use of (1) grants and loan guarantees for energy efficiency improvements and renewable energy systems, and (2) grants for energy audits and renewable energy development assistance.

Congress has allocated funding for the new program in the following amounts: \$55 million for FY 2009, \$60 million for FY 2010, \$70 million for FY 2011, and \$70 million for FY 2012. The REAP is administered by the U.S. Department of Agriculture (USDA), which will develop regulations to implement the program.

Of the total REAP funding available, 96% is dedicated to grants and loan guarantees for energy efficiency improvements and renewable energy systems. These incentives are available to agricultural producers and rural small businesses to purchase renewable energy systems (including systems that may be used to produce and sell electricity), to make energy efficiency improvements, and to conduct relevant feasibility studies.

Eligible renewable energy projects include wind, solar, biomass and geothermal; and hydrogen derived from biomass or water using wind, solar or geothermal energy sources. These grants are limited to 25% of a proposed project's cost, and a loan guarantee may not exceed \$25 million.

The combined amount of a grant and loan guarantee may not exceed 75% of the project's cost. In general, a minimum of 20% of the funds available for these incentives will be dedicated to grants of \$20,000 or less. The USDA likely will announce the availability of funding for this component of REAP through a Notice of Funds Availability (NOFA).

The USDA will also make competitive grants to eligible entities to provide assistance to agricultural producers and rural small businesses "to become more energy efficient" and "to use renewable energy technologies and resources." These grants are generally available to state government entities, local governments, tribal governments, land-grant colleges and universities, rural electric cooperatives and public power entities, and other entities, as determined by the USDA.

These grants may be used for conducting and promoting energy audits; and for providing recommendations and information related to energy efficiency and renewable energy. Of the total REAP funding available, 4% is dedicated to competitive grants to provide assistance to agricultural producers and rural small businesses.

* *The Renewable Energy Systems and Energy Efficiency Improvements Program was created by the USDA pursuant to Section 9006 of the 2002 federal Farm Security and Rural Investment Act of 2002. Funding in the amount of \$23 million per year was appropriated for each fiscal year from FY 2003-2007. In March 2008, the USDA announced that it would accept \$220.9 million in applications for grants, loan guarantees, and loan/grant combination packages under the Renewable Energy Systems and Energy Efficiency Improvements Program. The application deadline was June 16, 2008.*

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4. SBA - 504 Loan Program

Incentive Type:	Federal Loan Program
Eligible Efficiency Technologies:	Yes; specific technologies not identified
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Photovoltaic, Wind, Biomass, Hydroelectric, Renewable Transportation Fuels, Geothermal Electric, Geothermal Heat Pumps, CHP / Cogeneration, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, Ocean Thermal, Renewable Fuels, Fuel Cells using Renewable Fuels, Micro-turbines
Applicable Sectors:	Commercial, Agricultural
Amount:	Up to 4 Million
Website:	http://www.sba.gov
Authority 1:	1203(c) of PL 110-140
Date Enacted:	12/19/2007
Date Effective:	01/01/2008

Summary:

A new public policy goal of the U.S. Small Business Administration to encourage energy efficiency is available for small businesses. Up to \$4 million in financing under the SBA's 504 loan program can be made available for projects that can be shown to save energy. As part of the Energy Independence and Security Act of 2007, the goal of encouraging energy efficiency is now part of the SBA's mission, meaning projects that reduce energy use, follow principles of sustainable design or contribute to the production of renewable energy can qualify for affordable, fixed-interest, long-term loans under the 504 program.

- **Sustainable Design:** Project will use sustainable design to purchase/construct/remodel a building that reduces the use of non-renewable resources and will minimize environmental impact. One standard is Leadership in Energy and Environmental Design (LEED). No maximum total project cost; maximum Evergreen loan of \$2,000,000 or up to 40% of total project costs.
- **Energy Reduction:** Project will reduce energy consumption by at least 10 percent. No maximum total project cost; maximum Evergreen loan of \$4,000,000 or up to 40% of total project costs.
- **Renewable Energy/Fuel:** Project will produce renewable energy (including solar panels, biomass, wind turbines, and hydroelectric power, among others), micro-power or renewable fuels (including biodiesel and ethanol). No maximum total project cost; maximum Evergreen loan of \$4,000,000 or up to 40% of total project costs.

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Web: <http://www.sba.gov>



1. Qualifying Advanced Energy Project Investment Tax Credit

Incentive Type:	Industry Recruitment/Support
Eligible Efficiency Technologies:	Lighting, Lighting Controls / Sensors, Energy Conservation Technologies
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Thermal Electric, Photovoltaic, Wind, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Fuel Cells using Renewable Fuels, Micro-turbines
Applicable Sectors:	Commercial, Industrial, and Manufacturing
Amount:	30% of qualified investment
Max. Limit:	Total amount of credits to be allocated shall not exceed \$2.3 billion
Terms:	Apply to the Internal Revenue Service for certification for credits
Web Site:	http://www.ustreas.gov
Authority 1:	H.R. 1: Div. B, Sec. 1302 (American Recovery and Reinvestment Act of 2009)
Date Enacted:	02/17/2009
Date Effective:	02/17/2009

Summary:

The American Recovery and Reinvestment Act of 2009 (H.R. 1), enacted in February 2009, established a new investment tax credit to encourage the development of a U.S.-based renewable energy manufacturing sector. In any taxable year, the investment tax credit is equal to 30% of the qualified investment required for an advanced energy project that establishes, re-equips or expands a manufacturing facility that produces any of the following:

- Equipment and/or technologies used to produced energy from the sun, wind, geothermal or "other" renewable resources
- Fuel cells, micro-turbines or energy-storage systems for use with electric or hybrid-electric motor vehicles
- Equipment used to refine or blend renewable fuels
- Equipment and/or technologies to produce energy-conservation technologies (including energy-conserving lighting technologies and smart grid technologies)*

Qualified investments generally include personal tangible property that is depreciable and required for the production process. Other tangible property may be considered a qualified investment only if it is an essential part of the facility, excluding buildings and structural components.

The U.S. Treasury Department will issue certifications for qualified investments eligible for credits to qualifying advanced energy project sponsors. In total, \$2.3 billion worth of credits may be allocated under the program. After certification is granted, the taxpayer has one year to provide additional evidence that the requirements of the certification have been met and three years to put the project in service.

In determining which projects to certify, the U.S. Treasury Department must consider those which most likely will be commercially viable, provide the greatest domestic job creation, provide the greatest net reduction of air pollution and/or greenhouse gases, have great potential for technological innovation and commercial deployment, have the lowest levelized cost of generated (or stored) energy *or* the lowest levelized cost of reduction in energy consumption or greenhouse gas emissions, *and* have the shortest project time.

The U.S. Treasury Department, in consultation with the U.S. Department of Energy, must create additional specific program guidelines and the application process by August 16, 2009.

Any taxpayer receiving this credit may not also receive business energy investment tax credit.

* *Note: This credit may be expanded in the future to include other energy technologies that reduce greenhouse gas emissions, as determined by the U.S. Treasury Department.*

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Washington, DC 20224
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Web: <http://www.irs.gov>

F. Production Incentives



1. Renewable Energy Production Incentive (REPI)

Incentive Type:	Production Incentive
Eligible Renewable/Other Technologies:	Solar Thermal Electric, Photovoltaic, Landfill Gas, Wind, Biomass, Geothermal Electric, Anaerobic Digestion, Tidal Energy, Wave Energy, Ocean Thermal
Applicable Sectors:	Local Government, State Government, Tribal Government, Municipal Utility, Rural Electric Cooperative, Native Corporations
Amount:	2.1¢/kWh (subject to availability of annual appropriations in each federal fiscal year of operation)
Terms:	10 years
Web Site:	http://apps1.eere.energy.gov/repi
Authority 1:	42 USC § 13317
Date Enacted:	10/24/1992 (subsequently amended)
Authority 2:	10 CFR 451

Summary:

Note: Contact the program administrator to find out the current funding status of this program.

Established by the federal *Energy Policy Act of 1992*, the federal Renewable Energy Production Incentive (REPI) provides incentive payments for electricity generated and sold by new qualifying renewable energy facilities. Qualifying systems are eligible for annual incentive payments of 1.5¢ per kilowatt-hour in 1993 dollars (indexed for inflation) for the first 10-year period of their operation, *subject to the availability of annual appropriations in each federal fiscal year of operation*. REPI was designed to complement the federal renewable energy production tax credit (PTC), which is available only to businesses that pay federal corporate taxes.

Qualifying systems must generate electricity using solar, wind, geothermal (with certain restrictions), biomass (excluding municipal solid waste), landfill gas, livestock methane, or ocean resources (including tidal, wave, current and thermal). The production payment applies only to the electricity sold to another entity. Eligible electric production facilities include not-for-profit electrical cooperatives, public utilities, state governments and political subdivisions thereof, commonwealths, territories and possessions of the United States, the District of Columbia, Indian tribal governments or political subdivisions thereof, and Native Corporations.

Payments may be made only for electricity generated from an eligible facility first used before October 1, 2016. Appropriations have been *authorized* for fiscal years 2006 through fiscal year 2026. If there are insufficient appropriations to make full payments for electricity production from all qualified systems for a federal fiscal year, 60% of the appropriated funds for the fiscal year will be assigned to facilities that use solar, wind, ocean, geothermal or closed-loop biomass technologies; and 40% of the appropriated funds for the fiscal year will be assigned to other eligible projects. Funds will be awarded on a pro rata basis, if necessary.

Contact:



Christine Carter
U.S. Department of Energy
1617 Cole Blvd.
Golden, CO 80401-3393
E-Mail: christine.carter@go.doe.gov
Web: <http://www.energy.gov>

Information Specialist - REPI
U.S. Department of Energy
Washington, DC
E-Mail: repi@ee.doe.gov
Web: <http://www.energy.gov>

List of Incentive and Program Contacts

A. Local Contacts



Purchase Area Development District
Business Lending & Development Services
1002 Medical Drive
Mayfield, KY 42066
Phone: (270) 251-6118
Email: bizloans@purchaseadd.org
Web: <http://www.purchaseadd.org>



B. Kentucky State Contacts



Department of Revenue
Taxpayer Services
501 High Street
Frankfort, KY 40620
Phone: (502) 564-4581
Fax: (502) 564-3875
Web: <http://revenue.ky.gov>



Office of Energy Policy
James Bush
Capital Plaza Tower, 12th Floor
500 Mero Street
Frankfort, KY 40601
Phone: (502) 564-7192
E-Mail: james.bush@ky.gov
Web: <http://www.energy.ky.gov>



Cabinet for Economic Development
Department of Financial Incentives
Don Goodin
Old Capitol Annex
300 West Broadway
Frankfort, KY 40601
Phone: (502) 564-4554 Ext.3413
E-Mail: Don.Goodin@ky.gov
Web: <http://www.thinkkentucky.com>



U.S. Department of Agriculture – State Office
Rural Energy Coordinator
USDA Rural Development
771 Corporate Drive – Suite 200
Lexington, KY 40503
Phone: (859) 224-7435



C. Federal Contacts



U.S. Internal Revenue Service

Public Information – IRS
1111 Constitution Avenue, N.W.
Washington, DC 20224
Phone: (800) 829-1040
Web: <http://www.irs.gov>



U.S. Department of Agriculture

Public Information – RBS
Rural Business - Cooperative Service
USDA/RBS, Room 5045-S, Mail Stop 3201
1400 Independence Avenue SW
Washington, DC 20250-3201
Phone: (202) 690-4730
Fax: (202) 690-4737
E-Mail: webmaster@rurdev.usda.gov
Web: <http://www.rurdev.usda.gov/rbs>



U.S. Small Business Administration

409 3rd Street, SW
Washington, DC 20416
Phone: (800) 827-5722
E-Mail: answerdesk@sba.gov
Web: <http://www.sba.gov>



U.S. Department of Treasury

Grant Information
1500 Pennsylvania Avenue, NW
Washington, DC 20220
Phone: (202) 622-2000
Fax: (202) 622-6415
E-Mail: 1603Questions@do.treas.gov
Web: <http://www.treasury.gov>



U.S. Department of Energy

Public Information – DOE
1000 Independence Avenue, SW
Washington, DC 20585-0121
Phone: (202) 586-8336
E-Mail: LGProgram@hq.doe.gov
Web: <http://www.lgprogram.energy.gov>



D. Other Contacts



Tennessee Valley Authority

400 W. Summit Hill Dr.
Knoxville, TN 37902-1499
Phone: (865) 632-2101
E-Mail: tvainfo@tva.com
Web: <http://www.tva.com>



List of Utility Companies

A. Investor Owned Electric Utilities



E.ON U.S. - KU
137 S. Fourth Street
Barlow, KY 42024
Phone: (800) 981-0600
Web: <http://www.eon-us.com/ku/default.asp>



B. Investor Owned Natural Gas Utilities



ATMOS Energy Corporation
P.O. Box 650205
Dallas, TX 75265
Phone: (888) 286-6700
Web: <http://www.atmosenergy.com>



C. Publicly Owned Electric & Gas Utilities



Bardwell City Utilities
P.O. Box 639
Bardwell, KY 42023
Phone: (270) 628-5444/3833

Benton Electric & Gas Systems
1009 Main Street, Unit-2
Benton, KY 42025
Phone: (270) 527-3717
Web: <http://www.cityofbenton.org>



Fulton Electric & Gas Systems
200 Nolan Avenue
Fulton, Kentucky 42041
Phone: (270) 472-2434
Web: <http://www.fulton-ky.com/publicworks.html>



Hardin Natural Gas System
202 Commerce Street
P.O. Box 57
Hardin, KY 42048
Phone: (270) 437-4361

Hickman Electric & Gas Systems
1812 South 7th Street
Hickman, KY 42050-1910
Phone: (270) 236-2535

New Commonwealth Natural Gas

112 S Jefferson Street
Clinton, KY 42031
Phone: (270) 653-6419

Second Location:
311 Court Street
Wickliffe, KY 42087
Phone: (270) 335-3116

Mayfield Electric & Water Systems

301 East Broadway
Mayfield, KY 42066
Phone: (270) 247-4661
Web: <http://www.mayfieldews.com>



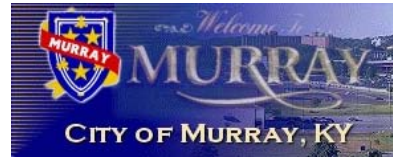
Murray Electric System

401 Olive Street
Murray, KY 42071
Phone: (270) 753-5312
Web: <http://www2.murray-ky.net>



Murray Natural Gas System

200 Andrus Drive
Murray, KY 42071
Phone: (270) 762-0336
Web: <http://www.murrayky.gov/publicworks/naturalgas>



Paducah Power System

1500 Broadway
Paducah, KY 42001
Phone: (270) 575-4000
Web: <http://www.paducahpower.com>



D. Cooperative Electric Utilities

Utilities

Big Rivers Electric Corporation

201 Third Street
Henderson, KY 42419
Phone: (270) 827-2561
Web: <http://www.bigrivers.com>



Hickman-Fulton Counties RECC

1702 Moscow Street
Hickman, KY 42050
Phone: (270) 236-2521
Web: <http://www.hfrecc.com>



Jackson Purchase Energy Corporation

P.O. Box 4030
Paducah, KY 42002
Phone: (270) 442-7321
Web: <http://www.jpenergy.com>



West Kentucky RECC
1218 West Broadway
Mayfield, KY 42066
Phone: (270) 247-1321
Web: <http://www.wkrecc.com>



E. State and Federal Power Agencies



Tennessee Valley Authority
400 W. Summit Hill Dr.
Knoxville, TN 37902-1499
Phone: (865) 632-2101
E-Mail: tvainfo@tva.com
Web: <http://www.tva.com>



