

Chapter Thirteen

Incentives that Support Renewable Energy and Energy Efficiency

Several types of incentives are available to support investments in renewable energy and energy efficiency in Kentucky. The specific incentives available vary in different parts of the state, and include rebates and cash payments, loans, financing assistance, tax incentives, programs that purchase power generated from renewable sources (including net metering), energy audits, and home weatherization programs. Incentives are available to the residential, commercial, agricultural, industrial, and public sectors. Incentives are provided from a variety of sources, including the Federal government, electric utilities, and private for-profit and non-profit organizations.

The available incentives change regularly. To find the most up-to-date information about incentives available in your region, refer to the Database of State Incentives for Renewable Energy (www.dsireusa.org). Contact your local electric utility or Community Action Agency to learn about programs that support home weatherization and energy conservation (see below for contact information).

If your electric utility is supplied by the Tennessee Valley Authority (TVA), their Generation Partners Program (described below) may be of interest to you. This program presently offers the best incentives for solar electricity in Kentucky. Although most TVA distributors in Kentucky are not actively promoting this program, if their customers call them wanting to participate, they may be open to working with you.

TAX CREDITS AND OTHER TAX INCENTIVES

Residential Energy Efficiency Tax Credit

Incentive Type: Personal Tax Credit, Federal
Eligible Technologies: Water Heaters, Furnaces, Boilers, Heat pumps, Air conditioners, Building Insulation, Windows, Doors, Roofs, Circulating fan used in a qualifying furnace, geothermal heat pumps
Sector: Residential
Amount: 10% of cost of building envelope improvements; 100% for qualified energy property (heating, cooling, water heaters)
Maximum Incentive: Varies by technology; no more than \$500 credit for all energy property and envelope improvements for all tax years.
Dates of Availability: Jan. 1, 2006 - Dec. 31, 2007

Website: www.irs.gov/newsroom/article/0,,id=154657,00.html

Contact: Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
800-829-1040

Source: www.dsireusa.org

Residential Solar and Fuel Cell Tax Credit

Incentive Type: Personal Tax Credit, Federal
Eligible Technologies: Solar Hot Water, Photovoltaics, Fuel cells. Solar swimming pool heaters are NOT included.

Amount: 30% of equipment and installation cost
Maximum Incentive: \$2,000 for solar water heating and photovoltaics; \$500 per 0.5 kW for fuel cells.
Carryover Provisions: Excess credit may be carried over to succeeding tax year.

Eligible System Size: Not specified.
Equipment Requirements: Solar water heating property must be certified by SRCC or by comparable entity endorsed by the state. At least half the energy used to heat the dwelling's water must be from solar in order for the solar water heating property expenditures to be eligible.

Dates of Availability: System must be placed in service between Jan. 1, 2006 and Dec. 31, 2007

Contact: Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
800-829-1040

Source: www.dsireusa.org

Additional information sources:
Kentucky Office of Energy Policy - 502-564-7192.
See KOEP's web page on the 2005 Energy Policy Act: www.energy.ky.gov/2005federalenergybill.htm
Tax Incentives Assistance Project - www.energytaxincentives.org

Solar & Geothermal Business Energy Tax Credit

Incentive Type: Business Tax Credit, Federal
Eligible Technologies: Solar hot water, solar space heating, solar thermal electric, solar thermal process heat, photovoltaics, geothermal electric and direct use geothermal, fuel cells, solar hybrid lighting, micro-turbines. [Note: geothermal heat pumps NOT included.]

Sectors: Commercial, Industrial

Amount: For equipment placed in service from January 1, 2006 until December 31, 2007, the credit is 30% for solar, solar hybrid lighting, and fuel cells, and 10% for micro-turbines and geothermal.

Maximum Incentive: No maximum specified for solar or geothermal. \$500 per 0.5 kW for fuel cells; \$200 per kW for micro-turbines.

Eligible System Size: Micro turbines less than 2 MW; fuel cells at least 0.5 kW

Website: <http://www.irs.gov/pub/irs-pdf/f3468.pdf>

Contact: Internal Revenue Service

1111 Constitution Avenue, N.W.

Washington, DC 20224

800-829-1040

Source: www.dsireusa.org

Contact: Internal Revenue Service

1111 Constitution Avenue, N.W.

Washington, DC 20224

1-800-829-1040

Source: www.dsireusa.org

Modified Accelerated Cost-Recovery System (MACRS)

Incentive Type: Corporate depreciation

Eligible Technologies: Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Geothermal Electric, Fuel Cells, Solar Hybrid Lighting, Direct Use Geothermal, Micro-turbines

Sectors: Commercial, Industrial

Website: www.irs.gov

Summary: Under MACRS, businesses can 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. For solar, wind and geothermal property placed in service after 1986, the current MACRS property class is five years. With the passage of the Energy Policy Act of 2005, fuel cells, micro-turbines, and solar hybrid lighting technologies are now classified as 5-year property as well.

Contact: Internal Revenue Service

1111 Constitution Avenue, N.W.

Washington, DC 20224

1-800-829-1040

Source: www.dsireusa.org

New Energy-Efficient Home Tax Credit for Builders

Eligible technologies: Comprehensive energy efficiency measures/ whole building

Sector: Construction

Amount: \$2,000 for new site-built homes and manufactured homes achieving 50% energy savings. \$1,000 for manufactured homes achieving 30% energy savings.

Dates of Availability: January 1, 2006 - December 31, 2007

Website: www.irs.gov/newsroom/article/0,,id=154658,00.html

Contact: Internal Revenue Service

1111 Constitution Avenue, N.W.

Washington, DC 20224

1-800- 829-1040

Source: www.dsireusa.org

Energy Efficient Commercial Buildings Tax Deduction

Eligible 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

Sectors: Commercial, Construction

Amount: \$0.30-\$1.80 per square foot, depending on technology and amount of energy saved

Maximum Incentive: \$1.80 per square foot

Equipment Requirements: Must meet certification requirements.

Dates of Availability: January 1, 2006 - December 31, 2007

Web site: <http://www.irs.gov>

Renewable Electricity Production Tax Credit

Incentive Type: Corporate Tax Credit

Eligible Technologies: Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Refined Coal, Indian Coal, Small Hydroelectric

Sectors: Commercial, industrial

Amount: 1.9¢/kWh for wind, geothermal, closed loop biomass; 0.9¢/kwh for others. Applies to first 10 years of operation.

Dates of Availability: Varies by technology

Website: <http://www.irs.gov/pub/irs-pdf/f8835.pdf>

Contact: Internal Revenue Service

1111 Constitution Avenue, N.W.

Washington, DC 20224

1-800-829-1040

Source: www.dsireusa.org

Residential Energy Conservation Subsidy Exclusion (Personal and Corporate)

Incentive Type: Personal and corporate tax exemption

Eligible Technologies: Energy efficiency and conservation improvements; solar hot water, solar space heating, and photovoltaics may be eligible

Sectors: Residential, multi-family residential

Website: www.irs.gov/publications/p525/index.html

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." Such measures include installations or modifications primarily designed to reduce consumption of electricity or natural gas, or improve the management of energy demand. *Dwelling unit* includes a house, apartment, condominium, mobile home, boat, or similar property. 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.

Contact: Internal Revenue Service
1111 Constitution Avenue, N.W.
Washington, DC 20224
1-800-829-1040

Source: www.dsireusa.org

Alternative Fuel and Vehicle Tax Incentives

Eligible Technologies: Automobiles (hybrid gas-electric, "clean fuel", and electric vehicles)

Amount: Varies

Websites: www.fueleconomy.gov,
www.eere.energy.gov/afdc/progs/fed_summary.cgi?afdc/US/0, www.ase.org/content/article/detail/2654

Contact: Visit the above websites for contact information

FINANCING ASSISTANCE

Low-Interest Loans for Solar Water Heaters (from MACED and the KY Solar Partnership)

Eligible Technology: Solar Water Heaters

Sector: Residential, commercial

Interest Rate: 6.0%, fixed

Terms: Maximum loan limit: \$6,000; 6 year fixed term. Higher loans for larger systems (such as those used for radiant home heating or commercial systems) will be evaluated on a case by case basis.

Requirements: SRCC rated solar collectors required. See loan application at website below for full requirements and loan application.

Eligibility: Residents and businesses of Eastern Kentucky counties (see website or call for map)

Website: www.kysolar.org/swh_loans.htm

Contacts: Kentucky Solar Partnership
2235 Gregory Woods Rd.
Frankfort, KY 40601

solar@kysolar.org

1-888-576-6527

Or Mountain Association for Community Economic Development (MACED)

433 Chestnut St.

Berea, KY 40403

1-859-986-2373

www.maced.org

Low-Interest Loans for Renewable Energy Systems and Renewable Energy Businesses in Eastern Kentucky (from MACED)

Eligible Technologies: renewable energy systems

Sector: Commercial

Interest Rate: contact MACED for current rates and terms

Eligibility: Businesses located in the 51 counties of Eastern Kentucky served by MACED

Website: www.maced.org

Summary: MACED offers low-interest financing for businesses to install renewable energy technologies for use in their facilities. MACED also offers small business loans for new or developing renewable energy businesses.

Contact: MACED

433 Chestnut St.

Berea, KY 40403

859-986-2373

Loan Discounts for Sustainability Investments (Permaculture Credit Union)

Eligible Technologies: home energy efficiency upgrades, renewable energy generation, permaculture landscaping, water catchment and delivery, farm machinery, and fuel-efficient automobiles

Sectors: Residential, commercial

Terms: The PCU offers its members loan discounts of 0.75% for qualifying sustainability investments (for fuel-efficient automobiles, the discount is 0.75% for vehicles that achieve 35mpg average and 1.5% discount for vehicles that exceed 45 mpg on average).

Eligibility: Loans available to PCU members.

Website: www.pcuonline.com

Summary: The Permaculture Credit Union (PCU) offers its members loans with aggressive discounts for qualifying sustainability investments. The PCU is a credit union of members dedicated to the following ethics of Permaculture: care of the Earth, care of people, and reinvestment of the surplus to benefit the Earth and its inhabitants. Membership in the PCU is open to anyone who subscribes to the ethics of Permaculture, or has completed a Permaculture recognized design course, or is a member of an affiliated Permaculture Institute.

You can join the PCU by paying a membership fee of \$5.00 and opening a share account with a minimum deposit of \$50.00. You must maintain an average daily balance of \$300.00 to accrue dividends (interest).

The PCU offers Share Accounts (Savings Accounts) and a variety of loan products, which include: signature loans up to \$5,000; home equity and auto loans up to \$40,000; and share-secured loans up to the full deposit amount.

Contact: Permaculture Credit Union

4250 Cerrillos Road

P.O. Box 29300

Santa Fe, NM 87592-9300

505-954-3479 or 866-954-3479 (toll-free); 505-

424-1624 (fax)

Paducah Power System - Residential Energy Efficiency Loan Program

Eligible Technologies: Heat pumps, building insulation, and other energy saving measures

Sector: Residential

Terms: Fixed rate of 7%; maximum loan \$7,500; loan term up to 5 years

Website: www.paducahpower.com/financingha.htm

Summary: Paducah Power System provides loans to their residential customers to help make their homes more energy efficient. The loans can be up to \$7,500 and can be used to install new qualifying heating and cooling systems along with upgrades to insulation or other energy savings measures. The loan term can be

up to 5 years and has a fixed rate of 7%. Heat pumps must be installed by a member of their Quality Contractor Network (QCN).

Contact: Paducah Power System

Ella Mayes

PO Box 180

Paducah, KY 42002

270-575-4000

Source: www.dsireusa.org

Energy Efficient Mortgages

Summary: A variety of mortgage and home improvement loan programs exist to help pay the cost of improving the energy efficiency of new and existing homes. Some programs will also finance investments in renewable energy systems. The specific benefits and conditions for participating in each program vary, and the amount of money involved can range from a few hundred dollars to tens of thousands of dollars.

Energy efficient mortgages (EEM's) are used by homeowners to pay for energy efficiency and renewable energy investments for new and existing homes. Any homeowner who qualifies for a mortgage also qualifies for an EEM. These mortgages are offered through a variety of agencies, including the FHA and VA, and private lenders associated with Fannie Mae and Freddie Mac. The Energy Star Homes Program, a project of the U.S. Department of Energy and U.S. Environmental Protection Agency, also encourages participating lenders to offer EEM's. The energy improvements gained through an EEM will result in reduced utility bills over the life of the home. Energy efficiency investments can reduce utility costs by up to 50%, an annual savings of up to \$650 for a typical home. EEM's allow homeowners to qualify for up to 2% more debt if they use the additional financing to make energy-efficiency and/or renewable energy improvements to a new or existing home. While this increases mortgage payments, the combined monthly mortgage and utility payments for an EEM home will be less than those for a regular mortgage due to reduced utility bills. The EEM also provides a higher quality, more comfortable home with a higher re-sale value.

EEM's require a Home Energy Rating (HERS Rating) performed by an energy professional to determine the anticipated energy savings resulting from the home energy improvements.

Other energy efficiency financing assistance programs offer different packages of incentives. An Energy Star mortgage, for instance, may include incentives such as lower interest rates, a discount on closing costs and/or origination fees, up to a 4 percent extension of the debt-to-income ratio stretch, or payment of the cost for a home energy rating.

"You can benefit from energy-efficient

financing whether you're buying, selling, refinancing, or remodeling a home. If you're looking to buy an energy-efficient home, you can qualify for a better, more comfortable home because with lower utility costs, you can afford a slightly larger mortgage payment. You can also obtain financing to make energy-efficient improvements to an older home before moving in or to your existing home. And if you put your home on the market, you can use its energy efficiency as an attractive selling point.¹

The following list identifies lenders in Kentucky who provide energy efficient mortgages or other types of financing assistance for energy efficiency and renewable energy. Although the national mortgage agency Countrywide Home Loans officially offers EEM's, many local branches in Kentucky are unfamiliar with them. If your local mortgage lender or loan office is unfamiliar with energy efficient financing options, let them know of your interest. Citizens play an important role in stimulating demand for programs such as this, and your interest can stimulate local lenders to begin offering these programs.

Sources: www.dsireusa.org, www.natresenet.org, www.erha.com

Countrywide Home Loans

800-669-6607

Countrywide has offices in many Kentucky locations. Check the phone book or call their national office to find the office nearest you.

Federal Housing Administration (FHA) Energy Efficient Mortgages

US Dept. of Housing and Urban Development (HUD)
451 7th Street SW
Washington, DC 20410,
www.hud.gov

www.hud.gov/progdsc/energy-r.html (EEM Program)

All FHA approved lenders can offer EEM's, although it is up to their discretion whether they actually do. A state by state list of FHA approved lenders is available on their web site, www.fha.com. FHA can be contacted through your local HUD office, which can be found in the phone book or on HUD's Web site.

Fannie Mae

3900 Wisconsin Avenue, NW
Washington, DC 20016-2892
1-800-7FANNIE (1-800-732-6643)
www.homepath.com, www.fanniemae.com

Freddie Mac

8200 Jones Branch Drive
McLean, VA 22102-3107
1-800-FREDDIE (1-800-373-3343)
www.freddiemac.com

Veteran's Administration (VA) Loans

1-800-848-4904

www.homeloans.va.gov/ (Home Loan Guaranty website)

All lenders offering VA loans can offer EEM's.

If you call lenders listed in your phone book, many will offer VA loans. You can also find a list of lenders in your area by visiting: www.vba-roanoke.com/rhc/va-e-lenders/. Chapter 7 (7.03) of the lenders handbook has additional information about EEM's.

Further information about energy efficient mortgages:

ENERGY STAR Homes

1-888-STAR-YES (1-888-782-7937)

www.energystar.gov

National Home Energy & Resources Organization (HERO)

4005 Poplar Grove Road

Midlothian VA 23112

1-800-373-2416

www.national-hero.com

Provides state-by-state listings of the energy raters it trains and certifies.

Residential Energy Services Network (RESNET)

P.O. Box 4561

Oceanside, CA 92052-4561

1-760- 806-3448

www.natresnet.org

A national network of mortgage companies, real estate brokerages, builders, appraisers, utilities, and other energy and housing professionals dedicated to improving the energy efficiency of the nation's housing. It provides state-by-state directories of conventional EEM lenders and energy raters.

Veterans Housing Guaranteed and Insured Loans

Eligible Technologies: Equipment Insulation, Heat pumps, Caulking/Weather-stripping, Building Insulation, Windows, Doors, Roofs, Passive Solar Space Heat, Solar Water Heat, Solar Space Heat

Sectors: Residential, Veterans, Retired Service Personnel, Unmarried Surviving Spouses of Veterans

Amount: Varies

Maximum limit: \$3,000 - \$6,000

Terms: Department of Veteran's Affairs guarantees 50% of the loan

Date of Availability: Ongoing

Website:

www.federalgrantswire.com/

veteranshousingguaranteedandinsuredloans.html

Contact: Please visit the program website above.

Source: www.dsireusa.org

REBATE PROGRAMS

Solar Water Heater Rebate Program

Eligible Technologies: Solar Water Heaters

Sectors: Residential

Amount: \$500

Eligibility: Available for systems installed on residences in Kentucky

Requirements: SRCC rated collectors are required. SRCC systems are recommended. (See rebate application for details.) All major system components must have at least a 1-year warranty. System must include at least a two-year installation warranty that covers any defect in the workmanship of the installation at no charge to the owner.

Website: www.kysolar.org/swh_rebate.htm

Summary: The Kentucky Solar Partnership, in collaboration with the Energy Center at the University of Louisville and the US Department of Energy, is offering a \$500 rebate for solar water heaters installed on residences in Kentucky. Initial funding provided rebates for 25 installations and efforts are being made to expand the program. Owner-installed systems are eligible, but applicants must demonstrate that they have attended a solar water heater installation workshop or have the necessary skills to complete the project, and must meet all the terms and conditions of the program.

As a condition for receiving a rebate, recipients must agree to allow the Kentucky Solar Partnership to inspect the solar water heating system after installation and to perform monitoring of the performance of the system for up to two years. They also agree to allow information about their home and solar system to be used in educational materials produced for the purpose of promoting the use of solar energy.

Swimming pool heaters and radiant home heating systems are not eligible for the incentive at this time, nor are repairs to or expansion of existing solar water heating systems. Applications are available at www.kysolar.org/swh_rebate.htm.

Contact: Kentucky Solar Partnership
2235 Gregory Woods Rd.

Frankfort, KY 40601

solar@kysolar.org

1-888-576-6527

Duke Energy - Commercial and Industrial Energy Efficiency Rebate Program

Eligible Technologies: Lighting, heat pumps, air conditioners, motors, pumps

Sectors: Commercial, industrial

Amount: Motors: \$4/HP - \$10/HP, varies based on HP
Pumps: \$160/unit - \$400/unit, varies according to HP
Lighting: \$2/unit - \$125/unit, varies according to

technology and system size

Heat Pumps: \$20/ton - \$45/ton, varies according to technology, system size and efficiency rating

Maximum Incentive: \$50,000 per calendar year, per facility

Requirements: Rebates for lighting equipment are offered for retrofits only. All other incentives are valid for retrofits or new installations. Equipment must either be installed by a pre-approved contractor, or obtain site verification by Duke Energy personnel after installation.

Website: www.cinergyulhp.com/kysbus/energy_management/energy_efficiency_incentive_program.asp

Contact: Duke Energy

C&I DSM Programs - WP680

1000 East Main St

Plainfield, IN 46168

1-800-283-7741

Web site: www.duke-energy.com

Source: www.dsireusa.org

Duke Energy - Compact Fluorescent Light Bulb In-Store Rebate Program

Eligible Technology: Lighting

Sector: Residential

Amount: \$2.00/ light bulb, maximum \$24.00

Equipment Requirements: Must be Energy Star Rated

Website: www.cinergyulhp.com/kyres/savings/products/energy_star_products_and_rebates.asp

Summary: Duke Energy offers a rebate for their Kentucky electric customers to purchase compact fluorescent light bulbs for their homes. The rebate is redeemed by participating retailers at the time of purchase, and there is a limit of 12 bulbs. For a list of participating retailers, please refer to the program's website or the toll-free number provided.

Duke Energy
Customer Service
526 South Church St
Charlotte, NC 28202
1-800-573-3503
Web site: www.duke-energy.com
Source: www.dsireusa.org

REGULATIONS AND POLICIES

Net Metering Rules

"Kentucky Governor Ernie Fletcher signed statewide net metering legislation (SB 247) into law on April 22, 2004, requiring all investor-owned utilities and rural electric cooperatives to offer net metering to customers with PV systems of 15 kW or less. These utilities must file with the Kentucky Public Service Commission (PSC) a net metering tariff that includes

all terms and conditions of their net metering programs, including interconnection standards, by Oct. 19, 2004.

"The legislation stipulates the use of a single meter capable of registering the flow of electricity in two directions. Any additional meter, meters or distribution upgrades needed to monitor the flow in each direction will be installed at the customer-generator's expense. If the electricity fed back to the utility by the customer-generator exceeds the electricity supplied by the utility during a billing period, the customer-generator will be credited for the excess kilowatt-hours at the retail rate. This electricity credit will appear on the customer-generator's next bill and carries forward indefinitely. Credit is not transferable.

"Although the legislation does not specify which sectors are eligible, the system capacity limit will not encourage large-scale electricity consumers to participate. If the cumulative generating capacity of net metering systems reaches 0.1% of a supplier's single-hour peak load during the previous year, the obligation of the supplier to offer net metering to a new customer-generator may be limited by the PSC.

"Electric generating systems and interconnecting equipment used by eligible customer-generators must meet all applicable safety and power quality standards established by the National Electrical Code (NEC), Institute of Electrical and Electronics Engineers (IEEE), and accredited testing laboratories such as Underwriters Laboratories (UL)."

Four Kentucky utilities initiated pilot net metering programs prior to the passage of the state net-metering law. Under these programs, PV systems, wind and small hydro facilities are eligible for net metering. These utilities and the expiration dates for their programs are Berea College Utilities (expires 9/30/06), Kentucky Utilities (KU) (expires 3/14/05), LG&E (expires 3/14/05), and ULH&P (expires 9/13/05).

Source: Excerpted from www.dsireusa.org

Solar Easements

In Kentucky, solar easements may be obtained for the purpose of ensuring access to direct sunlight. Easements must be expressed in writing and will become an interest in real property that may be acquired and transferred. Local zoning regulations may also have provisions requiring preservation of solar access. Contact the Kentucky Division of Energy for further information. Refer to KRS § 381.200.

Source: www.dsireusa.org

RENEWABLE ENERGY PRODUCTION INCENTIVES

Federal Renewable Energy Production Incentive (REPI)

Eligible Technologies: Solar Thermal Electric, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Livestock Methane, Tidal Energy, Wave Energy, Ocean Thermal, Fuel Cells (Renewable Fuels)

Sectors: Municipal Utility, Rural Electric Cooperative, State/local governments that sell project's electricity, Tribal Government

Amount: 1.5 cents per kWh (indexed for inflation)

Terms: 10 years

Dates of Availability: Appropriations authorized through 2026

Website: www.eere.energy.gov/wip/program/repi.html

Summary: The Renewable Energy Production Incentive (REPI) provides financial incentive payments for electricity produced and sold by new qualifying renewable energy generation facilities. Qualifying facilities are eligible for annual incentive payments of 1.5 cents per kilowatt-hour (1993 dollars and indexed for inflation) for the first ten year period of their operation, subject to the availability of annual appropriations in each Federal fiscal year of operation.

Contacts: Dan Beckley, U.S. Department of Energy Weatherization and Intergovernmental Program Washington, DC 20585

E-Mail: dan.beckley@hq.doe.gov

Or, Christine Carter, U.S. Department of Energy Golden Field Office

1617 Cole Blvd.

Golden, CO 80401-3393

E-Mail: christine.carter@go.doe.gov

Web site: <http://www.eere.energy.gov/>

Source: www.dsireusa.org

TVA - Green Power Switch Generation Partners Program

Eligible Technologies: Photovoltaics, Wind

Applicable Sectors: Commercial, Residential

Amount: \$500 (residential only) plus \$0.15/kWh (residential/small commercial) or \$0.20/kWh (commercial) for 10 years

Terms: \$500 payment available only until program capacity reaches 150 kW

Website: www.gpsgenpartners.com

Summary: Through the Green Power Switch Generation Partners Program, the Tennessee Valley Authority (TVA) purchases the electricity produced by grid-intertied photovoltaic and wind turbine systems. TVA purchases the energy through participating power distributors and pays \$0.15/kWh. TVA will also pay the owners of qualifying residential

systems \$500 when a new installation is connected to the grid. The credit of \$0.15/kWh is available for a minimum of 10 years from the signing of the contract, regardless of the amount produced.

In September 2004, larger commercial customers were included in the program. Under the larger commercial contract, TVA will purchase the output at \$0.20/kWh.

Qualifying systems must have a minimum output of 500 W AC and a maximum of 50kW. They must provide at least a portion of the energy used at a particular site and must not have previously generated into the grid. Installations must comply with local codes and adhere to specific interface guidelines established by the program.

Participation in the program is entirely up to the discretion of the power distributors. Contact your electric utility to find out if they are affiliated with TVA. If you are in TVA's distribution area and would like to be a Generation Partner, contact your distributor and let them know. The Generation Partners Program has indicated that distributors are more likely to participate if their customers show interest in the program.

As of August 2006, 30 distributors in multiple states have signed up for the program. Thus far, the program includes several residential solar participants, a 20-kW wind project, a 50-kW commercial solar system, and a 10-kW commercial solar system.

Contact: Ginger Lawyer
Tennessee Valley Authority
Green Power Switch Generation Partners
26 Century Blvd.
OCP 2-F, NST
Nashville, TN 37229
E-Mail: gglawyer@tva.gov
Source: www.dsireusa.org

Mainstay Energy Rewards Program- Green Tag Purchase Program

Eligible Technologies: Photovoltaics, solar thermal electric, wind, biomass, geothermal electric, small hydroelectric, renewable fuels

Amount: Varies based on technology

Terms: Contact Mainstay for current information

Website: www.mainstayenergy.com

Summary: The Mainstay Energy Rewards Program purchases the power generated from renewable energy sources. "Mainstay Energy is a private company that purchases the 'green tags' or 'renewable energy credits' from small-scale renewable energy producers. Green tags represent the environmental qualities of the electricity generated by renewable energy systems. Mainstay pays participants per kilowatt-hour of production, and then re-sells the green tags it purchases to customers who want to purchase green

power. The concept of green tags allows us to track the environmental benefits of renewable energy production once it enters the electrical grid.

"Payment amounts depend on the type of renewable energy technology, the amount of electricity produced, and the length of the contract period. Mainstay offers 3, 5, and 10-year purchase contracts. The longer the contract period, the more Mainstay pays per kWh. Participating systems must be grid-intertied and have been installed after January 1, 1999."

Contact: Mainstay Energy Rewards Program
161 E. Chicago Ave., Suite 41B
Chicago, IL 60611-2624
1-877-473-3682

www.mainstayenergy.com

Source: www.dsireusa.org

FEDERAL GRANT AND FINANCING OPPORTUNITIES

Tribal Energy Grant Program

Eligible Technologies: Passive Solar Space Heat, Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Biomass, Hydroelectric, Geothermal Electric, Geothermal Heat Pumps

Sectors: Tribal governments

Amount: Varies

Maximum Limit: Varies

Website: www.eere.energy.gov/tribalenergy/financial.html

Summary: DOE's Office of Energy Efficiency and Renewable Energy's Tribal Energy Program provides financial and technical assistance to tribes for feasibility studies and shares the cost of implementing sustainable renewable energy installations on tribal lands. This program seeks to promote tribal energy self-sufficiency and fosters employment and economic development on America's tribal lands.

Tribal Energy Program funding is awarded through a competitive process. Each solicitation will include instructions on how to apply, application content, and the criteria by which applications will be selected for funding. Consult the program Web site above for current funding opportunities and past solicitations.

Contact: Thomas Sacco, U.S. Department of Energy
Weatherization & Intergovernmental Program
Forrestal Building, MS 5G-045
1000 Independence Avenue SW
Washington, DC 20585
202-586-0759

E-Mail: thomas.sacco@ee.doe.gov

Web site: <http://www.eere.energy.gov/wip/program/tribalenergy.html>

Source: www.dsireusa.org

USDA Renewable Energy Systems and Energy Efficiency Improvements Program

Eligible Technologies: Energy efficiency equipment and improvements; Solar Water Heat, Solar Space Heat, Photovoltaics, Wind, Biomass, Geothermal Electric, Geothermal Heat Pumps, Hydrogen, Direct-Use Geothermal, Anaerobic Digestion, Renewable Fuels, Fuel Cells (Renewable Fuels)

Sectors: Commercial, Agricultural

Amount: Grants: 25% of eligible project costs;

Guaranteed loans: 50% of eligible project costs

Maximum limits: Grants: \$500,000 per renewable energy project; Guaranteed loans: \$10 million

Dates of Availability: FY 2003 - FY 2007

Website: www.rurdev.usda.gov/rd/farbill/9006resources.html

Summary: Section 9006 of the 2002 Farm Bill requires the U.S. Department of Agriculture (USDA) to create a program to make direct loans, loan guarantees, and grants to agricultural producers and rural small businesses to purchase renewable-energy systems and make energy-efficiency improvements. This program is known as the Renewable Energy Systems and Energy Efficiency Improvements Program.

Contact: Contact the Rural Energy Coordinator at your local USDA office or visit the program website.

Source: www.dsireusa.org

RESIDENTIAL WEATHERIZATION AND UTILITY-BASED CONSERVATION PROGRAMS

Kentucky Weatherization Program

Eligible Technologies: Home heating systems; insulation; energy audits; duct sealing and other weatherization services

Sectors: Residential

Terms: Kentucky Weatherization Programs service families with a total income at or below 125% of the poverty level

Amount: Average of \$2,500 per housing unit

Website: www.kaca.org

Summary: "The Kentucky Weatherization Program provides energy conservation improvements to low-income households to help reduce energy costs while making homes healthier and safer. Eligible families must have a total income at or below 125% of the poverty level or have had a resident who received SSI or K-TAP (Kentucky Temporary Assistance Program) sometime in the previous twelve months. The Program is operated by local Community Action Agencies, which have offices throughout the State.

"The Weatherization Program typically spends about \$2,500 per housing unit and weatherizes approximately 2,000 units each year. The services

provided for each home are based on a site assessment and a computerized energy audit. Renovations may include repair or replacement of heating systems; elimination of carbon monoxide spillage and fuel leaks; reduction of air infiltration; carbon monoxide detectors and smoke alarms; or added insulation. Renovations are followed up with an energy education program for participants. Studies have found that participating households save about \$300 annually on energy costs. About 50,000 homes have been weatherized in Kentucky since the inception of the program."²

Contact:

Kentucky Association for Community Action, Inc.
101 Burch Court

Frankfort, KY 40601

502-875-5863 or 800-456-3452

Project WARM

Summary: Project Warm promotes home energy affordability, safety and comfort through energy conservation services and education. They involve and empower the community, focusing on at-risk families and households in Jefferson County, Kentucky. Their home energy conservation services are free for low-income residents.

Contact: Project WARM

1252 S. Shelby St.

Louisville, KY 40203

502-636-9276

Utility-based Energy Conservation Assistance Programs

Summary: Some electric and gas utilities in Kentucky offer incentives to assist their customers with energy saving home improvements. Some utilities also offer green power purchasing programs or incentives that support the installation of renewable energy systems.

Types of assistance offered include:

- home energy audits;
- rebates for high efficiency appliances, heating, and cooling units;
- weatherization services, along with financing and rebates, in some cases;
- rebates for energy efficient homes;
- and rebates for home energy ratings for Energy Star certification.

Contact your utility to find out what programs they offer and how they can assist you to improve the energy efficiency of your home. If your utility does not offer the type of assistance that you need, let them know that there is demand for energy conservation and renewable energy in their region.

COMMERCIAL AND INDUSTRIAL ENERGY ASSISTANCE PROGRAMS

Kentucky Pollution Prevention Center, Commercial Energy Efficiency and Pollution Prevention Assistance

Summary: "The Kentucky Pollution Prevention Center (KPPC) is a non-profit organization established by the general assembly to provide waste reduction and pollution prevention technical services to Kentucky businesses and organizations. KPPC's services help existing facilities achieve higher performance in terms of energy efficiency, resource conservation, and waste minimization. Their free services include on-site visits to assist clients with problem waste streams, energy efficiency assessments and training, pollution prevention research, and a materials exchange program to find new uses for waste products. These services are non-regulatory, confidential, and have helped KPPC's clients save thousands of dollars."³

Website: www.kppc.org

Contact: University of Louisville
420 Lutz Hall
Louisville, KY 40292
502-852-0148

End Notes

1. "Financing an Energy Efficient Home," National Renewable Energy Laboratory, US Department of Energy, Document no. DOE/GO-10200-1072, FS104, October 2000.
2. Andy McDonald, "High Performance Buildings: Bringing Environmentally Sound Building Practices into the Mainstream in Kentucky," Appalachia- Science in the Public Interest, Technical Paper 71, Mt. Vernon, Kentucky, 2004, p.8.
3. Ibid, p.7.