

Federal Tax Credits for Solar and Energy Efficiency

Federal tax credits are available for residential and commercial solar energy systems, and for residential energy efficiency improvements. These tax credits are available for systems placed in service between January 1, 2006 and December 31, 2016.

Residential Tax Credits

For solar water heaters and solar electric (PV) systems, the tax credit is 30% of the equipment and installation cost, with a maximum tax credit of \$2,000.

Commercial Tax Credits

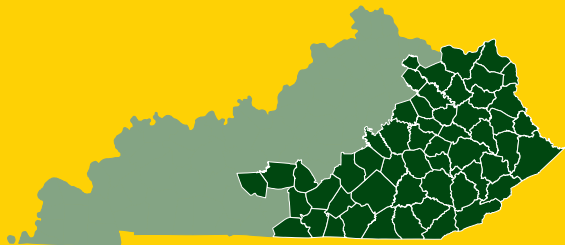
For solar water heaters, solar electric (PV) systems, and solar hybrid lighting, the tax credit is 30% of the equipment and installation cost, with no maximum limit.

Tax credits are subtracted directly from your tax liability, making them about three times more valuable than a tax deduction.

Kentucky state tax credits also apply. Contact Kentucky Solar Partnership for more information.

MACED's Service Area

Residents of Kentucky's 54 Appalachian counties (shown in dark green below) are eligible for loans through this program. If you live outside of MACED's service area and are interested in installing a solar water heater, contact the Kentucky Solar Partnership to learn if there are any financial incentives available in your area.



Loans for Commercial Energy Efficiency Projects Including Renewable Energy Systems and Business Development

MACED also offers loans to enterprises for energy efficiency improvements including lighting, HVAC, Energy Star appliances, and renewable energy systems like solar photovoltaics and sun tubes. Contact MACED for more information.

Are Rebates or Grants Available?

Rebates, grants, and other financial incentives that support renewable energy and energy efficiency may be available in your area. Contact the Kentucky Solar Partnership for more information.



How Do I Apply?

To apply for a loan, to learn more about this program, or to learn more about renewable energy and energy efficiency, please contact the Kentucky Solar Partnership's Frankfort office:

Kentucky Solar Partnership
2235 Gregory Woods Rd. • Frankfort, KY 40601
Tel: 888-576-6527
E-mail: solar@kysolar.org
www.kysolar.org

Mountain Association for Community Economic Development
433 Chestnut St. • Berea, KY 40403
Tel: 859-986-2373
www.maced.org

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Flexible Loans for Solar Water Heaters



Solar Water Heaters...

- Heat water for washing, bathing, and other household needs
- Heat swimming pools
- Provide hot water for radiant home heating systems
- Produce hot water for commercial and institutional uses, such as:
 - hotels, offices, restaurants, schools, laundromats, factories
- Use clean, renewable solar energy and protect the environment
- **Save you hundreds of dollars per year on your utility bills!**

A Project of the Kentucky Solar Partnership and the Mountain Association for Community Economic Development

About the Loan Program

The Kentucky Solar Partnership (KSP) and the Mountain Association for Community Economic Development (MACED) offer flexible financing and technical support for the installation of solar water heating systems. The program seeks to expand the market for solar water heaters in Kentucky by combining community education with flexible financing opportunities.

Who Can Apply?

Residents and businesses in Eastern Kentucky are encouraged to apply. A credit check is required before final loan approval. See the map on the back to find out if you live in one of the 54 counties in MACED's service area.

What Does a Solar Water Heater Cost?

A residential solar water heater will typically cost \$3,000 to \$6,500, depending on the size and capacity of the system, whether a new water storage tank is required, whether the system is installed by the homeowner or a professional contractor, daily hot water use in the home, and other factors.

Table 1 shows how much money a typical family spends just to heat water, and how much can be saved by using a solar water heater—hundreds of dollars per year! As energy costs rise, financial savings will increase as well.

What Are the Loan Terms?

Loans cover the full cost of equipment and installation. Specific interest rates and terms are available from MACED. Call 859-986-2373.

Table 1 — Potential Financial Savings Offered by a Solar Water Heating System for a Typical Family of Four

Fuel or energy source for water heater and price	Annual Water Heating Fuel Cost	Potential Annual Utility Savings*
Electric, \$0.08/kWh	\$512	\$216-\$347
Natural Gas, \$1.25/therm	\$316	\$158-\$252
Propane, \$2.53/gal excluding taxes for propane	\$668	\$334-\$527

*Based on average hot water use of 70 gallons/day and a solar system providing 50 – 80% of energy needed for water heating. As fuel prices rise, annual savings will rise. Calculations provided by the Kentucky Solar Partnership.



Table 2 — Annual Pollution Prevented by Using a Solar Water Heater in Kentucky*

Emission	Family of Two	Family of Four
Carbon Dioxide (CO₂) prevented	4,343 lbs.	7,583 lbs.
Nitrogen Oxides (NO_x) prevented	10 lbs.	18 lbs.
Sulfur Dioxide (SO₂) prevented	24 lbs.	43 lbs.
Mercury (Hg) prevented	35 milligrams	60 milligrams

*Based on replacing an electric water heater and reducing water heating energy demand 50%.
Source: The Cleaner and Greener Program Emissions Reduction Calculator, available on-line at: cleanerandgreener.org/emission_reductions.htm

Solar Water Heaters Are a Good Investment...

A solar water heater can reduce the cost of heating water by 50 to 80% or more, saving a family hundreds of dollars per year, and thousands of dollars over the life of the system! By harnessing the energy of the sun, a solar water heater provides security against rising fuel prices and can also increase the equity value of your home.



...And Good for the Environment

Solar water heaters use a free, renewable resource without generating pollution. Their use reduces our demand for energy from coal, natural gas and propane, all fossil fuels whose use causes significant environmental harm. When you install a solar water heater, you not only save hundreds of dollars per year on your utility bills, but you help create a cleaner, safer environment for our children and grandchildren.

About Solar Water Heaters

- Solar collectors need to be mounted in a sunny location. When mounted flush with the roof they can resemble large skylights.
- Solar water heaters (SWH) are very durable and low maintenance. Solar collectors commonly last over 25 years.
- SWH are used in combination with conventional water heaters to provide hot water day and night, year-round, in the winter and on cloudy days.