



Renewable Energy and Energy Efficiency Rebates and Incentives

Arizona State Incentives

Residential Solar and Wind Energy Systems Tax Credit

Arizona's Solar Energy Credit provides an individual taxpayer with a credit for installing a solar or wind energy device or system at the taxpayer's Arizona residence. The credit is allowed against the taxpayer's personal income tax in the amount of 25% of the cost of a solar or wind energy device/system, with a \$1,000 maximum allowable limit, regardless of the number of energy devices installed. The credit should be claimed in the year of installation. If the amount of the credit exceeds a taxpayer's liability in a certain year, the unused portion of the credit may be carried forward for up to five years. For more information contact the *Arizona Department of Revenue*.

<http://www.revenue.state.az.us/Forms/2006/310%20instructions.pdf>

Non-Residential Solar and Wind Tax Credit

Tax credits also exist for non-residential entities such as Commercial, Industrial, Nonprofit, Schools, Local Government, State Government, Tribal Government, Federal Government, Agricultural, and Institutional sectors. A corporate or personal tax credit is offered to businesses that install one or more solar energy devices (passive solar space heat, solar water heat, solar space heat, solar thermal electric, solar thermal process heat, photovoltaics, wind, solar cooling, solar pool heating & daylighting) in their Arizona facilities. The tax credit is equal to 10% of the installed cost of the solar energy device, not to exceed \$25,000 in credits for one building in a single tax year and \$50,000 total credits per business per tax year. Tax credits can be used to offset Arizona income tax liability; any unused credit amounts can be carried forward for a five-year period. For more information contact the *Arizona Department of Commerce*.

<http://www.azcommerce.com/BusAsst/Incentives/Solar+Energy+Tax+Incentives+Program.htm>

Income Tax Subtraction for Energy Efficient Residences

Arizona provides an individual income tax subtraction to taxpayers who sell one or more energy efficient single family residences, condominiums or town houses. The credit may be claimed in the year that the house is sold. It is equal to 5% of the sales price excluding commissions, taxes, interest, points, and other brokerage, finance and escrow charges and cannot exceed \$5,000. Energy efficient residences include new single family residences, condominiums or town houses that exceed the 1995 Model Energy Code Threshold by at least 50% (90 points) as determined by an approved rating program. Contact the *Arizona Department of Revenue* for more information.

<http://www.azdor.gov/ResearchStats/legislative%20summaries/2000leg.htm>



Qualifying Wood Stove Deduction

This incentive allows Arizona taxpayers to deduct the cost of converting an existing wood fireplace to a qualifying wood stove. The cost to purchase and install all necessary equipment is tax deductible, up to a maximum \$500 deduction. Qualifying wood stoves must meet the standards of performance for new wood heaters manufactured after July 1990, or sold after July 1992. For more information contact the *Arizona Department of Commerce*. <http://www.azcommerce.com/Energy>

Property Tax Assessment for Renewable Energy Property

Renewable energy equipment owned by utilities and other entities operating in Arizona is assessed at 20% of its depreciated cost for the purpose of determining property tax. "Renewable energy equipment" is defined as "electric generation facilities, electric transmission, electric distribution, gas distribution or combination gas and electric transmission and distribution and transmission and distribution cooperative property that is located in this state, that is used or useful for the generation, storage, transmission or distribution of electric power, energy or fuel derived from solar, wind or other nonpetroleum renewable sources not intended for self-consumption, including materials and supplies and construction work in progress, but excluding licensed vehicles and property valued under sections 42-14154 and 42-14156." For more information contact the *Arizona Department of Revenue*.

Solar Energy Property Tax Exemption

Arizona's property tax exemption for Commercial, Industrial, and Residential sectors applies to "solar energy devices and any other device or system designed for the production of solar energy for on-site consumption." For property tax assessment purposes, these devices are considered to add no value to the property.

A "solar energy device" for the purpose of this incentive is defined as "a system or series of mechanisms designed primarily to provide heating, to provide cooling, to produce electrical power, to produce mechanical power, to provide solar daylighting or to provide any combination of the foregoing by means of collecting and transferring solar generated energy into such uses either by active or passive means. Such systems may also have the capability of storing such energy for future utilization. Passive systems shall clearly be designed as a solar energy device such as a trombe wall and not merely a part of a normal structure such as a window." Contact the *Arizona Department of Revenue* for more information. <http://www.revenue.state.az.us>

Solar and Wind Equipment Sales Tax Exemption

Arizona provides a sales tax exemption for the retail sale of solar energy devices and for installation of solar energy devices by contractors. The statutory definition of "solar energy device" in House Bill 2429 includes wind electric generators and wind-powered water pumps in addition to daylighting, passive solar heating, active solar space heating, solar water heating, and photovoltaics. The sales tax exemption does not apply to batteries, controls, etc., that are not part of the system. For more information please refer to the *Arizona Department of Commerce*.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=AZ08F&state=AZ&CurrentPageID=1&RE=1&EE=1



Arizona Greywater and Rainwater Tax Credit

Tax credits are now available not only for greywater systems but also for rainwater harvesting systems as well. The original interpretation of the policy excluded the latter

but is now retroactive to January 1, 2007 for rainwater systems. In other words, anyone who has installed a rainwater harvesting system since this date will be eligible for credits. The credit equals 25% of the cost of the system up to a maximum of \$1,000. Builders can receive up to \$200 for each unit of residence constructed with a conservation system installed. Keep in mind that only \$250,000 is allotted per year for these credits. Once this amount is reached, no more credits will be issued and one can only apply the following year. Contact the *Arizona Department of Revenue* for more information.

<http://www.azdor.gov/Refunds%20and%20Credits/graywaterchoicesmenu.htm>

Utility Rebate & Loan Programs

Other residential and non-residential rebate and incentive programs exist through utility providers such as Arizona Public Service (APS), Salt River Project (SRP), and Unisource Energy Services (UES).

Arizona Public Service (APS)

APS offers up to \$3/Watt for residential grid-tied solar photovoltaic (PV) systems and up to \$2/Watt for residential off-grid PV systems. They offer \$0.75/kWh savings for residential solar water heating systems. A grid-tied wind energy system is eligible for \$2.50/Watt and an off-grid wind system is eligible for \$2/Watt, for residential applications. There are also several incentives offered for non-residential solar, wind, biogas/biomass, geothermal, hydro and other renewable energy systems. APS residential customers replacing heat pumps or air conditioning (AC) systems with higher efficiency ones are eligible for a rebate up to \$500: \$400 maximum for the system and an additional \$100 for using an APS Qualified Contractor. APS offers a rebate up to \$250 for the Building Performance Institute (BPI) Certified Contractor testing and repair of your heating/cooling duct system.

Please refer to <http://www.aps.com/main/green/choice/default.html> for more details.

Salt River Project (SRP)

SRP residential customers who install a solar water heating system are eligible to receive \$0.50/installed kWh of energy savings. Residential customers installing a grid-tied solar electric system are eligible to receive \$3/Watt, up to \$60,000.

Refer to <http://www.srpnet.com/environment/earthwise/solar/Default.aspx> for details.

UniSource Energy Services (UES)

For the Coconino County area, UES provides both a commercial and a residential natural gas customer rebate. The residential rebate provides up to \$325 toward the purchase of qualifying high-efficiency natural gas heating equipment that is replacing existing inefficient units. On the commercial side, UES offers rebates for customers purchasing more efficient equipment including water heaters, furnaces, boilers and commercial kitchen griddles.

Please refer to <http://uesaz.com/Green> for more detailed information.

Federal Incentives

Residential Renewable Energy Tax Credit

Through December 31, 2016 individual homeowners can claim a 30% tax credit for the purchase and installation of residential solar electric property with no cap beginning in 2009. An individual can take both a 30% credit up to a \$2,000 cap for a solar water heating system and/or a geothermal heat pump. A 30% tax credit up to \$500 per 0.5 kilowatt (kW) is available for small wind, with a \$4,000 cap. A 30% tax credit up to \$500 per 0.5 kW is available for fuel cells. For more information please refer to the *Database of State Incentives for Renewables & Efficiency*.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US37F&State=federal¤tpageid=1&ee=1&re=1

Residential Energy Efficiency Tax Credit

The credit applies to energy efficiency improvements in the building envelope of existing homes and for the purchase of high-efficiency heating, cooling and water-heating equipment. Efficiency improvements or equipment must serve a dwelling in the U.S. that is owned and used by the taxpayer as a primary residence. A tax credit of 10% of the cost of building envelope improvements and 100% of the cost (with certain maximum limits) of qualified heating, cooling and water heating equipment is available. The maximum amount of homeowner tax credit for all improvements combined is \$500 during the three year period of the tax credit (2006, 2007 and 2009). (Note that geothermal heat pumps are now covered under the Residential Renewable Energy Tax Credit.) For more information, see the *Database of State Incentives for Renewables & Efficiency* or contact the IRS.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US43F&State=federal¤tpageid=1&ee=1&re=1

Business Energy Tax Credit

Through December 31, 2016 federal business energy tax credits can be claimed for Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Wind, Biomass, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, CHP/Cogeneration, Solar Hybrid Lighting, Direct Use Geothermal, and Microturbines. The credit is set at 30% of expenditures for solar technologies, fuel cells and small wind, and 10% of expenditures for geothermal heat pumps, microturbines and CHP. A maximum incentive of \$1,500 per 0.5 kilowatt (kW) for fuel cells, \$200 per kW for microturbines, \$4,000 for small wind, and no maximum for the other technologies. There are also minimum system size limits. For more information please refer to the *Database of State Incentives for Renewables & Efficiency*.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US02F&State=federal¤tpageid=1&ee=1&re=1

Energy Efficient Commercial Buildings Tax Deduction

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. 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. Refer to the *Database of State Incentives for Renewables & Efficiency* website or the *IRS*.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US40F&State=federal¤tpageid=1&ee=1&re=1

Energy Efficient New Homes Tax Credit for Home Builders

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. 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.

For energy saving requirements and certification see the *Database of State Incentives for Renewables & Efficiency* or the *IRS*:

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US41F&State=federal¤tpageid=1&ee=1&re=1

Renewable Electricity Production Tax Credit (PTC)

This federal tax credit applies to commercial and industrial sectors generating electricity by qualified energy resources sold by the taxpayer to an unrelated person during the taxable year. The qualified energy resources include: Landfill Gas, Wind, Biomass, Hydroelectric, Geothermal Electric, Municipal Solid Waste, Hydrokinetic Power (i.e., Flowing Water), Anaerobic Digestion, Small Hydroelectric, Tidal Energy, Wave Energy, and Ocean Thermal. A credit of 2.0¢ per kilowatt-hour (kWh) applies to wind, geothermal and closed-loop biomass; a credit of 1.0¢ per kWh applies to other qualified technology. The duration of the credit is 10 years with a few exceptions. (Note that geothermal projects may not claim both the Business Energy Tax Credit and the PTC.) Please refer to the *Database of State Incentives for Renewables & Efficiency* for more information or contact the *IRS*.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US13F&State=federal¤tpageid=1&ee=1&re=1

Energy Efficient Mortgages (EEMs)

Energy efficient mortgages (EEMs) can be used by homeowners to finance a variety of energy efficiency measures, including renewable energy technologies, in a new or existing home. The federal government supports these loans by insuring them through Federal Housing Authority (FHA) or Veteran Affairs (VA) programs. The federal government also certifies private lenders to provide EEMs through the ENERGY STAR® program, which does not provide the same security as the FHA or VA programs but



offers ENERGY STAR® certification. Other private lenders, like Fannie Mae and Freddie Mac, offer “conventional energy efficient mortgages” that may or may not require homes to meet ENERGY STAR® standards. For more detailed information, please refer to the *Database of State Incentives for Renewables & Efficiency*.
http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US36F&State=federal¤tpageid=1&ee=1&re=1

Renewable Energy Production Incentive (REPI)

The federal Renewable Energy Production Incentive (REPI) provides incentive payments for electricity produced 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 and 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.

Eligible electric production facilities include not-for-profit electrical cooperatives, public utilities, state governments, Commonwealths, territories, possessions of the United States, the District of Columbia, Indian tribal governments, or a political subdivision thereof and Native Corporations. The production payment applies only to the electricity sold to another entity.

Qualifying systems must generate electricity using solar, wind, geothermal (with certain restrictions), biomass, landfill gas, livestock methane, or ocean (including tidal, wave, current, and thermal) generation technologies. Fuel cells using hydrogen derived from eligible biomass facilities are also eligible.

If there are insufficient appropriations to make full payments for electricity production from all qualified systems for a federal fiscal year, 60% of appropriated funds will be assigned to facilities that use solar, wind, ocean (including tidal, wave, current and thermal), geothermal or closed-loop biomass technologies; and 40% of appropriated funds for the fiscal year will be assigned to other projects. Contact the *U.S. Department of Energy* for more details. <http://www.eere.energy.gov/repil/>

Tribal Energy Program Grant

The DOE 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 *U.S. Department of Energy* for more information. <http://www.eere.energy.gov/tribalenergy>

USDA Rural Energy for America Program (REAP) – Grants

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 \$55 million in funding for FY 2009. 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 for the purchase of 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. For more information, contact the *USDA* or consult the *Database of State Incentives for Renewables & Efficiency*. www.usda.gov or http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US05F&State=federal¤tpageid=1&ee=1&re=1

Residential Energy Conservation Subsidy Exclusion

Energy conservation subsidies provided by public utilities, either directly or indirectly, are nontaxable. 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. Please visit the *IRS* website for further details. <http://www.irs.gov/publications/p525/index.html>

Clean Renewable Energy Bonds (CREBs)

Note that the IRS has not yet issued an announcement that they are accepting applications for the new allocation, or any official guidance detailing how it will operate. It remains to be seen if the new program will operate as described below.

CREBs can 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. CREBs may be issued by electric cooperatives, government entities (states, cities, counties, territories, Indian tribal governments, or any political subdivision thereof), and certain lenders. The advantage of CREBs is that they are issued -- theoretically -- with a 0% interest rate.

In practice, for a variety of reasons bond issuers typically must issue the bonds at a discount or make supplemental interest payments in order to find a buyer. 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 current allocation is \$800 million but there does not appear to be a time frame for issuing the bonds. Consult the *Database of State Incentives for Renewables & Efficiency* or the *IRS*.



http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US45F&State=federal¤tpageid=1&ee=1&re=1

Qualified Energy Conservation Bonds

Note that this summary should be taken as a preliminary interpretation of how the program will operate. The IRS has not yet issued any official program guidance defining its interpretation of the law.

The Energy Improvement and Extension Act of 2008, Section 301, authorized the issuance of qualified energy conservation bonds which can be used by state, local, and tribal governments to finance certain types of energy related projects. Qualified energy conservation bonds are qualified tax credit bonds, and in this respect are similar to existing federal Clean Renewable Energy Bonds (CREBs). 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 can be taken quarterly to offset the tax liability of the bondholder. The definition of qualified energy conservation projects is fairly broad and renewable energy facilities that are eligible for CREBs are also eligible for energy conservation bonds. Refer to the *Database of State Incentives for Renewables & Efficiency* or contact the IRS.

http://www.dsireusa.org/library/includes/incentive2.cfm?Incentive_Code=US51F&State=federal¤tpageid=1&ee=1&re=1

* The information provided herein is meant only as a resource. Although all efforts have been made to provide current and accurate information, it is not a substitute for consultation with authorized federal and state legal sources such as the IRS, Department of Revenue, Department of Commerce or other appropriate departments.