Renewable Energy and Energy Efficiency Rebates and Incentives

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Arizona State Incentives

Water Conservation 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/TaxCredits/WaterConservationSystems.aspx

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

Residential Solar Energy 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.azdor.gov/Portals/0/Brochure/543.pdf

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
Through December 31, 2040 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.*

http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=AZ30F&re=1&ee=1

Energy Equipment Property Tax Exemption
Arizona's property tax exemption for Commercial, Industrial, and Residential sectors applies to "solar energy devices and combined heat and power systems, and energy efficient building components. The bill defines renewable energy equipment as "equipment that is used to produce energy primarily for on-site consumption from renewable resources, including wind, forest thinnings, agricultural waste, biogas, biomass, geothermal, and low-impact hydropower." For property tax assessment purposes, these devices are considered to add no value to the property.

Contact the *Arizona Department of Revenue* for more information.
http://www.revenue.state.az.us

Solar and Wind Equipment Sales Tax Exemption
Through December 31, 2016 Arizona provides a sales tax exemption up to $5,000 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.azsolarcenter.org/economics/tax-breaks/state-tax-statutes/solar-devices-tax-exemption.html

Utility Rebate & Loan Programs
Other residential and non-residential rebate and incentive programs exist through utility providers such as Arizona Public Service (APS), and Unisource Energy Services (UES).

Arizona Public Service (APS)

Renewable Energy Incentive Program
APS offers customers who install various renewable energy sources the opportunity to sell the credits associated with the energy generated to APS. Previously, APS only provided incentives for solar technologies, but they expanded the list of qualified renewables in 2008 to include all technologies eligible for Arizona's Renewable Energy Standard (RES). The solar technologies eligible for a rebate include photovoltaic (PV), solar hot water, solar HVAC and solar daylighting systems. Up-front incentives for PV may be de-rated based on expected performance. Renewable energy systems are eligible for the following credit amounts:

- **Grid-tied PV (residential):** $1.75/watt DC, adjusted based on expected performance; No system size limit.
- **Grid-tied PV (non-residential):** $2.50/watt DC; or commercial customers may opt for a production-based incentive (PBI) on a 10-, 15- or 20-year contract.
- **Off-grid PV (residential):** $2/watt DC; System must be less than 5 kW.
- **Off-grid PV (non-residential):** $1.50/W or PBI
- **Solar hot water systems (residential):** $0.50/kWh estimated first-year energy savings based on OG-300 ratings, up to 50% of the system's cost.
- **Solar hot water systems (commercial):** Up to $0.75/kWh estimated first-year energy savings based on OG-300 ratings for small systems. For large SWH systems, customers can receive $0.45/kWh estimated first year energy savings, or may choose a 10, 15 or 20 year PBI. Incentives are limited to 50% of total system cost.
- **Solar HVAC systems (non-residential only):**The incentive for the thermal energy delivered for cooling by a solar HVAC system is based on

actual performance and ranges between $0.12/kWh-equivalent and $0.16.kWh equivalent. In addition, systems that incorporate solar thermal heating and/or solar thermal water heating are eligible for the large solar water heating PBI.

- **Solar Daylighting (non-residential only):** $0.20/kWh anticipated first year savings.
- **Grid-tied wind systems (residential and non-residential):**$2.50/W up to 50% of the system cost or $75,000; non-residential systems may opt for the PBI
- **Off-grid wind systems (residential and non-residential):**$2.00/W up to 50% of the system cost or $75,000; non-residential systems may opt for the PBI

http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=AZ04F&re=1&ee=1

Residential Energy Efficiency Rebate Program
APS offers an incentive for its residential customers to upgrade their AC units or heat pumps. The rebate amount is $175 for units with a SEER 13 and EER 10.8, $425 for units with SEER 14-16 / EER 10.8, and $525 for units with SEER 17 and above / EER 10.8. To be eligible, AC units must meet both the SEER and EER values and be replacements for less efficient equipment in existing homes. To apply for this rebate, fill out the application, and mail it to APS along with an invoice from a licensed contractor indicating proof of installation. Installation must be completed by an APS Qualified Contractor in accordance with APS' Quality Installation standards. Instructions on how to find an APS qualified contractor are listed on the website.
http://www.aps.com/_files/mktg/HPERebateForm.pdf

Energy Efficiency Solutions for Business
APS Solutions for Business has prescriptive, custom, whole building and energy study incentives available to its non-residential customers, including schools, small businesses, industrial facilities and public agencies.

Prescriptive Incentives are available to business customers for both retrofit and new construction projects. APS will rebate 75% of cost up to $150,000/year for customers with an aggregated demand of 100 kW or less, and $300,000/year for customers with aggregated loads greater than 100 kW demand. To qualify for the incentive, all final applications must be submitted within 6 months of project completion.

Custom Incentives are available to all customers for retrofit and new construction energy saving measures not included in the list of qualified prescriptive measures. Custom measures are funded at $0.11/ annual kWh savings and can be reserved with an Application for Custom Measures.

http://www.aps.com/businessrebates

UniSource Energy Services (UES)

Commercial Energy Efficiency Rebate Program
UES offers the Commercial Energy Solutions Program for their non-residential gas customers to install energy efficient equipment. Incentives are provided for qualified equipment installed in a retrofit, major renovation, or new construction project in four categories: furnaces, process boilers, water heaters, and high efficiency commercial kitchen griddles. The amount of the rebate varies depending on the equipment size and efficiency; specifications are listed on the program website. In order to qualify, UES recommends that non-residential customers submit a Pre-Notification Application. Equipment is then installed, and a Final Application is submitted. The rebate will be received within 6 weeks of submitting the complete application.

http://websafe.kemainc.com/ProjectCenter/Default.aspx?alias=websafe.kemainc.com/ProjectCenter/unisource

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 fuels cells. For more information please refer to the *Database of State Incentives for Renewables & Efficiency.*
http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US37F&re=1&ee=1

Residential Energy Efficiency Tax Credit
Through December 31, 2011 individual homeowners may claim at tax credit that 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 United States that is owned and used by the taxpayer as a primary residence. The maximum tax credit for all improvements made in 2011 is $500. The cap includes tax credits for any improvements made in 2006 - 2010. If a taxpayer claimed $500 or more of these tax credits in any previous year, any purchases made in 2011 will be ineligible for a tax credit. For more information, see the Database of State Incentives for Renewables & Efficiency or contact the IRS.
http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=US43F&re=1&ee=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&currentpageid=1&ee=1&re=1

Energy Efficient Commercial Buildings Tax Deduction
Through December 31, 2013 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&currentpageid=1&ee=1&re=1

Energy Efficient New Homes Tax Credit for Home Builders
Through December 31, 2011 builders may receive a 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 State;
-Its construction is substantially completed after August 8, 2005'
-It meets the energy savings requirements outlined in the statue 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&currentpageid=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&currentpageid=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&currentpageid=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/repi/

Tribal Energy Program Grant
The program, part of DOE's Office of Energy Efficiency and Renewable Energy, provides financial and technical assistance to tribes to evaluate and develop their renewable energy resources and reduce their energy consumption through efficiency and weatherization.

The program also offers education and training opportunities to help build the knowledge and skills essential for sustainable energy projects.

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

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. REAP is administered by the U.S. Department of Agriculture (USDA). In addition to these mandatory funding levels, there may also be discretionary funding issued each year.

Of the total REAP funding available, approximately 88% is dedicated to competitive 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) and to make energy efficiency improvements. Funding is also available to conduct relevant feasibility studies, with approximately 2% of total funding being available for 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&currentpageid=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