Tax Credits and Rebates

Information on tax credits, rebates and grants available from the federal government, state governments and utilities is available on the website www.dsireusa.org. Below is some of the information that is important when using ATAS products such as Cool Roofing, InSpire Wall and ATA-Solar.

Residential Energy Efficiency Tax Credit

State:	Federal
Incentive Type:	Personal Tax Credit
Eligible Efficiency Technologies:	Water Heaters, Furnaces , Boilers, Heat pumps, Central Air conditioners, Building Insulation, Windows, Doors, Roofs, Circulating fans used in a qualifying furnace
Eligible Renewable/Other Technologies:	Biomass, Stoves that use qualified biomass fuel
Applicable Sectors:	Residential
Amount:	Purchases made in 2011: varies Purchases made in 2010: 30%
Maximum Incentive:	For purchases made in 2011: Aggregate amount of credit is limited to $500. Taxpayer is ineligible for this tax credit if this credit has already been claimed by the taxpayer in an amount of $500 in any previous year. For purchases made in 2009 or 2010: Aggregate amount of credit for all technologies placed in service in 2009 and 2010 combined is limited to $1,500
Equipment Requirements:	Equipment must be new and in compliance with all applicable performance and safety standards as described in tax code
Start Date:	1/1/2006
Expiration Date:	12/31/2011
Web Site:	http://www.energystar.gov/taxcredits
Authority 1:	26 USC § 25C
Date Enacted:	8/8/2005 (subsequently amended)
Date Effective:	1/1/2006
Expiration Date:	12/31/2010 ($1,500 limit) 12/31/2011 ($500 limit)
Authority 2:	IRS Form 5695 & Instructions: Residential Energy Credits
Authority 3:	HR 4853 (Sec. 710)
Date Enacted:	12/17/2010
Date Effective:	1/1/2011
Expiration Date:	12/31/2011

Building Envelope Improvements
Owners of existing homes receive a tax credit worth 30% of the cost of upgrading the efficiency of the building's envelope. Installation (labor) costs are not included. The following improvements are eligible for the tax credit:

- Insulation materials and systems designed to reduce a home's heat loss or gain
- Exterior doors and windows (including skylights) and
- Pigmented metal roofs designed to reduce heat gain, and asphalt roofs with appropriate cooling granules.

Residential Renewable Energy Tax Credit

State:	Federal
Incentive Type:	Personal Tax Credit
Eligible Renewable/Other Technologies:	Solar Water Heat, Photovoltaics, Wind, Fuel Cells, Geothermal Heat Pumps, Other Solar Electric Technologies
Applicable Sectors:	Residential
Amount:	30%
Maximum Incentive:	Solar-electric systems placed in service before 1/1/2009: $2,000 Solar-electric systems placed in service after 12/31/2008: no maximum Solar water heaters placed in service before 1/1/2009: $2,000 Solar water heaters placed in service after 12/31/2008: no maximum Wind turbines placed in service in 2008: $4,000 Wind turbines placed in service after 12/31/2008: no maximum Geothermal heat pumps placed in service in 2008: $2,000 Geothermal heat pumps placed in service after 12/31/2008: no maximum Fuel cells: $500 per 0.5 kW
Carryover Provisions:	Excess credit may be carried forward to succeeding tax year
Eligible System Size:	Fuel cells: 0.5 kW minimum
Equipment Requirements:	Solar water heating property must be certified by SRCC or by comparable entity endorsed by the state in which the system is installed. At least half the energy used to heat the dwelling's water must be from solar. Geothermal heat pumps must meet federal Energy Star requirements. Fuel cells must have electricity-only generation efficiency greater than 30%.
Web Site:	http://www.energystar.gov/taxcredits
Authority 1:	26 USC § 25D
Date Enacted:	8/8/2005 (subsequently amended)
Date Effective:	1/1/2006
Expiration Date	12/31/2016
Authority 2:	IRS Form 5695 & Instructions: Residential Energy Credits

Solar-electric property

- There is no maximum credit for systems placed in service after 2008. The maximum credit is $2,000 for systems placed in service before January 1, 2009.
- Systems must be placed in service on or after January 1, 2006, and on or before December 31, 2016.
- The home served by the system does *not* have to be the taxpayer's principal residence.
- Note that the Solar Energy Industries Association (SEIA) has published a three-page document that provides answers to frequently asked questions regarding the federal tax credits for solar energy.

Business Energy Investment Tax Credit (ITC)

State:	Federal
Incentive Type:	Corporate Tax Credit
Eligible Renewable/Other Technologies:	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, Microturbines
Applicable Sectors:	Commercial, Industrial, Utility
Amount:	30% for solar, fuel cells and small wind;** 10%** for geothermal, microturbines and CHP Fuel cells: $1,500 per 0.5 kW
Maximum Incentive:	Microturbines: $200 per kW Small wind turbines placed in service 10/4/08 - 12/31/08: $4,000 Small wind turbines placed in service after 12/31/08: no limit All other eligible technologies: no limit
Eligible System Size:	Small wind turbines: 100 kW or less** Fuel cells: 0.5 kW or greater Microturbines: 2 MW or less CHP: 50 MW or less**
Equipment Requirements:	Fuel cells, microturbines and CHP systems must meet specific energy-efficiency criteria
Authority 1:	26 USC § 48
Authority 2:	Instructions for IRS Form 3468
Authority 3:	IRS Form 3468

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

- **Solar.** The credit is equal to 30% of expenditures, with no maximum credit. Eligible solar energy property includes equipment that uses solar energy to generate electricity, to heat or cool (or provide hot water for use in) a structure, or to provide solar process heat. Hybrid solar lighting systems, which use solar energy to illuminate the inside of a structure using fiber-optic distributed sunlight, are eligible. Passive solar systems and solar pool-heating systems are *not* eligible. (Note that the Solar Energy Industries Association has published a three-page document that provides answers to frequently asked questions regarding the federal tax credits for solar energy.)

Energy-Efficient Commercial Buildings Tax Deduction

State:	Federal
Incentive Type:	Corporate Deduction
Eligible Efficiency Technologies:	Equipment Insulation, Water Heaters, Lighting, Lighting Controls/Sensors, Chillers , Furnaces , Boilers, Heat pumps, Central Air conditioners, Caulking/Weather-stripping, Duct/Air sealing, Building Insulation, Windows, Doors, Siding, Roofs, Comprehensive Measures/Whole Building
Applicable Sectors:	Commercial, Construction, State Government, Fed. Government, (Deductions associated with government buildings are transferred to the designer)
Amount:	$0.30-$1.80 per square foot, depending on technology and amount of energy reduction
Maximum Incentive:	$1.80 per square foot
Equipment Requirements:	Not specified, but building must be certified as meeting specific energy reduction targets as a result of improvements in interior lighting; building envelope; or heating, cooling, ventilation, or hot water systems.
Web Site:	http://www.efficientbuildings.org
Authority 1:	26 USC § 179D
Date Enacted:	8/8/2005 (subsequently amended)
Date Effective:	1/1/2006
Expiration Date	12/31/2013
Authority 2:	H.R. 1424: Div. B, Sec. 303 (The Energy Improvement and Extension Act of 2008)
Date Enacted:	10/3/2008
Expiration Date	12/31/2013

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

A tax deduction of $1.80 per square foot is available to owners of new or existing buildings who install (1) interior lighting; (2) building envelope, or (3) heating, cooling, ventilation, or hot water systems that reduce the building's total energy and power cost by 50% or more in comparison to a building meeting minimum requirements set by ASHRAE Standard 90.1-2001. Energy savings must be calculated using qualified computer software approved by the IRS. Click here for the list of approved software.

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

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

The IRS released interim guidance (IRS Notice 2006-52) in June 2006 to establish a process to allow taxpayers to obtain a certification that the property satisfies the energy efficiency requirements contained in the statute. IRS Notice 2008-40 was issued in March of 2008 to further clarify the rules. NREL published a report (NREL/TP-550-40228) in February 2007 which provides guidelines for the modeling and inspection of energy savings required by the statute, and the US Department of Energy has compiled a list of qualified computer software for calculating commercial building energy and power cost savings.

Click here for answers to frequently asked questions provided by the *Commercial Building Tax Deduction Coalition.*

For more information, visit the Energy Star web site.

Modified Accelerated Cost-Recovery System (MACRS)

State:	Federal
Incentive Type:	Corporate Depreciation
Eligible Renewable/Other Technologies:	Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal Process Heat, Photovoltaics, Landfill Gas, Wind, Biomass, Geothermal Electric, Fuel Cells, Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Solar Hybrid Lighting, Anaerobic Digestion, Microturbines
Applicable Sectors:	Commercial, Industrial
Authority 1:	26 USC § 168
Date Effective:	1986
Authority 2:	26 USC § 48

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

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

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

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

small wind under *The Energy Improvement and Extension Act of 2008.*

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

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

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

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