



Federal Energy Efficiency Tax Credits for Existing Homes (Retrofit)

- The maximum amount of credit for all improvements combined is \$500 during the three year period of the tax credit (2006, 2007, & 2009; note that 2008 tax year is not included).
- Efficiency improvements, or equipment, must serve a dwelling owned and used by the taxpayer as a primary residence.
- **Ways to earn \$500 retrofit credit:**
 - Exterior windows:** 10% of the total cost (not installation), up to \$200. Includes skylights and storm windows.
To be eligible, exterior windows must be ENERGY STAR qualified *or* meet the 2000 International Energy Conservation Code (IECC), including supplements.
 - Insulation, exterior doors, storm doors, Energy Star roofing:** 10% of the cost of the product (not installation), up to \$500.
Includes seals to limit air infiltration, such as caulk and weather stripping, as well as storm doors.
To be eligible, insulation, exterior doors, and storm doors must meet 2000 IECC criteria, including supplements.
To be eligible, pigmented metal roofs and asphalt roofs with cooling granules must meet Energy Star.
 - Central air conditioner, heat pump, water heater, or biomass based space heater or water heater:** \$300 (not based on a percentage of initial cost) towards the full purchase price, including installation costs. See renewable energy tax credit section for information on 30% tax credit for geothermal (ground source) heat pumps.
Product eligibility varies, see www.energytaxincentives.org
 - Furnace or boiler:** \$150 towards the full purchase price of a furnace or boiler with an Annual Fuel Utilization Efficiency (AFUE) of >95, and/or \$50 for an efficient, air-circulating fan in a furnace, including installation cost.

Federal Energy Efficiency Tax Credit for New Homes

- Available for homes completed by December 31, 2009.
- Federal tax credit for new, site-built homes \$2,000 to builder for each home that:
 - Achieves **50% energy savings for heating and cooling** over the 2004 IECC and supplements (Does not count water heating or renewable energy production). This is different than the home's HERS score, which includes all energy not just heating and cooling energy use.
 - Building envelope improvements alone account for a level of annual heating and cooling energy consumption that is at least 10% below that of a reference dwelling unit.
- Many ENERGY STAR homes do not meet the energy savings required for this new home tax credit.
- Requires a certified HERS rater using RESNET procedures to show compliance (e.g. REM/Rate or Energy Gauge).

A Few Internet Resources

Federal and State, all incentives: www.dsireusa.org
 Consumer tax credits: www.ase.org/taxcredits
 All efficiency incentives: www.energytaxincentives.org
 Tax rules and forms: www.irs.gov

Energy Efficiency Information (tax credits and more):
www.energystar.gov
 North Carolina Solar Center: NC renewable energy tax credit forms and instructions: www.ncsc.ncsu.edu

For more information about North Carolina Solar Center programs visit
www.ncsc.ncsu.edu

• Federal Renewable Energy Tax Credits

A 30% tax credit for the purchase and installation of photovoltaic (aka solar electric or PV), solar water heating, geothermal heat pump, residential wind turbine, and fuel cell systems. Available to end of 2016.

There is no cap on the credit for photovoltaic systems put in service after 12/31/2008.

The following caps apply: solar water heating (\$2,000), fuel cells (\$1,500 per 0.5 kW), small wind (\$500 per 0.5 kW, up to \$4,000), and geothermal heat pumps (\$2,000).

Expenditures include labor costs for the onsite preparation, assembly, or original installation of the system and for piping or wiring to interconnect the system to the home.

Credits only apply to systems that serve a dwelling unit located in the U.S. and used as a residence by the taxpayer.

SEIA offers a Frequently Asked Questions document here:

www.seia.org/galleries/pdf/ITC_Frequently_Asked_Questions_10_9_08.pdf

Solar Water Heating Specifics

System must be designed to provide at least 50% of annual hot water needs.

Solar water heating property must be certified by the Solar Rating Certification Corporation (SRCC) or a comparable entity endorsed by the government of the State in which the property is installed.

The tax credit does not apply to solar water heating for swimming pools or hot tubs.

Geothermal (ground source) Heat Pump Specifics

Geothermal heat pumps must meet the requirements of the Energy Star program.

Federal Renewable Energy Tax Credits

Taxpayers are able to take the tax credit against the alternative minimum tax (AMT).

Expenditures are treated as made at system completion.

Credit is calculated based on the taxpayer's expenditures excluding subsidized energy financing.

If the tax credit exceeds tax liability, the excess amount may be carried forward to future taxable years.

• North Carolina Energy Efficiency Tax Credits

No NC residential energy efficiency tax credits exist at this time.

Progress Energy and Duke Energy offer Energy Star Homes a 5% monthly discount for the life of the home. Learn more about these and other utility incentives at www.dsireusa.org

• North Carolina Renewable Energy Tax Credits

Tax credit of 35% of the cost of renewable energy system constructed, purchased, or leased by a taxpayer.

The credit is *not* limited to systems that serve a dwelling unit used as a residence by the taxpayer.

Eligible costs include:

Equipment and associated design

Construction costs

Installation costs

Less any discounts, rebates, advertising, etc.

If the credit is not used entirely in the first year, the remaining amount may be carried over for the next 5 years.

Passive Solar System:

Capped at \$3,500 per dwelling unit.

Includes cost of windows, thermal mass, and controls.

Domestic Solar Hot Water System (and pool heating):

Capped at \$1,400 per dwelling unit.

Active Space Heating, or Combined Active Space Heating and Domestic Hot Water System:

Capped at \$3,500 per dwelling unit.

Solar Electric (PV), Wind, Biomass, Hydroelectric:

Capped at \$10,500 per technology per unit.

The needed forms and instructions are available at the North Carolina Solar Center Website: www.ncsc.ncsu.edu

Solar Hot Water Example with Federal and NC credits

\$6,000 installed system

35% NC tax credit equals \$2,100, but is limited to \$1,400 by the cap

30% Federal tax credit equals \$1,800 (below the \$2,000 cap)

But, you must pay federal income taxes on NC tax credit so (assuming 30% tax bracket) you owe 30% of \$1,400 (= \$420) in federal income taxes on the NC credit

Cost of system to user: \$6,000 - \$1,400 - \$1,800 + \$420 = \$3,220

Consumers are advised to consult with a tax professional regarding special situations.

For more information about tax credits and residential building, visit: www.healthybuilthomes.org

