



American Council for an Energy-Efficient Economy

Home Energy COP Webinar: Residential Energy Efficiency Tax Incentives

Jennifer Amann, ACEEE

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The American Council for an Energy-Efficient Economy (ACEEE)

Nonprofit 501(c)(3) dedicated to advancing energy efficiency through research, communications, and conferences.

~36 staff in Washington DC, + field offices in DE, MI, and WI.

Focus on End-Use Efficiency in Industry, Buildings, Utilities, and Transportation; Economic Analysis & Human Behavior; and State & National Policy

Funding:

- Foundations (34%)
- Federal & State Grants (7%)
- Specific Contract work (21%)
- Conferences and Publications (34%)
- Contributions and Other (4%)

Energy Efficiency Tax Incentives: History and Current Status

- Energy Policy Act of 2005 established tax credits for energy efficiency retrofits and on-site renewables
- October 2008 legislation extended many incentives originally expiring in '07 & '08
- American Recovery and Reinvestment Act further extends and modifies the scope of EE and RE tax incentives

*Goal: Dramatically increase availability
and demand for high efficiency products*

Residential Efficiency Incentives

Efficiency measures

- Home envelope improvements
- High efficiency heating, cooling and water heating equipment

Dates of eligibility

- Measures placed in service in 2009 & 2010

Incentive amounts

- 30% of installation costs up to **\$1,500** per home
- Lower caps for specific measures removed
- Includes labor for HVAC only!

Applies to taxpayer's principal residence only

Envelope Improvements (1)

Insulation and Sealing:

Insulation, air sealing and duct sealing to 2009 IECC



Roofs:

Energy Star-qualified pigmented metal roofs and asphalt roofs with cooling granules



Envelope Improvements (2)

Replacement Windows, Skylights & External Doors:

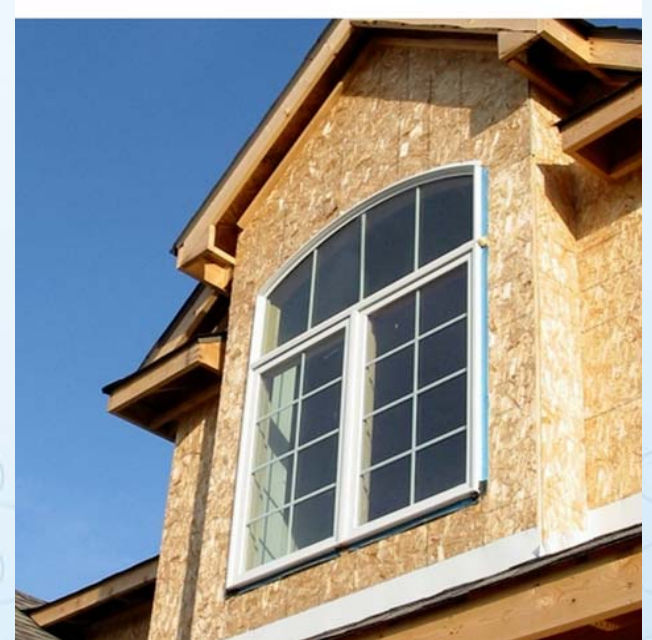
U Factor \leq .30

SHGC \leq .30

Some storm windows/doors also eligible

Window Films:

Must meet “qualifying insulation system” requirements



High Efficiency Equipment: Qualifying Levels (1)



Energy Efficiency Measure	Minimum Efficiency Requirement
Furnace fan	Electric use no more than 2% of energy use of furnace
Natural gas or propane furnace	95 AFUE
Oil furnace and natural gas, propane or oil hot water boiler	90 AFUE
Central air conditioner or heat pump	Highest CEE Tier (SEER and EER requirements)

High Efficiency Equipment: Qualifying Levels (2)

Energy Efficiency Measure	Minimum Efficiency Requirement
Natural gas, propane or oil water heater	0.82 EF or thermal efficiency $\geq 90\%$
Electric heat pump water heater	2.0 EF
Geothermal heat pump	Covered with on-site renewables
Biomass* stove used to heat a dwelling unit or domestic hot water	Thermal efficiency $\geq 75\%$

Biomass fuel includes agricultural crops, trees, pellets from wood wastes & residues, plants, grasses, and fibers

Qualifying Purchases

Manufacturer certifies eligibility

Taxpayer

- obtains certification from manufacturer, installer, or retailer
- keeps record of purchase/installation date and total cost
- completes IRS Residential Energy Efficient Property Form 5695

On-Site Renewable Generation Incentives



Incentives available for

- Solar energy systems
- Small wind systems
- Geothermal heat pumps

Dates of eligibility

- Measures placed in service 2008 through 2016

Incentive amounts

- 30% of system cost with NO cap (except for 2008 installations)

Not limited to taxpayer's principal residence

Solar Energy Systems

Solar water heating

- Performance certified by SRCC or comparable entity
- At least half of energy used to heat water must be solar energy
- No credit for expenses for swimming pool or hot tub

Photovoltaic systems

- Must supply electricity for the residence
- Must meet applicable fire and electrical code reqs

Other On-site Renewables

Small wind systems

- Homeowners, farmers, businesses eligible
- Credits for wind turbines with not more than 100 kW nameplate capacity

Geothermal heat pumps

- Residential use only
- Must meet ENERGY STAR specifications in effect on date of equipment purchase

Other Tax Provisions

- New homes tax credit (to builders)
- Appliance tax credit (to manufacturers)
- Commercial buildings tax deduction
- Vehicle tax credit for plug-in hybrid, plug-in electric, and plug-in conversion kits
- Various incentives for
 - fuel cells and microturbines
 - combined heat and power systems
 - smart meters and smart grid systems

ARRA Appliance Rebates



- \$300 million as 50% match for state appliance rebate programs (match limited to admin costs?)
- Authorized in EPA Act 2005 but never funded
- Rebates are for Energy Star (or better?) products (which?) that replace existing products (operable?)
- States to provide plans to DOE



Other ARRA Assistance to States

State Energy Program (\$3.1 billion expansion)

- States have large discretion on how to spend
Revolving loan funds? State buildings? Homes? Other?

Low Income Weatherization (\$5 billion expansion)

- Ramp-up to Obama's goal of 1 million homes/year

Energy Efficiency & Conservation Block Grants

- \$1.9 billion directly to larger municipalities
- \$784 million for states: \$470 million to pass to cities/counties not eligible for direct
- \$56 million for tribal programs
- \$456 million awarded in a competitive pool

Online Resources

Tax Incentives Assistance Project

- www.energytaxincentives.org

State Specific Incentives Info

- dsireusa.org

Stimulus Package Info, Guidelines, etc.

- www.aceee.org/energy/national/recovery

Contacts

Jennifer Amann

ACEEE

202.507.4015

jamann@aceee.org

Sarah Black

ACEEE (TIAP)

202.507.4033

sblack@aceee.org