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The U.S. Department of Energy and the North Carolina Solar Center are excited to announce that a new, modernized DSIRE is under construction. The new version of DSIRE will offer significant improvements over the current version, including expanded data accessibility and an array of new tools for site users. The new DSIRE site will be available in the summer of 2014. Staff are currently working hard on the new DSIRE and are unfortunately only able to make minimal updates to the DSIRE website at this time. We apologize for any inconvenience and thank you for using DSIRE.







## **Federal**

## **Incentives/Policies for Renewables & Efficiency**

Business Energy Investment Tax Credit (ITC)

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Last DSIRE Review: 03/13/2014

Program Overview:

State: Federal

Incentive Type: Corporate Tax Credit

Solar Water Heat, Solar Space Heat, Solar Thermal Electric, Solar Thermal

Eligible Process Heat, Photovoltaics, Wind, Geothermal Electric, Fuel Cells,

Renewable/Other Geothermal Heat Pumps, Municipal Solid Waste, CHP/Cogeneration, Solar

Technologies: Hybrid Lighting, Tidal Energy, Fuel Cells using Renewable Fuels,

Microturbines, Geothermal Direct-Use

Applicable Sectors: Commercial, Industrial, Utility, Agricultural

Amount: 30% for solar, fuel cells, small wind\*

10% for geothermal, microturbines and CHP

Fuel cells: \$1,500 per 0.5 kW Microturbines: \$200 per kW

Maximum Incentive: 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

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Microturbines: 2 MW or less

CHP: 50 MW or less\*

Equipment Fuel cells, microturbines and CHP systems must meet specific energy-

Requirements: efficiency criteria

Authority 1: <u>26 USC § 48</u>

Authority 2: <u>Instructions for IRS Form 3468</u>

Authority 3: IRS Form 3468

Authority 4: H.R. 8 (American Taxpayer Relief Act of 2012)

Date Enacted: 01/02/2013 Date Effective: 01/02/2013

Summary:

The federal business energy investment tax credit available under 26 USC § 48 was expanded significantly by the Energy Improvement and Extension Act of 2008 (H.R. 1424), enacted in October 2008. This law extended the duration -- by eight years -- of the existing credits for solar energy, fuel cells and microturbines; increased the credit amount for fuel cells; established new credits for small wind-energy systems, geothermal heat pumps, and combined heat and power (CHP) systems; allowed utilities to use the credits; and allowed taxpayers to take the credit against the alternative minimum tax (AMT), subject to certain limitations. The credit was further expanded by the American Recovery and Reinvestment Act of 2009, enacted in February 2009.

In general, the following 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.
- Fuel Cells. The credit is equal to 30% of expenditures, with no maximum credit. However, the credit for fuel cells is capped at \$1,500 per 0.5 kilowatt (kW) of capacity. Eligible property includes fuel cells with a minimum capacity of 0.5 kW that have an electricity-only generation efficiency of 30% or higher. (Note that the credit for property placed in service before October 4, 2008, is capped at \$500 per 0.5 kW.)
- Small Wind Turbines. The credit is equal to 30% of expenditures, with no maximum credit for small wind turbines placed in service after December 31, 2008. Eligible small wind property includes wind turbines up to 100 kW in capacity. (In general, the maximum credit is \$4,000 for eligible property placed in service after October 3, 2008, and before January 1, 2009. *The American Recovery and Reinvestment Act of 2009* removed the \$4,000 maximum credit limit for small wind turbines.)
- **Geothermal Systems.** The credit is equal to 10% of expenditures, with no maximum credit limit stated. Eligible geothermal energy property includes geothermal heat pumps and equipment used to produce, distribute or use energy derived from a geothermal deposit. For electricity produced by geothermal power, equipment qualifies only up to, but not including, the electric transmission stage. For geothermal heat pumps, this credit applies to eligible property placed in service after October 3, 2008. Note that the credit for geothermal property, with the exception of geothermal heat pumps, has no stated expiration date.
- **Microturbines.** The credit is equal to 10% of expenditures, with no maximum credit limit stated (explicitly). The credit for microturbines is capped at \$200 per kW of capacity. Eligible

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- property includes microturbines up to two megawatts (MW) in capacity that have an electricity-only generation efficiency of 26% or higher.
- Combined Heat and Power (CHP). The credit is equal to 10% of expenditures, with no maximum limit stated. Eligible CHP property generally includes systems up to 50 MW in capacity that exceed 60% energy efficiency, subject to certain limitations and reductions for large systems. The efficiency requirement does not apply to CHP systems that use biomass for at least 90% of the system's energy source, but the credit may be reduced for less-efficient systems. This credit applies to eligible property placed in service after October 3, 2008.

In general, the original use of the equipment must begin with the taxpayer, or the system must be constructed by the taxpayer. The equipment must also meet any performance and quality standards in effect at the time the equipment is acquired. The energy property must be operational in the year in which the credit is first taken.

Significantly, the American Recovery and Reinvestment Act of 2009 repealed a previous restriction on the use of the credit for eligible projects also supported by "subsidized energy financing." For projects placed in service after December 31, 2008, this limitation no longer applies. Businesses that receive other incentives are advised to consult with a tax professional regarding how to calculate this federal tax credit.

\* A number of changes to this credit are scheduled to take effect for systems placed in service after December 31, 2016. The credit for 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 will decrease from 30% to 10%. The credit for geothermal heat pumps, hybrid solar lighting, small wind, fuel cells, microturbines, and combined heat and power systems will expire. The credit amount for equipment which uses geothermal energy to produce electricity will remain at 10%.

## **Contact:**

Public Information - IRS U.S. Internal Revenue Service 1111 Constitution Avenue, N.W. Washington, DC 20224 Phone: (800) 829-1040

Web Site: http://www.irs.gov