





GHP and Other Energy Funding Opportunities

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April 30, 2009



American Recovery and Reinvestment Act (ARRA)

\$22B energy-related tax incentives and revisions

<i>CleanTech segment</i>	<i>Program</i>	<i>Total allocation¹ \$ Billions</i>	<i>Allocation</i>
 Renewables / cleaner energy \$17.3 billion	<i>Expanded Renewable Energy Production Credit</i>	13.1	<i>Utilities</i>
	<i>Investment tax credits for cleantech manufacturing</i>	1.6	<i>Manufacturers</i>
	<i>Remove dollar cap on small-scale energy property</i>	0.9	<i>Homeowners, businesses</i>
	<i>Additional clean renewable energy bonds</i>	0.6	<i>State/local gov't</i>
	<i>Tax credit for investment in nonsolar renewables</i>	0.3	<i>Utilities, gov't</i>
	<i>Grants in lieu of credits for renewable energy facilities</i>	0.8	<i>Utilities</i>
 Energy efficiency / building retrofits \$2.8 billion	<i>Tax credits for EE home improvement</i>	2.0	<i>Utilities</i>
	<i>Bonds for government energy conservation programs</i>	0.8	<i>Homeowners</i>
 Fuel efficient / electric vehicles \$2.1 billion	<i>Minimum \$2,500 plug-in electric vehicle credit</i>	2.0	<i>Individuals, business</i>
	<i>Tax credit for alternative refueling property</i>	0.1	<i>Individuals, business</i>
 Mass transit \$0.5 billion	<i>Tax-exemption for high-speed rail facilities</i>	0.3	<i>States, transit agencies</i>
	<i>Increase maximum tax-free transit compensation</i>	0.2	<i>Individuals</i>
		Total: \$21.9 billion	

Working Draft - Last Modified: 3/15/2009 12:21:15 AM Printed: 3/15/2009 4:28:19 PM

Tax Credit Changes in ARRA

- ARRA expands and extends existing consumer and business tax credits for EE and RE
- Expands existing financing mechanisms and creates new ones
 - Increases funding for CREBs and QECBs
 - Creates new grant financing option for renewable energy projects
 - New ENERGY STAR appliance rebate program
- Establishes new tax credits
 - Plug-in hybrids
 - Advanced energy manufacturing projects

State Energy Program

UTAH GEOLOGICAL SURVEY

Home Energy Efficiency Improvement Tax Credits

- ARRA extends residential energy efficiency tax credits to 12/31/10
- Tax credit amount raised from 10% to 30%
- The maximum credit has been raised from \$500 to \$1,500 total for the two year period (2009-2010).
- Tax credits for a specific dollar amount (e.g., \$300 for a CAC), have been converted to 30% of the cost.
- The \$200 cap on windows has been removed, but the requirements for windows has been increased significantly.
 - *Not all ENERGY STAR qualified windows will qualify.*

For details, see the ENERGY STAR Web site



Residential Renewable Energy Tax Credits

- 30% tax credit for on-site renewable systems (e.g., geothermal heat pumps, solar water heaters, and solar panels)
- For systems placed in service before December 31, 2016
- Removes cap on RE tax credits



Business Tax Credits

- **Extends new homes tax credit to 12/31/09**
 - \$1,000 for homes that achieve 30% reduction in heating and cooling energy consumption
 - \$2,000 for new homes meeting a 50% standard
- **Extends commercial tax credit for 5 years (12/31/2013)**
 - \$1.80 per ft² of floor area for buildings achieving a 50% energy savings target

ENERGY STAR Appliance Rebates

- New program authorized by EPA Act 2005 (Section 124)
 - “Funds rebate programs in eligible states to support residential end-user purchases of ENERGY STAR products”
- \$300 million in ARRA; distributed via States
 - **~\$3 million eligible for Utah via State Energy Program**

Renewable Energy Incentives under ARRA

Key changes in ARRA:

- Extension of credit for electricity produced from certain renewable resources
- Election of investment credit in lieu of production credit
- Election of a grant in lieu of production or investment credit
- Repeal of certain limitations on credit for renewable energy property

PTC, ITC and Grants

- ARRA allows taxpayers eligible for the federal renewable electricity production tax credit (PTC) to take the federal business energy investment tax credit (ITC) or to receive a grant from the U.S. Treasury Department instead of taking the PTC for new installations.
- Small wind-energy systems, geothermal heat pumps, and CHP systems now qualify
- Utilities now qualify for the ITC

Renewable Electricity Production Tax Credit (PTC)

- A per-kilowatt-hour tax credit for electricity generated by qualified energy resources
- ARRA revised the tax credit by:
 1. Extending the in-service deadline for most eligible technologies by 3 years (2 years for marine and hydrokinetic)
 2. Allowing facilities that qualify to opt instead to take ITC or an equivalent cash grant from the U.S. Department of Treasury.
 3. Expands qualifying technologies (wind, geothermal, biomass, hydrokinetic power (i.e., flowing water), tidal energy, wave energy, ocean thermal)

Business Energy Investment Tax Credit (ITC)

- ARRA repealed a previous limitation on the use of the credit for eligible projects also supported by “subsidized energy financing.”
- ARRA removed the maximum credit amount for all eligible technologies placed in service after 2008
- ARRA allows ITC-eligible entities to receive a grant from U.S. Department of Treasury instead of ITC for new installations

Renewable Energy Grants via Business Energy Tax Credit

- Established as alternative finance mechanism to PTC for renewable energy projects
 - Cash grant taken in lieu of the ITC or PTC
 - Administered by Treasury Department
- Grants available to eligible property placed in service in 2009 or 2010, or if construction began in 2009 or 2010.
 - 30%: Solar, Fuel Cells, Qualified facility, Small Wind Turbines
 - 10%: Geothermal Heat Pumps, Microturbines, CHP
- Only tax-paying entities are eligible
- Treasury ruling: grants are not subject to NEPA

Modified Accelerated Cost-Recovery System (MACRS) + Bonus Depreciation

- Businesses may recover investments in certain property through depreciation deductions
- GHP classified as five-year property
- Business may be 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
 - For more info go to: *IRS Publication 946, IRS Form 4562: Depreciation and Amortization, and Instructions for Form 4562*

Other ARRA Funding Opportunities

- State Energy Program (SEP) \$35 million
- Energy Efficiency and Conservation Block Grant (EECBG) \$9.5 million
 - Provides funding to cities and counties for energy efficiency and renewable programs and projects
 - Must be incorporated
 - Utah's top 17 cities and 10 counties in population eligible for formula funding via DoE
 - All other cities and counties eligible via SEP competitive grants (stay tuned!!)
 - energyrecovery@utah.gov

Residential Energy Efficiency Tax Credit (personal tax credit)

- Technologies include: Water Heaters, Furnaces, Boilers, Heat pumps, Air conditioners, Building Insulation, Windows, Doors, Roofs, Circulating fans used in a qualifying furnace
- 30% Investment Tax Credit: Aggregate amount of credit for all technologies placed in service in 2009 and 2010 combined is limited to \$1,500

Residential Renewable Energy Tax Credit (personal tax credit)

- Eligible Technologies Include: Solar Water Heat, Photovoltaics, Wind, Fuel Cells, ***Geothermal Heat Pumps***, Other Solar Electric Technologies
- Systems must be placed in service on or after January 1, 2008, and on or before December 31, 2016.
 - Systems placed in service in 2008 have \$2,000 credit limit
 - Excess credit may be carried forward to succeeding tax year
- The geothermal heat pump must meet federal Energy Star program requirements in effect at the time the installation is completed
- The home served by the system does *not* have to be the taxpayer's principal residence

State of Utah-Renewable Energy Tax Credit

- 10 % Commercial Investment Tax Credit for **GHP**, solar hot water, solar PV, wind (<660kw), and biomass with a \$50,000 limit.
 - Commercial wind, geothermal electric, and biomass systems 660 kW or greater: 0.35¢/kWh (\$0.0035/kWh) for 4 years
- 25% Residential Investment Tax Credit for **GHP**, solar hot water, solar PV, wind (<660kw), and biomass with a \$2,000 limit.
- Must obtain certification from the State Energy Program

Information Resources

- ARRA Funding
 - recovery.org
 - Department of Energy
 - energy.gov/recovery
 - <http://www.eecbg.energy.gov/>
 - Utah State Energy Program
 - <http://geology.utah.gov/sep/stimulus/index.htm>
 - Email: energyrecovery@utah.gov,
 - Phone: 801.538.5428