



Try This at Home



Rebates and Credits for Energy Efficiency Upgrades

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If you've been thinking about making some upgrades to your home to improve energy efficiency, now is the time. There are numerous rebates, credits and incentives to pay for some (and perhaps all) of the cost of the upgrade. This fact sheet is designed to provide you with some resources to get the credits you are entitled to. Much of this information was compiled from www.dsireusa.org. For more information on geothermal or solar installations, check the Utah House website (<http://theutahhouse.org>) for workshops on these and other topics.



Home appliances and weatherization upgrades

Rebates and credits are available for lots of home appliance and weatherization upgrades. Table 1 below contains the rebates/credits that are available through federal and utility organizations. Please note that to obtain the Rocky Mountain Power rebates, all of the appliances have to be Energy Star certified. Visit <http://www.homeenergysavings.net/utah/home.html> for details.

Table 1. Home upgrades and rebates available through federal and utility organizations

| | Federal tax credit | Questar Gas | Rocky Mountain Power |
|---|--------------------|--------------------|-----------------------|
| Boiler (gas) | * | \$400 | |
| Central A/C | * | | \$150 |
| Clothes dryer (electric) | | | \$50-75 |
| Clothes dryer (gas) | | \$30 | |
| Clothes washer (electric) | | | \$50-75 |
| Clothes washer (gas) | | \$50-75 | |
| Dishwasher | | | \$20 |
| Doors | * | | |
| Evaporative cooler | | | \$300 ¹ |
| Furnace (gas) | * | \$300 | |
| Lighting | | | \$20/fixture |
| Refrigerator | | | \$20 |
| Room A/C | * | | \$30 ² |
| Water heater (electric) | * | | \$50 |
| Water heater (gas) | * | \$50 | |
| Water heater (tankless) | * | \$300 | |
| Windows | * | \$0.95/sq. ft | \$0.95/sq. ft |
| Central A/C or heat pump tune-up | | | \$100/25 ³ |
| Duct insulation | | \$250 | |
| Duct sealing | | \$225 | \$150/50 ³ |
| Home insulation | * | \$0.20-0.30/sq. ft | \$0.20-0.45/sq. ft |
| * Individual credit varies. Credit for most items is 30%, with a maximum combined credit of \$1500. | | | |
| ¹ Rebate for first time installation. Rebate is \$100 for upgrades. | | | |
| ² \$20 recycling incentive also available. | | | |
| ³ Rebate for customer/contractor | | | |

Home heating/cooling

Geothermal/ground source heating and cooling. These systems are the most efficient HVAC systems available. They use the near constant temperature of the earth as a reservoir to dump heat to, or pull heat from, depending on what the needs of the house are. Here is the summary of what is available:

Federal: Tax credit for 30% of purchase price.

State of Utah: Tax credit for 25% of purchase price, \$2000 limit.

Solar hot water heating and electricity generation

There are two ways to harness the sun's energy: heating water to use in your home, or using an array to convert the sun's energy into electricity (solar photovoltaic, or PV). Solar PV systems tend to cost more at the beginning. Both types of systems are suitable for use in Utah. Rebates and credits are available for both types of systems:

Solar hot water heating

Federal: Tax credit for 30% of purchase price, no limit.

State of Utah: Tax credit for 25% of purchase price, \$2000 limit.

Utility: Questar gas offers a \$750 rebate. Visit www.thermwise.com.

Solar photovoltaic (PV)

Federal: Tax credit for 30% of purchase price, no limit.

State of Utah: Tax credit for 25% of purchase price, \$2000 limit.

Utility: Rocky Mountain Power provides a \$2/watt rebate, with a \$6000 limit. You need to be in their service area to receive this credit. Details can be found at http://portal.ecosconsulting.com/rmp_solar/. ****As of March 2009, the rebate funds available for 2009 have been exhausted.**

Local: The cities of Washington and Logan, Utah each offer credits of \$2/watt, with a limit of \$6000.

The following tables show some hypothetical financial examples for solar PV and hot water. For PV (Table 2), look at the average usage column to find the example closest to your actual usage per month. Then, two examples are given: one for offsetting 50% of your use, and one to offset 100%. The costs for each option can be seen, so you can determine which might be the best choice for you. The numbers in both tables came from a solar cost estimator website (<http://www.solar-estimate.org>). Both of the examples below were calculated for Davis County, UT. Some of the assumptions that were used are included after each table. **The numbers here should just be used as a guide.** To get a more precise estimate for your home, visit the website listed above, or contact a local solar installer.

Table 2. Sample cost estimates for solar PV.

| Average usage kWh/month | % of total use | Size (kW) | System cost (\$) | Rebate & incentive total (\$) | Cost to you (\$) | Average monthly savings (\$) | Time to break even (years) |
|-------------------------|----------------|-----------|------------------|-------------------------------|------------------|------------------------------|----------------------------|
| 500 | 50 | 2.1 | \$18,990 | \$11,897 | \$7,093 | \$28 | 21 |
| 500 | 100 | 4.2 | \$37,980 | \$19,394 | \$18,586 | \$57 | 22 |
| 750 | 50 | 3.2 | \$28,530 | \$16,159 | \$12,371 | \$44 | 21 |
| 750 | 100 | 6.3 | \$57,060 | \$25,118 | \$31,942 | \$88 | 22 |
| 1000 | 50 | 4.2 | \$37,980 | \$19,394 | \$18,586 | \$60 | 21 |
| 1000 | 100 | 8.4 | \$76,050 | \$30,815 | \$45,235 | \$119 | 22 |

Assumptions:

Calculations were for Davis County, UT, as of March 2009

Break even calculation assumed 3% annual increase in electricity prices

Rebates include Rocky Mountain Power rebate, which is currently NOT available for 2009.

Table 3. Sample cost estimates for solar hot water heating.

| Household size (people) | System cost (\$) | Rebates & incentives (\$) | Cost to you (\$) | Average monthly savings (\$) | Time to break even (yrs) |
|-------------------------|------------------|---------------------------|------------------|------------------------------|--------------------------|
| 1-2 | \$4,000 | \$2,763 | \$1,237 | \$12 | 6 |
| 3-6 | \$6,000 | \$3,863 | \$2,137 | \$27 | 5 |
| 7-8 | \$8,000 | \$4,963 | \$3,037 | \$41 | 4 |

Assumptions:

Calculations were for Davis County, UT, as of March 2009

Existing hot water heating is done with natural gas

Break even calculation assumed 3% annual increase in natural gas prices

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