Economic Stimulus Response

Heat Pump Tax Credit Article

Release date: 4/27/2009, 545 words

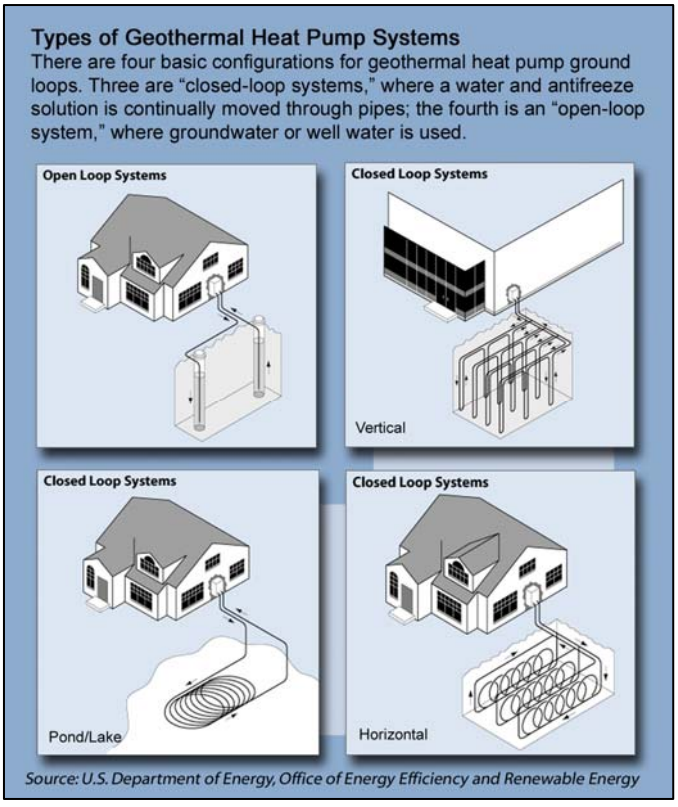
Heat and Cool Efficiently while Saving with the Stimulus

Federal stimulus provides savings for consumers who install heat pumps

By Scott Gates

Hands-down, managing the temperature in a home or business has the biggest impact on energy costs. In trying to keep warm in winter and cool during summer, the average U.S. homeowner spends $1,400 annually, accounting for 56 percent of all home energy expenses. To help cut these costs, the federal stimulus bill provides tax credits for consumers who install heat pumps—highly efficient devices that can heat and cool your home year-round.

Heat pumps simply move heat from one place to another. During winter months, they collect and consolidate heat from outside and move it inside; during summer months, they reverse the flow and send warm, indoor air out. There are two main ways of doing this: Air-source heat pumps transfer the heat with air; ground-source, or geothermal, heat pumps do so by passing a liquid solution through underground pipes or by tapping groundwater.



The two types of heat pumps come with different up-front costs, provide different results, and are covered by two different tax credits.

The **energy efficiency tax credit** applies to air-source heat pumps, which can trim the amount of electricity needed for heating by as much as 30 percent to 40 percent. Although a typical high-efficiency, ENERGY STAR-qualified air-source heat pump comes with a substantial $6,000

price tag, it's estimated that energy savings will offset the purchase price within five years.

The tax credit is equal to 30 percent of the cost, up to $1,500, which does not include the cost of installation. A full list of system requirements, along with a product list, can be found by searching for "tax credit" at www.energystar.gov.

The **residential alternative energy tax credit** applies to geothermal heat pumps, which use a system of underground pipes to transfer heat. These pipes circulate liquid to move heat from your home, into the ground—and vice versa—with annual energy savings averaging between 30 percent and 71 percent, according to the Geo-Heat Center, part of the Oregon Institute of Technology.

But these heat pumps are pricey, costing anywhere from $15,000 to $40,000 for an average home. Excavation, installation of underground pipes, and (with a groundwater heat pump) well drilling accounts for much of the price tag.

"Heat pumps can be tricky to put in," explains Brian Sloboda, senior adviser with the Cooperative Research Network, an arm of Arlington, Va.-based National Rural Electric Cooperative Association. "But North American Technician Excellence-certified installers will have passed a comprehensive test and know what they're doing."

The tax credit compensates for the high cost of a geothermal system, and is equal to 30 percent of the cost for materials and installation on both new and existing homes. There is no cap for this credit, which covers all systems meeting ENERGY STAR criteria that are installed between January 1, 2009, and December 31, 2016.

Homeowners considering a heat pump should discuss their options with Their local electric cooperative. It is important to learn the ins and outs of available technology. To apply for either federal tax credit, use Internal Revenue Service Form 5695 and be able to provide a Manufacturer's Certification Statement. State rebates may also be available for some systems; to see what rebates are available in your state, check the Database of State Incentives for Renewables & Efficiency at www.dsireusa.org.

Sources: National Rural Electric Cooperative Association; Cooperative Research Network; OIT Geo-Heat Center; U.S. Department of Energy Office of Energy Efficiency and Renewable Energy; Internal Revenue Service

Scott Gates writes on consumer and cooperative affairs for the National Rural Electric Cooperative Association, the Arlington, Va.-based service arm of the nation's 900-plus consumer-owned, not-for-profit electric cooperatives.