

The Seattle Times

Saturday, October 2, 2010 - Page updated at 07:31 PM

Permission to reprint or copy this article or photo, other than personal use, must be obtained from The Seattle Times. Call 206-464-3113 or e-mail resale@seattletimes.com with your request.

Efficient home heat is hot new budget saver

By Tom Watson

Special to The Seattle Times

Any home can be warm, but what's really hot now is efficient heat.

As we hunker down for our interminable months of cool weather in the Northwest, take a few moments to ponder your home heating system.

You could boost the efficiency of your current system, adding insulation for example, or you could really turn up the heat and invest in one of the innovative green heating choices now available.

Q: How will I know when to replace my current heating system?

A: If your furnace is more than 15 years old, installing a new system will almost certainly improve heating efficiency and save money. If your home has high humidity or dust, or certain rooms seem too hot or cold, those may also be signs that it's time to consider a new heating system.

Washington State University Extension's energy program offers a handy calculator to determine potential savings from a new heating system (www.energyexperts.org; click on "Calculators & Tools").

Q: I've been hearing a lot about ductless heat pumps. How do they work?

A: These devices transfer heat between outdoor and indoor air, using electricity to compress and expand a refrigerant. The Northwest Energy Efficiency Alliance promotes ductless heat pumps (www.goingductless.com) as a practical, cozier alternative to electric baseboard or wall heaters. Homeowners are usually encouraged to keep their existing electric heating units to supplement a ductless heat pump system if needed.

Ductless heat pumps increase efficiency because they heat rooms independently and avoid the substantial loss of heat as it travels through ducts. Since they include a built-in cooling option, ductless heat pumps can be an especially good choice for Seattle area homeowners who want air conditioning.

Q: What about geothermal heat?

A: A home geothermal-heating system also typically utilizes a heat pump, transferring heat from a loop of piping buried in the ground. Geothermal might be best suited for new home construction because of elaborate installation requirements.

Both geothermal and ductless heat pumps are included in the federal government's Energy Star certification program, which helps consumers find the most efficient products.

Q: What's the difference between geothermal and radiant-heating systems?

A: Unlike geothermal, which gets its heat from underground, the most common type of radiant heat uses a boiler to heat water running through tubing directly under the floor. Radiant heat is usually more efficient than both baseboard and forced-air heating.

Q: Are wood-burning systems a green option?

A: Although fireplaces and other wood-burning heating systems have become more efficient and can be very economical, these are controversial because of air-pollution concerns. An upcoming EcoConsumer column will be devoted entirely to the topic of burning wood for heat.

Q: How much do alternative-heating systems cost?

A: You will generally pay more upfront for a ductless heat pump, geothermal or radiant heat system, sometimes twice as much, than for a standard system. Savings on energy costs should eventually make up that difference, however.

Rebates and tax credits on geothermal and ductless heat-pump systems can make initial costs much more reasonable. For example, if a qualifying homeowner takes advantage of a Seattle City Light pilot program and combines that with a state rebate and federal tax credit, the initial cost for a ductless heat pump would be reduced from about \$5,000 to \$1,600 (see www.cityofseattle.net/light/Conserve/dhp or call 206-684-3800 for details).

Puget Sound Energy also offers rebates www.pse.com/solutions/foryourhome; click on "Rebates & Promotions" and "Heating"). Information on federal tax credits is at www.energy.gov/taxbreaks.htm, but keep in mind that some of these are scheduled to expire Dec. 31.

Q: What else should I know about these newfangled green heating systems?

A: They hold immense promise for saving consumers money and reducing global warming, but these are still a work in progress. Get bids from several contractors and don't skimp on research, and soon you'll sit back and enjoy your greener, warmer, cozier home.

Tom Watson is project manager for King County's Recycling and Environmental Services. Reach him at tom.watson@kingcounty.gov, 206-296-4481 or www.KCecoconsumer.com

Copyright © The Seattle Times Company