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## With perfected technology, now's the time to buy a new water heater

There is nothing as wonderful as the relaxing feel of a nice, hot shower. On the other hand, there is nothing more jotting than that flow of hot water suddenly turning icy cold. That sudden jott of cold water may be the first indication that the water heater has given up the ghost. Should you call a plumber and try to fix the tank or replace it? If the tank is older than seven years old, replacement is probably the best idea.

Next question, should you buy a conventional water heater or try one of the tankless water heaters? When I asked Mark Ratliff of Hartford & Ratliff, (800) 466-3110, whether now was the time to consider a tankless water heater, he said, "You betcha!"

Hartford & Ratliff is the biggest water-heating specialist in this part of the country. Ratliff has always told me tankless was an excellent technology for specific purposes but to stick with my conventional tank water heater until the newer technology was perfected for American habits and came down in price. If Ratliff says now is the time for tankless, it is big

Thanks to government mandates, the prices of even conventional tank water heaters are going sky-high. Ratliff says the average installed cost for a 40-gallon gas water heater is \$550 to \$600.

A standard 50-gallon has an installed cost of about \$750. A standard 75-gallon gas water heater will have an installed cost of around \$1,000.

I always tell my listeners to get a rapid recovery water heater so they get more hot water quicker. According to Ratliff, government mandates have made rapid recovery tanks almost impossible to come by. Those that are available are expensive. A 60,000 BTU power vent 40-gallon water heater will have an installed cost of close to \$1,000, Ratliff said.

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Prices like these, in addition to gas rates that have increased more than 50 percent, are making many people look for alternative methods of getting their hot water supply.

Traditional tank water heaters are very inefficient. They heat water and hold it all day waiting for you to use it. Tankless water heating is efficient. It is "on demand." When you need it, the unit heats the water and delivers it to you.

Tankless water heaters come in both electric and natural gas or propane. Electric units are usually best for single purpose (heating the water for a single bathroom) or back up heating for a solar-or geothermally-heated home.

Natural gas/propane units are usually the choice for whole house use. They can be either outside the house (in southern climates) or inside. For anyone living above the Mason Dixon line, the tankless water heater has to be inside the house.

The Europeans and Japanese have always been more energy conscious and have been using tankless water heaters for years. Initially, European and Japanese tankless water heaters did not have enough power or flow rate to fill our hot water needs.

The trouble is that our friends across the pond do not take 20-minute showers or do a couple of loads of laundry every day. Americans are clean freaks. We waste a lot of water and a lot of energy. We probably are not going to change any time soon.

Paloma Industries, (805) 278-5499, was the first company with a tankless water heater big enough for the American home. Actually the Paloma water heaters are commercial water heaters adapted for residential use. The PH-12M recommended for average homes has a 105-gallon per hour first hour rating. The PH-24 recommended for very large homes has a first hour rating of 215 gallons with a 50-percent rise in temperature.

If you go to Home Depot or Lowe's, you will see the Bosch Aqua Star line by Controlled Energy Corp, (800) 642-3111. The company's most powerful unit, the 2505 X, can create enough hot water for simultaneous use of two major appliances and is roughly equivalent to the Paloma PH-12.

Two other big companies in the tankless field are Takagi and Rinnai. Takagi, (888) 882-5244, makes a range of natural gas/propane tankless water heaters ranging from 140,000 BTUs to 235,000 BTUs, with first hour ratings of 181 to 300 gallons.

The Rinnai Continuum 2424, (800) 621-9419, is often considered the gold standard because it has a very handy separate thermostat. It produces 8.5 gallons of hot water a minute. The company does not list its first hour rating.

Rattiff says that as a general rule, a whole house tankless water heater will retail for about \$1,200 to \$1,400. Installation is a big job and will cost around \$2,000. This brings the installed cost to between \$3,000 and \$4,000.

That's a lot of money but the energy saving is about 50 percent over conventional natural gas and 70 percent over electric. Ratliff says you won't start seeing savings for 5- to 8-years, "but you will see a quality difference immediately."

Add up the pros and cons for your specific situation. It may be time to go tankless and brag about it.