

Energy-Efficient Water Heating

Do you ever wonder how much you pay for hot water? If you have an all-electric home, divide the total amount of your annual electric bill by five to estimate your annual water heating costs. You can save money and natural resources by applying the following steps:

Reduce Your Use

Here are ways to reduce hot water use and save on water and energy bills without sacrificing convenience.



- **Faucet aerators** on bath and kitchen faucets provide a smooth stream of water flow while cutting down water use by as much as 40%.
- **Low-flow showerheads** reduce the amount of hot water used for showering up to 50% while providing an invigorating spray. Older showerheads deliver 4 to 5 gallons of water per minute, while newer showerheads have a water flow of 2.5 gallons per minute or less.
- **Dishwasher's** use of hot water accounts for about 80% of the energy required to run the appliance. Purchasing an energy efficient dishwasher with a booster heater will allow you to lower your water heater thermostat to 120 degrees F and still get a sterile wash. Dishwashers with water saver cycles can use about 20% less water.
- **Clothes Washer's** use of hot water accounts for about 90% of the energy required to run the washer. Modern energy-efficient washers use less water for the same cleaning job. You can save by using cold or warm water for washing and cold for the rinse cycle. Washing only full loads or adjusting the water level for smaller loads is always a good efficiency measure.

Fix the Leaks

One of the best ways to reduce hot water waste is to repair leaky faucets. A leak of one drip per second can cost as much as \$4 per month on your energy bill!

Turn it Down

You can save energy and prevent scalding by lowering the thermostat setting on your water heater. By lowering your thermostat setting from 140 to 120 degrees, you'll save about 10% on your water heating energy cost while still having a comfortable water temperature for most uses.

For sanitary reasons, a temperature setting below 120 degrees isn't recommended. If you have a dishwasher, check the instruction manual to determine the appropriate water temperature required for proper operation. If it is not made to operate at temperatures below 140 degrees, don't lower the water heater thermostat.

Wrap It Up

If the hot water from your hot water faucet initially comes out cold, you may benefit from insulating your hot water pipes. Uninsulated hot water pipes lose heat to the surrounding air when not in use, causing you to run the water longer than necessary to get hot water.

Like hot water pipes, water heaters also lose heat to the surrounding air. Installing additional insulation on your water heater storage tank helps reduce heat loss and maintain water temperature without using more energy. If your heater is warm to the touch, it probably needs additional insulation. Adding an insulating blanket can reduce your water heater's energy use by about 10%. Some manufacturers do not recommend insulation wraps, so check your owner's manual before proceeding.

If You Are Building a New Home...

Locate the water heater as close as possible to the fixtures and appliances that use hot water. By locating the water heater near the point of use and insulating hot water pipes, you won't need to run the water as long to get hot water.

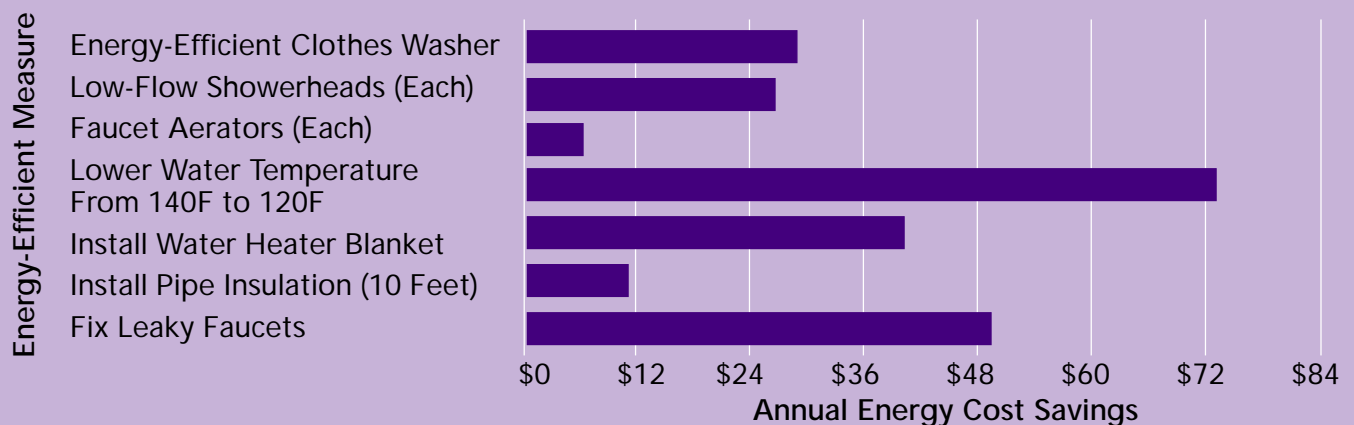
Select an Energy-Efficient Water Heater

While electric water heaters are very efficient overall, some are more efficient than others. If you are shopping for a new water heater, look for the EnergyGuide label and compare the energy costs of different models.

Saving Money on Water Heating Costs

A typical household spends about \$300 per year for electric water heating. By practicing simple cost-effective efficiency measures, you could reduce your water-heating bill by as much as 50%. The chart below provides some information on how much you could save with these steps.

Annual Electric Water Heating Cost Savings for Hot Water Efficiency Measures



Note: The figures above are based on energy calculations by APS using the APS Standard Plan. Your actual savings may vary.

For More Information Call the APS Energy Answer Line

For more information on saving energy in your home, call the **APS Energy Answer Line in Phoenix at (602) 371-3636 or toll-free 1 (888) 890-9730**. Or visit our web site at www.apsc.com.