



Your Guide to Your Electric Hot Water Heater

Efficiency Vermont

your resource for energy savings

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Trying to reduce your water heating bill?

Electricity can be an expensive way to heat your hot water. For some Vermonters, choosing another fuel can be a good option to consider, but for many it may not be practical or cost-effective. The good news for everyone is that you can reduce your electric bills by taking some simple actions to reduce your hot water use. Plus, by using less electricity to heat your hot water, you help to protect Vermont's environment.

This brochure can help. Inside, you'll learn how much your hot water may cost as well as ways to save money by lowering your electricity use.

If you have any questions or need more information, call Efficiency Vermont toll-free at 1-888-921-5990.

Or visit our web site: www.efficiencyvermont.com

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How much does your hot water heater cost to operate?

If you use electricity to heat your hot water, it is probably the biggest electric user in your household. The costs provided below are based on the statewide average rate of 12.5 cents per kWh. Please refer to your energy bill for your rate.

An estimate of your hot water heating costs

HOUSEHOLD SIZE	"LOW USE" ESTIMATED COSTS PER YEAR	"HIGH USE" ESTIMATED COSTS PER YEAR
One-person	\$160	\$ 430
Two-person	\$250	\$ 690
Three-person	\$350	\$ 940
Four-person	\$460	\$1220
Five-person	\$560	\$1480
Six-person	\$660	\$1760

The chart above estimates water heating costs for homes that have "low use" or "high use." Your costs may fall somewhere in-between.

"Low Use" estimates assume that you have:

- Low-flow showerheads and faucet aerators
- Hot water tank insulation and pipe insulation
- Hot water temperature set at 120°
- 7-minute showers
- High-efficiency clothes washer that uses 20 gallons of water per use
- Higher-efficiency dishwasher that uses 7 gallons of water per use and/or shorter hand washing time

(For more information on how these choices can reduce your costs, see the "Take Action" portion of this brochure.)

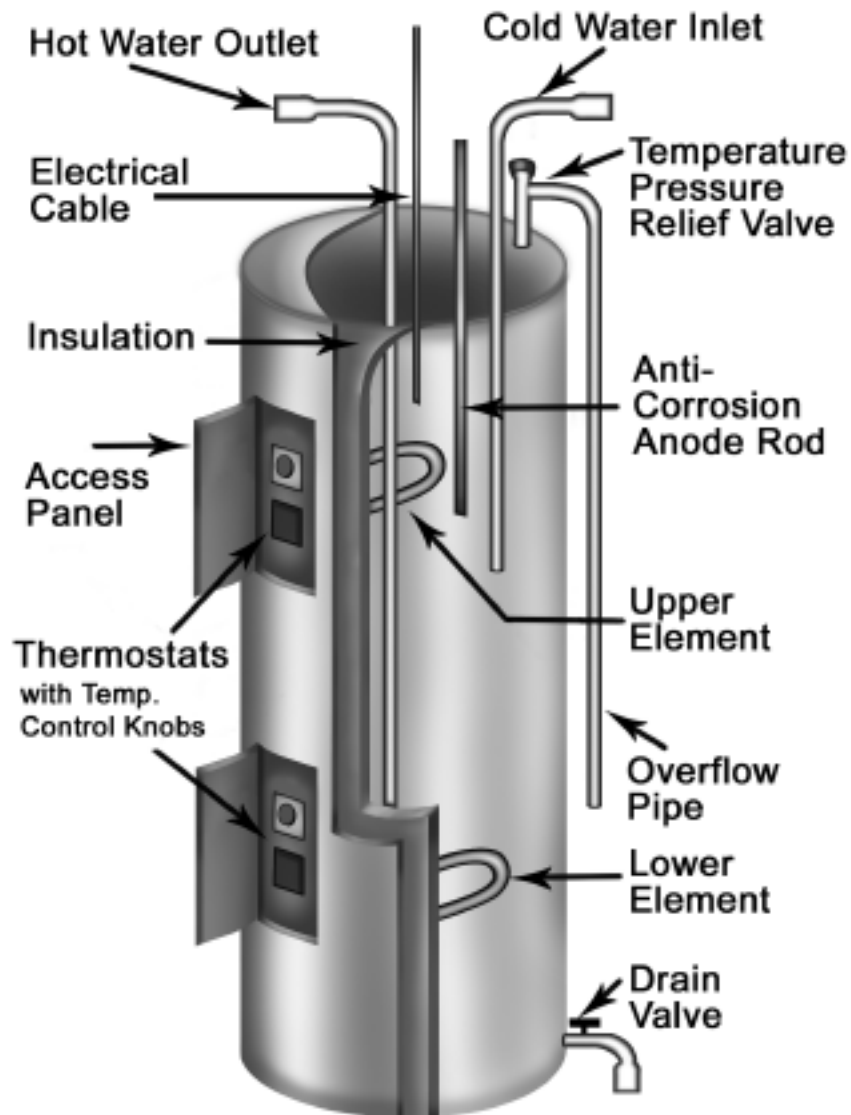
"High Use" estimates assume that you have:

- Standard showerheads or faucet aerators
- Hot water temperature set at 140°
- Some tank insulation with no pipe insulation
- 12-minute showers
- Older washing machine that uses 35 gallons of water per use
- Older dishwasher that uses 12 gallons of water per use and/or longer hand washing time

More about your electric hot water heater

An electric hot water heater heats a tank full of water with electric heating elements controlled by thermostats. A dial on the thermostats enables you to set the water temperature. The average life of an electric hot water tank is 13 years and the estimated cost to buy and install it is \$400 to \$800.

Electric Hot Water Heater



Take action and take control of your costs

Here are some simple steps you can take to reduce your electric hot water heating costs.

Showers and faucets

You can save significant amounts of hot water with little cost by installing low-flow showerheads and faucet aerators. While maintaining a strong spray, low-flow showerheads can reduce your hot water use by as much as 30%, and faucet aerators can reduce water flow by as much as 50%. Both of these inexpensive devices are now commonly used and are easy to install. They can be found at most hardware and plumbing stores, or you can call Efficiency Vermont for mail order sources.

Washing clothes

To reduce your costs, wash only full loads and, whenever possible, use cold or warm water.

Set the right temperature for you

Your water heater thermostat may have been preset by the manufacturer or installer to 140°F or higher. In most cases, 110° to 120°F is adequate for most household comfort and health needs. For each 10° that you lower your water temperature, you can save 3% to 5% on your electric bill. See your owner's manual for information on how to safely access the thermostat and change the setting.

Insulate your tank and pipes

You can help to maintain the temperature of the water in your system's storage tank with an insulated blanket or jacket. When properly installed, a water heater blanket on an electric water heater will usually pay for itself in the energy you'll save within one year. You can purchase these easy-to-install wraps for about \$10 to \$20 from your local hardware store, or you can call Efficiency Vermont for additional resources. Refer to the owner's manual for information on wrapping the tank.

While you're insulating the tank, consider insulating your pipes. As hot water moves through your pipes, heat is lost. You can reduce this heat loss by insulating hot water pipes wherever they are accessible. This is especially important the first six feet from the water heater on both the hot water and cold water supply pipes.

Find drips and leaks

If you've got a dripping hot water faucet or shower, you're paying to heat water that you don't use. Check your hot water pipes for leaks too. One drip per second of 120°F water can cost you \$33 a year or \$2.74 per month. Fixing a leak will cost you less in the long run than ignoring it.

Washing dishes

An energy-efficient dishwasher may use less energy than washing dishes by hand when you operate the dishwasher with full loads and avoid using the heat dry cycle.

Not using it? Turn it down or off.

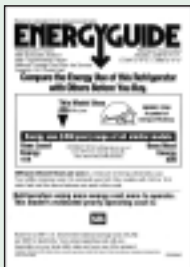
When you plan to be away from home for at least one week, turn the thermostat down to the lowest setting or turn the heater off completely. Keep in mind that it may take up to two hours for your water to heat up when you return the thermostat to its regular setting. Turning your water heater off for less than one week will not noticeably reduce your electric bill.

WHEN IT'S TIME TO BUY

When it's time to buy a new dishwasher or clothes washer, look for **ENERGY STAR**. By choosing an ENERGY STAR qualified appliance, you will be buying an appliance that uses less energy, costs less to operate, and performs as well as or better than non-ENERGY STAR models.



To find an ENERGY STAR appliance dealer or to learn about available rebates for ENERGY STAR appliances, visit www.encyvermont.com or call Efficiency Vermont at 1-888-921-5990.



When purchasing appliances, be sure to read the yellow EnergyGuide label affixed to the unit. This label shows how much an appliance is likely to cost to operate per year.

What you can do to maintain your electric hot water heater

Regular maintenance can make a difference in how well your hot water heater works and how long it lasts. Over time, sediment from water can affect the performance of any water heater. This sediment consists of any solid material that is not dissolved in the water. It is normal for your tank to take on some sediment, but over time it can interfere with the efficiency of the water heater.

To help avoid this problem, flush a quart of water from the storage tank once every three months. Most tanks will have information about regular maintenance, including flushing, in the owner's manual. If you do not have this information, contact Efficiency Vermont for resources.

When is it time to replace your hot water tank?

Depending on its quality and maintenance schedule, your hot water heater may last up to 25 years. If your tank is getting old, you should think about making a planned replacement instead of an emergency replacement when it fails.

What kind of replacement system should you buy?

Because electricity can be so expensive, if you have another fuel source available (propane, oil, natural gas, etc.), you may want to consider a fuel switch. While a different system may cost more to buy, it may cost less to operate than an electric model. Additionally, you may be eligible to receive financial assistance for conversion to a non-electric system. Call Efficiency Vermont to find out more information.

If you choose to replace your water heater with a new electric model, research what size tank would best suit your household needs and be sure to purchase a well-insulated tank. If you would like help with any questions during your system replacement process, call Efficiency Vermont.

If you have any questions or need more information, call Efficiency Vermont toll-free at 1-888-921-5990 or visit our web site: www.encyvermont.com.