



Energy Efficiency: Update Your Hot Water Heater

(General)

Benefits of a New Hot Water Tank

Older hot water heaters can be inefficient due to a lack of insulation, corrosion, sediment build up and older inefficient heating technology. By upgrading to a new hot water heater you can not only improve the quality of your home's hot water, but also save energy.

During Installation

A few things to keep in mind when your new hot water tank is being installed:

- Installations typically take between 4 to 8 hours.
- Before work is started, the old hot water tank will be removed.
- Small modifications to piping may be made near the hot water tank's location.
- Certain power breakers and hot water supplies will need to be isolated but it should not affect your day to day routines, with the exception of having no hot water temporarily.

Keep Things Running

Hot water tanks can build up deposits of lime and other sediments which reduces efficiency and the general life of the unit. You should flush the tank once a year or more often if you have extremely hard water.

Follow the instructions in the manual for your specific hot water heater. Here is an *example* of instructions for an electric hot water heater.

- Turn off the power and the cold water going into the tank.
- Drain the remaining water in the tank into a bucket.
- Briefly open the cold-water supply valve and then close it. This will stir up the sediment on the tank's bottom. Drain and repeat until clean water comes out of the hose.
- Close the drain cock, let the tank refill, and turn its power back on.

Be sure to periodically check for:

- water leakage or rust
- unusual noises or smells

If you detect any of these issues, contact a repairman as soon as possible.



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Energy Savings

For an average home, hot water is the second largest energy consumer (17% of total energy consumption) in your home, behind only space heating (63% of total energy consumption). *

By replacing your older low-efficiency hot water heater with a high-efficiency ENERGY STAR model, you can expect to save up to \$160/year and reduce your greenhouse gas emissions by up to 500 kilograms of carbon dioxide equivalent per year.



Tips to Reduce Your Water Heating Bill

Improve Energy Efficiency

Replacing an appliance is usually a last resort due to a high upfront cost. If your goal is to save energy for a fraction of the price, try making the following small upgrades:

- A water heater blanket will add an additional layer of insulation, keeping the heat in and using less energy.
- Install water saving shower heads to reduce the amount of water used.
- Install faucet aerators in kitchen and bathrooms to reduce the amount of water used as well.
- Insulate hot water pipes to reduce the time and amount of water used to get warm water to the tap.

Change What You Do and SAVE!

- Many hot water heaters will come factory set to run at approximately 60°C (140°F). Energy efficiency organizations recommend that you lower this setting to 49°C (120°F) to reduce the risk of scald injuries and to save energy.
- Take showers instead of baths. A short shower will use half the hot water that a bath will require.
- Turn off the tap while rinsing dishes.
- Wait to allow the hot water tank to heat new water.
- When doing laundry, run cold water cycle.
- Only run full loads of dishes when using a dishwasher.
- Use vacation mode when you will be away.
 - A hot water heater running continuously while no one is home will waste energy unnecessarily.
 - Vacation mode essentially puts your water heater into sleep mode while you are away.
 - It may take as long as two hours for the water to fully heat upon your return.

Useful Link

*Water Heaters - Government of Canada

<https://www.nrcan.gc.ca/energy-efficiency/energy-efficiency-products/product-information/water-heaters/13735>