



Build It Back Green

Use an Efficient Water Heater

Products & Practices Sheets



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BENEFITS

According to ENERGY STAR, water heating is the **second largest energy expenditure in the home** behind heating and cooling. The average American household spends **\$400 to \$600** per year on water heating.

Installing an ENERGY STAR rated water heater or insulating an old water heater can reduce your energy bill by **\$30 to \$100 per year**. If your water heater is 10-15 years old, it may be time to replace it with a more energy efficient model before it fails. If you are not in the market for a new water heater, there are a few steps that you can take to make your current water heater more energy efficient.

DESCRIPTION & CHARACTERISTICS

Various types of water heaters are identified and described below:

WATER HEATER TYPES	DESCRIPTION	ESTIMATED SAVINGS
Conventional Storage	Conventional storage water heaters heat the water and store the heated water until it is required. They can be gas or electric powered. Life span is usually 13 years. ENERGY STAR models are available in gas only.	ENERGY STAR models can save \$30 per year.
Tankless	Tankless water heaters only heat water as needed while providing continuous hot water delivery. Gas and electric powered models are available. Life span is usually 20 years. ENERGY STAR models are available in gas only.	ENERGY STAR models can save \$115 per year. Gas powered heaters qualifies for 30% federal tax credit up to \$1500.
Solar	Solar panels are used to collect energy from the sun and the energy is used to heat water for household use. Variety of designs available.	Solar water heaters can save \$220 per year. Qualifies for up to 30% federal tax credit and 50% state.

PERFORMANCE IMPROVEMENT & INSTALLATION TIPS

If you are not in the market for a new water heater, there are a few things that you can do to improve the performance of your current water heater.

- **Insulate your Heater:** According to the U.S. Department of Energy (DOE), adding insulation to your water heater can reduce standby heat losses by 25% to 45%. If your water heater's storage tank has an R-value of less than R-24, or is warm to the touch, adding insulation can save 4% to 9% in water heating costs. Insulating your storage water heater tank is fairly simple and inexpensive, and it will pay for itself in about a year. You can find pre-cut jackets or blankets available from around \$10 to \$20. Choose one with an insulating value of at least R-8. Some utilities sell them at low prices, offer rebates, and even install them at a low or no cost.
- **Lower the Thermostat on your Heater:** According to the U.S. DOE, you can reduce your water heating costs by simply lowering the thermostat setting on your water heater. For each 10°F reduction in water temperature, you can save between 3% to 5% in energy costs. Most water heaters are set at 140°F, but most households only require a water temperature of 120°F for their hot water needs.
- **Use Less Hot Water:** There are several ways in which you can easily reduce hot water consumption without dramatically changing your lifestyle. You can use less water by fixing leaks, install low flow showerheads and faucets, and use an efficient clothes washer.
- **Install a Timer on your Electric Water Heater:** If you own an electric water heater, you can install a timer on it to turn it off at night or other times when water does not need to be heated. A timer can be self-installed, costs about \$60, pays for itself in a year, and can reduce energy consumption by 5% to 12%.

PRODUCT TYPES & PRICES

- The estimated cost of water heaters can range from \$440 to \$2500 depending on the type. The estimated cost of installing a water heater in a typical 1200 square foot shotgun house can range from \$600 to \$3800.
- The estimated cost of accessories for water heaters, such as insulating jackets and timers can range from \$10 to \$60.
- Weatherproofing products may be purchased at Home Depot. Other local suppliers are identified on the **Vendors List** available on our website at globalgreen.org/bibg and in the **New Orleans Green Building Resource Center** at 841 Carondelet Street.