# WATER HEATERS Ways to cut your bills

Water heating is one of your home's top energy expenses, accounting for about 14 percent of your utility bill.

There are four main ways to cut your water heating bills:

- 1. Use less hot water.
- 2. Turn down the thermostat on your water heater.
- 3. Insulate your water heater.
- 4. Buy a more efficient water heater.

#### Use less hot water

A family of four, each showering for five minutes a day, uses 700 gallons of water a week. This is enough for a three-year supply of drinking water for one person. Follow these tips to reduce your hot water use:

- 1. New low-flow, non-aerating showerheads and faucets flow rates can't exceed more than 2.5 gallons per minute (gpm) at a water pressure of 80 pounds per square inch. Purchase quality low-flow fixtures for around \$10–\$20 a piece and achieve a water savings of 25 to 60 percent.
- 2. Repair leaky faucets promptly; leaky faucets waste gallons of water in a short period.
- Purchase energy efficient dishwashers and clothes washers. Check the Energy Guide labels to determine how much energy these appliances use. Always purchase appliances with the Energy Star label.
- 4. Turn off your water heater when you're on vacation.
- 5. Install timer controls. Shut off water heaters during the night when no hot water is used, and during your cooperative's peak demand time. This modest investment can pay for itself in lower bills in about 14 months.

### Turn down the thermostat on your water heater

Many heaters are set to 140 degrees F or higher. For most households, 115–120 degrees F is sufficient. For each 10 degree reduction you can save up to five percent on your water heating costs.

After living with the new setting for a while, readjust it, if necessary, to a temperature that suits your needs. In addition to saving energy you'll increase the life of the water heater and reduce the risk of scalding.

Drain a quart of water from your water tank every three months to remove sediment that impedes heat transfer and lowers the efficiency of your heater.

## Insulate your water heater

- 1. Insulate the tank and pipes, but be careful not to cover the thermostat.
- 2. Choose an insulation jacket with an insulating value of at least R-8, or use two R-5 jackets if that's all you can find. Jackets cost \$10–\$20 and can pay for themselves via lower energy bills in less than one year.



Next to heating or cooling, water heating is typically the largest energy user in the home, so it's smart to do some research before purchasing a new water heater.

- 3. On gas water heaters, keep the jacket away from the drain at the bottom and away from the flue at the top, and make sure the airflow to the burner is not obstructed.
- 4. Insulate hot water pipes, wherever they are accessible. This reduces heat losses at the tank and along pipes leading to faucets. You also won't have to wait as long for the water to get hot when you turn on the faucet.

# Buy a more efficient water heater

It may cost more initially, but the energy savings will continue during the lifetime of the appliance. It's best to start shopping if yours is more than seven years old. One reason to upgrade is that new water heaters are insulated with up to one to three inches of high-efficiency foam.

## **Energy Star**

Visit www.energystar.gov for information regarding energy efficient dish or clothes washers for your home.

#### Sources

U.S. Dept. of Energy, "A Consumer's Guide to Energy Efficiency and Renewable Energy." www.eere.energy.gov

Rocky Mountain Institute's "Home Energy Briefs, #5-Water Heating."

John Krigger, Saturn Resource Management. www.srmi.biz. Author of numerous energy efficiency books including "Surviving the Seasons and Residential Energy: Cost Savings and Comfort for Existing Buildings."