



Steps in the Home Energy Series

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Top ten tips

1. Control your thermostat.

In the winter, save on your heating bill by keeping your thermostat at an energy-efficient and comfortable setting during the day and turning the heat down at night and when you are not home. In the winter, try setting the thermostat to 68 degrees Fahrenheit during the day and 60 degrees when you are away or sleeping. In the summer, try setting your thermostat to 78 degrees.

You will save approximately 1 percent for every degree of night setback. If you get cold, put on more clothing rather than turn on the heat. Lowering the thermostat is also worthwhile if your heating system uses a boiler. However, you may not be able to set your thermostat back as much as with a forced-air furnace because of slower recovery times.

2. Lower your water temperature.

Your hot water is probably hotter than necessary. Most heaters are set at 140 degrees Fahrenheit, but such a high setting is only needed if you have a dishwasher without a booster heater. Turn the temperature down to 120 degrees (medium setting on a gas heater dial), and you will cut your water-heating costs by 6 to 10 percent. Most electric heaters have both an upper and a lower thermostat to adjust. Before adjusting your heater, turn the electricity off at the circuit breaker.

3. Insulate your water heater.

To keep your coffee hot, you put it in a thermos or an insulated cup. The same principle applies to your water heater. If your water heater is located in an unheated location, wrapping the tank in a blanket of glass-fiber insulation will reduce heat loss by 25 to 45 percent. This means a savings of 4 to 9 percent on your water-heating bill. Water heater jacket kits are available for \$10 to \$20 at your local hardware store or through your utility. Follow any installation directions, and take care to avoid blocking exhaust vents and air intakes on gas models and thermostat access panels on electric heaters. Insulation wraps and jackets are appropriate for older water heaters and those located in unheated areas. The manufacturer might not recommend an insulation wrap for newer water heaters.

4. Replace your shower head.

A standard shower head sprays you with up to 8 gallons of water per minute. A quality low-flow shower head will use only 1 to 2 gallons of water per minute. You will hardly notice a difference, except on your utility bill. Low-flow shower heads cost between \$10 and \$20 and pay for themselves within a year by reducing water consumption and energy used to heat the water.

5. Use the cold water washing cycle.

Water heating accounts for 90 percent of the energy used by washing machines. Washing in hot water costs 20 to 40 cents per load. That adds up and is for the most part unnecessary, except for special loads such as diapers or stained work clothes. Try washing in cold water using cold-water detergents, and wash full loads whenever possible. To save even more, use the clothesline instead of the dryer to dry your laundry on sunny days.

6. Plug any leaks.

Do you feel the breezes blowing through your house on a windy day, especially near trouble spots such as wall outlets, windows, doors and fireplaces? Heat escapes as cold infiltrates your home through cracks and openings. You can stop this heat loss quickly and easily with low-cost materials.

On windows, use clear weatherstrip tape along the gap where the glass meets the frame to seal any cracks. On double-hung windows, tape over the pulley hole and use rope caulk between the upper and lower windows. To stop leakage under exterior doors, roll up towels to block the breeze or buy an inexpensive door sweep. If the door leaks around the entire frame, install foam weatherstripping with adhesive backing between the door and the frame.

If you only use your fireplace rarely and it does not have a door, make sure the damper is closed and the opening is sealed. Cardboard and tape are inexpensive, effective materials for the job. Another low-cost option is to plug the chimney with a plastic bag full of crumpled newspaper or insulation. However, post a highly visible reminder to remove the bag before building a fire.

Use caulk or foam to seal along the basement sill plate and around door and window frames. Seal holes around water pipes, and stuff insulation into big holes around plumbing fixtures. Heat leaks out of light switches and electrical outlets, too. Inexpensive foam gaskets that fit behind the cover plates easily solve this problem. Every hole you plug means fewer drafts, a cozier home and lower heating bills. Plugging leaks and sealing cracks also saves on energy bills during the summer, as it reduces the need for air conditioning.

Space heating amounts to about 60 percent of your winter utility bill. By acting on these tips, you have the potential for significant savings.

7. Install storm windows.

Once you have sealed air leaks around your windows, you can double their insulating value by installing storm windows. Adding another layer of glass or plastic creates a dead air space, and trapped air is an excellent insulator. Plastic film window kits are the lowest-cost option and can be easily installed on the inside or outside of your existing windows. Be sure the air space is at least $\frac{3}{4}$ inch and not more than 4 inches.

8. Regularly clean or replace your furnace filter.

All forced-air furnaces have filters that keep dust and dirt from blowing into your house. If not periodically cleaned or replaced, dirty filters can greatly affect the heating ability of the furnace and waste fuel.

Some filters are disposable, and others can be washed and reused. Do not reuse disposable filters. New ones can often be purchased for less than a dollar. Clean or replace furnace filters every one to three months.

9. Watch your refrigerator.

Refrigerators cost \$5 to \$8 per month to operate and consume 3 to 5 percent of your home's total energy use. To keep out warm room air, keep the door closed as much as possible. It also helps to regularly clean dust out of the coils and to minimize freezer ice buildup. Keep the refrigerator at 36 to 38 degrees F and the freezer at 0 to 5 degrees F. If you have more than one refrigerator or freezer and one does not get much use, unplug it.

10. Draft an energy action plan.

The most important energy saving step of all takes place in your head. Once you make the decision to make these changes, you will discover that reducing your home energy consumption is easy and the rewards are worthwhile.

Original work created by Montana State University Extension and the University of Wyoming.

Adapted with permission by University of Missouri Extension.