

# Energy Management for Home

## Steps in the Home Energy Series

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## **Saving energy**

In older homes, about 75 cents of every dollar spent on home energy goes toward heating or cooling. There are several low- or no-cost strategies you can employ to keep these costs under control.

## All heating systems

Never use an unvented combustion heater (without an exhaust) in your home. If you suspect fuel or exhaust leakage with any combustion heating system, contact a heating contractor at once.

The simplest and easiest way to save money in winter is to turn down your thermostat. A setting of 68 degrees Fahrenheit during the day is both comfortable and economical;

you can go lower if you wear warm clothes. Save money also by turning your thermostat down a few degrees when you are away from the home during the day.

Many people find that a setting as low as 55 degrees at night both saves energy and can be refreshing. If that is too cold, find the lowest setting possible while still maintaining a comfortable temperature. With gas forcedair furnaces, you can expect to save 1 percent on your energy bill for every degree you turn your thermostat down at night. If you want to wake up to a warm and toasty house, invest in a programmable thermostat,



available from hardware stores for less than \$75. These thermostats automatically lower and raise the temperature setting at the times you specify. If you want more than one time setting or different weekend settings, pick a thermostat with that feature. Of course, settings for those with infants or the elderly cannot be as low, and you should always ensure that pipes sensitive to freezing are not at risk.

If you have a boiler, you can still save money by turning your thermostat down. The water in a boiler takes time to return to a temperature suitable for heating your home, so you might not be able to lower the thermostat as much as a forced-air furnace.

Clean around furnace air intakes, vent registers, baseboard heaters and radiators. Even a little dust can alter airflow to and from the heating system.

#### Electric baseboards and hot water radiators

- Keep them clean.
- For proper air circulation and heating, keep furniture and draperies away from the baseboards and radiators.
- For hot-water heating systems, insulate pipes running through unheated spaces.
- Place a sheet of aluminum foil or other nonflammable reflective material behind the radiator; it will reflect heat back into the room.
- To improve the efficiency of a hot-water heating system, if it is possible bleed the air from your radiators once or twice during the winter. Turn the air valve or the key on each radiator until water comes out. Hold a bucket under the valve and remember that the water is hot. Shut the valve tightly when the water stops spurting.

### **Forced-air furnaces**

- Furnace filters should be replaced or cleaned once a month during the heating season.
- Do not block furnace supply and return vents; furnaces need a balanced air supply for maximum efficiency.
- Draperies and furniture blocking vents can create a fire hazard.
- If furnace has outside combustion air intake, ensure that it is not blocked off.
- Check the exhaust flue and chimney to make sure they have no obstructions (e.g., birds, collapsed pipe, etc.).

- Have the furnace checked every one to three years by a qualified technician.
- If heating and return ductwork run through an unheated area — crawl space or attic — insulate the ductwork with R-11 fiberglass or foam.
- Check your heating ducts for cracks and other openings.
- Seal duct work with duct mastic or a foil tape (not duct tape).
- For furnace blower motors that require lubrication, oil annually and clean the blower blades so air can move more easily.

A well-tuned and maintained heating system will save you energy and keep your home comfortable.

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