

Energy Saving Tips for Homeowners



**Make your Home
More Comfortable
and Save Money**



At a Glance:

Residential Energy Consumption in Perspective

The average household spent \$1,488 on energy in 2001

Where do the energy dollars go?

Over 45 percent of the average household's energy costs was for appliances and lighting, while space heating accounted for another 30 percent. Water heating and air conditioning accounted for the remaining energy expenditures in the average household.



Households spent more money on electricity than on all other fuels combined,

Households spent a total of **\$159 billion** on energy — almost two-thirds of that (\$100 billion) was used to purchase electricity. The remaining amount was spent on natural gas, (\$47 billion); fuel oil, (\$6 billion); LPG, (\$5.5 billion); and kerosene, (\$0.5 billion).



Simple conservation measures can reduce energy use as much as 20% at little or no up-front cost.



Insulation

Adding insulation to your attic, floor, and/or walls reduces the amount of heat (or cooling) that escapes to the outdoors.

Be sure the paper facing is placed towards the warm side of the cavity.



Fiberglass batts are readily available at local lumber supply stores and can be installed by the do-it-yourselfer.



Blown insulation usually requires a professional, but is the best choice for attics.

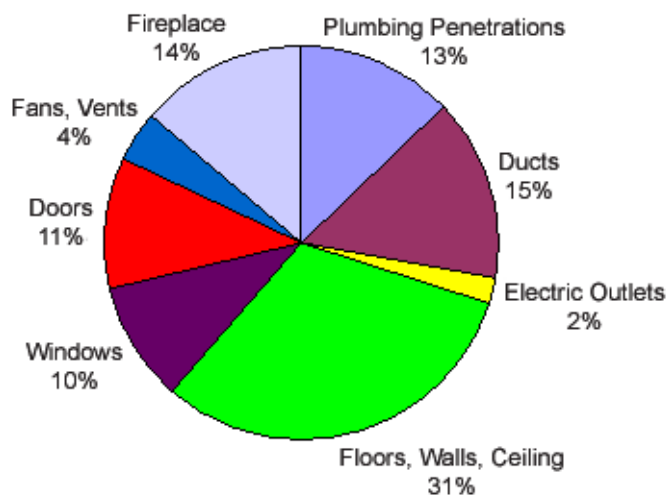
Air Sealing

Although you can't always see them, there are dozens of tiny gaps in your ceiling, walls, and

floors where air flows in and out of your home. Run your hand around the windows and doors in your home or in front of an

electrical outlet on an exterior wall on a cold, windy day. Can you feel any cold air?

Where Drafts Occur in your Home



Select a 50 Year or Lifetime silicone based acrylic caulk. These are available in several colors and many are paintable. Cost runs at about \$3.00 per tube.

Where to Seal

Around windows and doors

1. Make sure windows and storm windows close tightly and are locked.

2. Install door sweep at the bottom of exterior and basement doors.



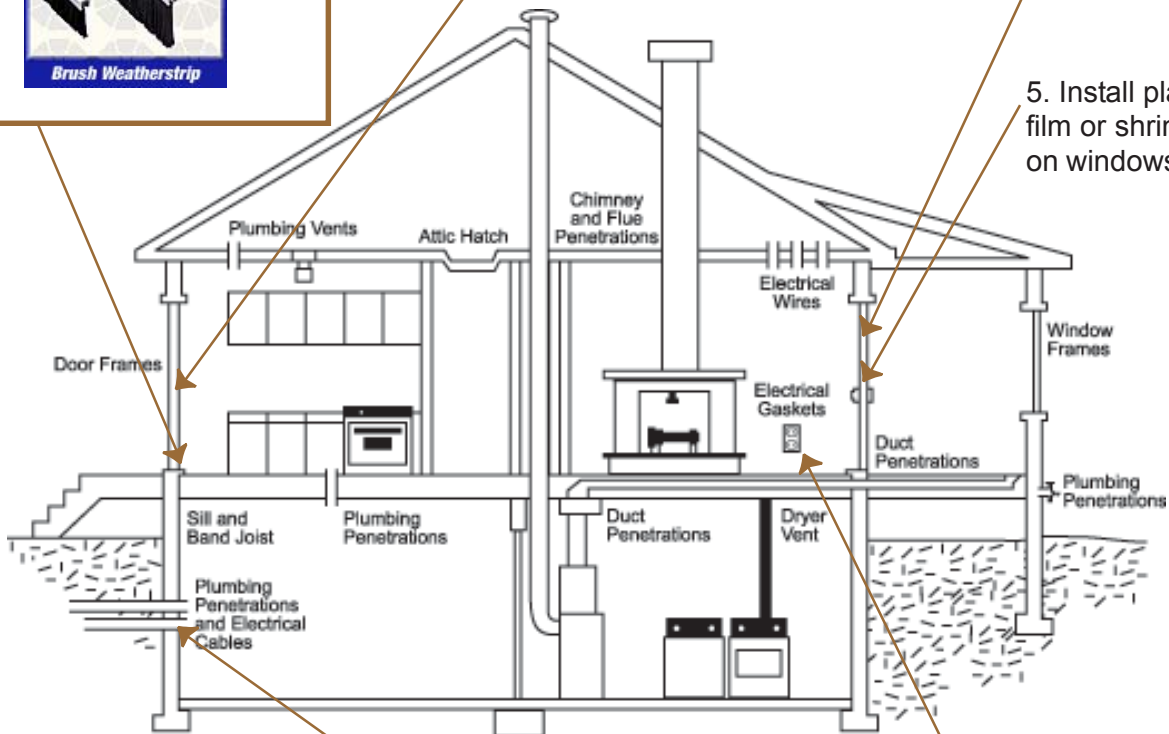
3. Install foam weatherstripping at door stops (both exterior doors and doors to unheated basements or attics).



4. Caulk around window and door trim on the interior or exterior.



5. Install plastic film or shrink wrap on windows.



Where leaks occur in your home

Plumbing and electrical penetrations in the basement and attic

Use caulk or foam such as "Great Stuff" or "DapTex" to fill holes drilled for wiring and plumbing, e.g. around drains and supply lines to the kitchen sink and first floor bath fixtures.



Receptacles and switches

Put foam gaskets behind receptacle and switch plates on exterior walls.



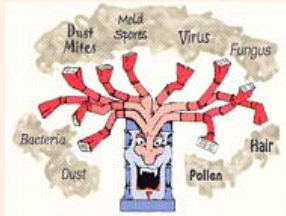
Thermostat Settings

Turn thermostat down in winter and up in the summer when you will not be at home for several hours or when you go to bed. Or install a programmable thermostat that automatically raises and lowers temperature settings.



Programmable Thermostat
Cost: \$40 - \$100

Furnaces and Heat Pumps



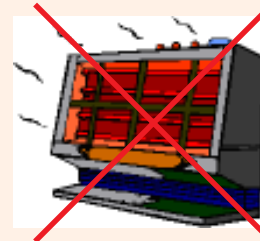
1. Change filter in your furnace or heat pump every month or two. Use a pleated filter rather than the fiber ones. (They cost a little more but are more effective and can be changed every 2 months vs. every month in most cases.)



2. Have your furnace and/or heat pump cleaned and checked at the start of every heating or cooling season.



3. Minimize the use of electric space heaters. Even the smallest ones cost about \$3 per day to operate — a \$90 increase in your monthly utility bill if left on continuously.



4. If replacing a furnace or boiler, use an ENERGY STAR® model.



Air Conditioning

1. Use windows, fans, and dehumidifiers to make you feel more comfortable. They use less energy than air conditioners.



2. If replacing an air conditioner, use an ENERGY STAR® model.



3. Remove window air conditioning units in the winter or cover with plastic and insulation



Ductwork

Seal any joints in exposed ductwork with foil tape or mastic. Then insulate ducts in basement or attic.



Water Heaters

About 11% of the energy used in residences goes for heating water.

If your gas water heater is more than 10 years old, it probably has an efficiency no higher than 50%... but new ones are about 60%!

1. Wrap your heater with an insulating blanket, but make sure you don't cover up the air intake near the thermostat on a gas water heater.



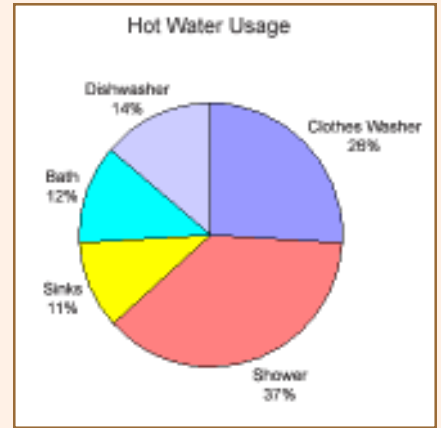
2. Insulate hot and cold water pipes within 5' of the water heater.



Take more showers than baths. You use 15-25 gallons of hot water for a bath, but less than 10 gallons during a 5-minute shower.

3. Turn the thermostat on the water heater to 120°F or medium temperature.

4. Turn off your electric water heater if you are away from home for several days.



Hot Water Use

Use “cold water only” as often as you can — especially for short draws.

HOT
WARM
COLD

1. If you do dishes by hand, fill the sink with wash water rather than washing under running water. If you use a dishwasher, make sure you have a full load — likewise with loads of laundry.



2. Use the “energy saver” and/or “water saver” setting on your dishwasher.

3. Wash laundry in warm or cold water.



4. Replace showerhead with low-flow shower head.

Appliances

Dry clothes outdoors!

Air dry dishes!

If you are buying a new appliance such as refrigerator, dishwasher, or washing machine, buy an energy-efficient model. Look for the ENERGY STAR® logo or the Energy Guide label.



Refrigerators

Your refrigerator is always on ...

but, there are several no-cost ways to put energy costs on ice!

1. Set the temperature for only as cold as you need. Usually, refrigerator: 37°F – 40°F; freezer: 5°F.

37°F - 40°F
5°F

2. Allow hot food to cool completely before putting it in the refrigerator.

3. Clean the coils on the back of the refrigerator and the air intake grill about every six months.



4. Do not keep refrigerators or freezers in a garage. The compressor will work harder during hot months.

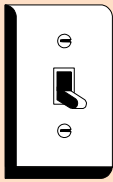
5. Keep your freezer relatively full as it will operate more efficiently.



6. Defrost your freezer regularly if it is manual defrost. Don't let ice build up more than ¼".

Lights

Flip the switch!



1. Turn lights out when you leave a room.

2. Replace incandescent bulbs with fluorescent or compact fluorescent bulbs. A CFL will use about two thirds less electricity than a standard bulb.



3. Consider installing light and motion sensors on outdoor light fixtures.

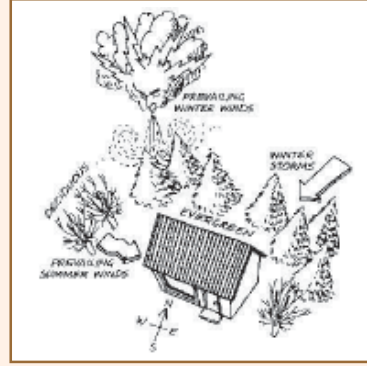


Safety
↓
Security
↓
Energy Savings

Landscaping

Plant deciduous trees on the south and west sides of the house to help shade windows in the summer.

Plant evergreens on the north and west sides of the house to help buffer the house from winter winds.



Computers

If left on all the time:

Your computer will use more electricity than a 100 watt light bulb, and cost you about \$70 per year.

Turn off your computer when you are finished using it.

