



ENERGY SAVINGS GUIDE



**100 West 13th Avenue
Eugene, OR 97401
(541) 682-2561
WWW.HOMESFORGOOD.ORG**

**HOMES FOR GOOD
HOUSING AGENCY**

Helping make your home more efficient and comfortable

**CONSERVATION
BENEFITS EVERYONE
TODAY & TOMORROW**

SAVING TIPS

Use a fan to help circulate the heat throughout the home

Turn the lights off when leaving the room

Clean or replace your furnace filters often

Set your thermostat to 68° for comfort and savings

Install a water-saving showerhead

Wash cloths in cold water

Replace incandescent light bulbs

Weather stripping and caulking your doors and windows can save you as much as 6% on your heating cost

SAVING TIPS

USE YOUR LEFTOVER HEAT. Your oven and range have leftovers too. An electric oven can stay hot for up to 30 minutes. Even your electric range top burner can stay hot for an extra 3 to 5 minutes. Take advantage of this extra heat by warming up desserts or rolls. Keep your oven clean. An oven that's free of grease and baked-on residue will work more efficiently.

TURN DOWN YOUR TV BRIGHTNESS. Check your menu settings. Many TVs are set for showroom brightness. Set to Standard or Eco or Energy Saving.

COOK ENERGY SMART. Efficient cooking saves money, keeps your home cooler, and can save time. Use the microwave when possible. Use a burner smaller than the pot. Using a lid to heat liquids can reduce energy use by 30%. Turn down a pot if it is boiling too much. A slow boil is just as hot as a fast boil.

DON'T PREHEAT IF YOU DON'T HAVE TO. If you're baking breads and cakes, preheating your oven may be necessary. But for most foods (casseroles and broiled items) preheating simply isn't necessary. It's an energy and money waster. Remember, every time you open your oven door you lose approximately 25°F of heat.

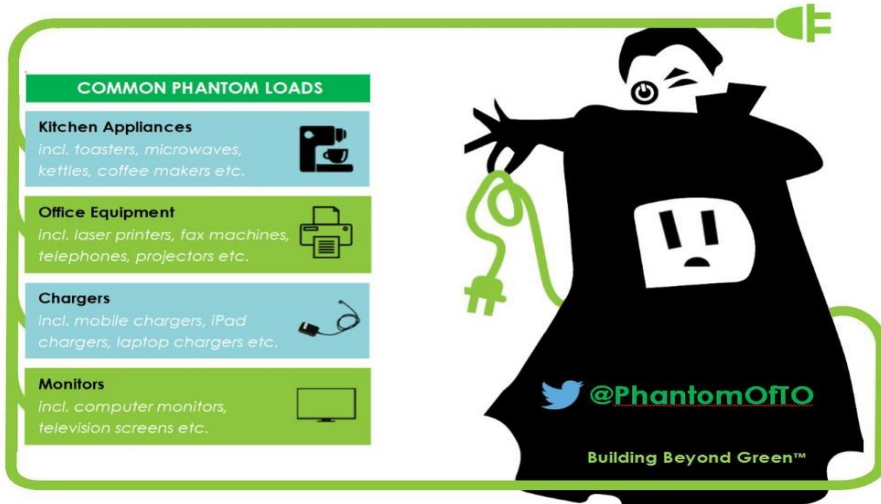
USE YOUR MICROWAVE OVEN. Your microwave requires about the same amount of energy per hour to operate as your electric oven. But, since it cooks food so much more quickly, it saves you time, energy, and money.

HANG CLOTHES OUTSIDE TO DRY. Line drying saves 25 cents per load and makes clothes smell fresh. If you must use a dryer, clean the lint screen at every use and keep your vents free of lint. Use the moisture sensor if your dryer has one.

PHANTOM LOAD

PHANTOM LOAD

Also called vampire or stand-by load, is electricity used by devices when they are off or in standby mode, adding 3% to 5% to your electric bill. Reduce phantom loads by hooking all such devices into a power strip, then turn off the power strip. If you have a device that needs a clock, you may not want to turn it completely off.



TIPS TO REDUCE PHANTOM LOAD

Unplug it. No electricity, means no cost, but be aware that unplugging devices may mean loss of convenience or memory. For example, unplugging a cable box mean you need to reprogram channels.

Use a smart strip. This lets you set one device as the master that controls when other devices will turn off.




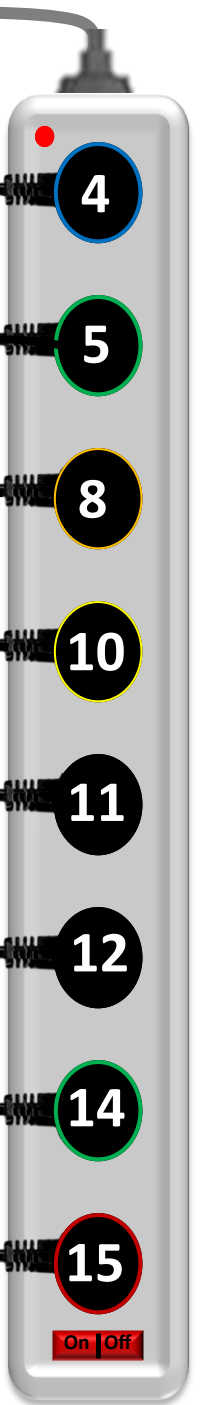
 **When you finish charging a phone, remove charger from the outlet. If it's plugged in, it's using a small amount of energy.**

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USE OF ENERGY

Everyone uses energy. Natural gas and electricity are the most-consumed energy sources, followed by heating oil, and propane.

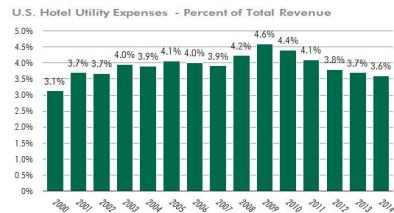
We use energy each day for transportation, cooking, heating and cooling rooms, it also lights our homes and runs almost all of our appliances including refrigerators, toasters, computers and many others.



LIVE LIGHTER

The amount of energy we use in our homes mainly depends on the climate where we live and the types and number of energy consuming devices we use. Examine assumptions about how we use electricity.

Know Your Consumption. Utilities provide monthly summaries of energy use. Compare your energy use, this also is good to catch any unreasonable increases. If your bill suddenly seems high, call your utility. They can help you find the reason why.



Source: PKF Hospitality Research, a CBRE Company, Trends[®] in the Hotel Industry

THIS BOOK WILL SHOW YOU HOW TO USE THE ENERGY IN YOUR HOME EFFICIENTLY.

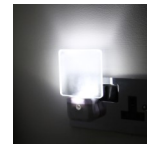


Turn lights off when leaving the room

LIGHTING

SAVING TIPS

Turn off the lights. When you leave a room or leave home, make it a habit to turn off the lights. If you are coming right back or want a light for safety or comfort, that's fine. Just don't leave lights on unnecessarily.



Install night lights. Night lights can bring comfort to a child, but they can also help guide adult across a room or down the hall. Look for LED night lights or lights with a sensor to save the most energy.

Use lamps with light shades. Paint walls in a lighter color. Open drapes to let the light in. Dust light bulbs that have been installed over a year.



Turn Off Devices. TVs make up 5% of a home's energy bill. Is anyone really watching it? If not, turn it off or use a radio.

Make sure your TV is not running in the "store demo mode", which uses the most energy.

Check to see if your TV has an energy saver mode. You can usually find it under "Menu" and "Settings". Switch to "Standard" or even better "Eco" if that option is available. If the screen is too dim, choose the setting that works best for your environment.

If you are going to buy a TV, check the energy use, and buy Energy Star. Some TVs use less than \$20 year while others use over \$80 a year. Look for Energy Star label.

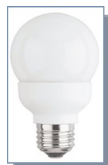


LIGHTING

ENERGY EFFICIENT LIGHTS

Most of us grew up with incandescent bulbs and thought how bright a bulb was depended on its wattage. We need to think differently. Energy efficient lights, like compact fluorescents (CFL) and light emitting diodes (LED), deliver the same brightness with fewer watts.

Incandescent	Lumens
100 watts =	1,600
75 watts =	1,100
60 watts =	800
40 watts =	450



LED's are the most energy-efficient bulb you can find.

The price has become more affordable and the shape is more standardized. LEDs fit in most fixtures, are dimmable and won't break when dropped. They often seem brighter to people, so you end up using a lower wattage.



CFLs are the next most energy-efficient bulb.

These bulbs only use about 25% of the energy of an old fashioned bulb and last longer. You can save \$45 in energy costs over the life of the bulb. New CFLs turn on right away, brighten instantly, and come in many shades of white.

Replace incandescent lights with energy-efficient lights. LEDs and CFLs quickly pay for themselves in energy savings.



HEATING & COOLING

For most of us the number one user of energy is heating and cooling. Most air conditioners use ten times as much energy as a standard fan.

Natural gas and heating oil (fuel oil) are used mainly for home/space heating. Space heating accounts for the largest share of the energy used in our homes.

ELECTRIC FURNACES

Electric furnaces convert 100% of the electricity into heat. These type of furnaces have electric resistance heating elements. A fan blows air across the hot elements and the heated air is blown through ducts throughout the home.



GAS FURNACES

Gas furnaces are between 78% and 95% efficient. The heated air is blown through ducts throughout the home.

FORCED AIR SYSTEMS

A forced air heating system uses air to distribute heat throughout your home. In this type of system, heated air travels through your ductwork and is released through vents into the different rooms of your home. When you set your thermostat to the temperature of your liking, a forced air system will deliver the results you need, using air to carry the heat instead of steam or gravity.



Use a ceiling fan to bring down the ceiling heat in the winter

HEATING & COOLING

HEAT PUMPS

Heat pumps can be ducted or ductless. A ducted heat pump has an indoor air handler that looks like a normal furnace. Heated or cooled air is blown through ducts throughout the home. A ductless heat pump is installed high on a main wall. It blows heated or cooled air directly into the home.

Ducted and ductless heat pumps have an outside unit that takes outside air and converts it into heated or cooled air.

Heat Pumps convert electricity into heated or cooled air at more than 100% efficiency. Some heat pumps are up to 300% efficient which means for every kilowatt of electricity, you get three times that much heat.

PROGRAMMABLE THERMOSTAT



Use a programmable thermostat, these automatically turn down the thermostat at night, then warm up the house just when you need it. A good range is 55 degrees at night and 68 degrees during the day.

Ductless Heat Pump



Heat Pump or Air Conditioner

REFRIGERATION

Let items cool before they are placed in the fridge.

Let frozen items defrost in the fridge rather than on the counter or even in the microwave. For some foods, a slow defrost helps retain moisture.



Your fridge may have a “sweat” or energy saving switch. Generally, this is a setting used for warm humid climates. Try turning off the sweat switch or turn on the energy saving switch.

KEEP COLD INSIDE



Organize items so that what you use most is easiest to reach. Think about what you need before you open the door. Keep gasket around door clean to help door close completely.

TIPS TO SAVE ENERGY & MONEY

- Old refrigerators and freezers absolutely guzzle electricity, so you should give serious thought to buying a new appliance
- Never place your refrigerator next to a heat source such as an oven, hob or radiator, and avoid direct sunlight. Always ensure that your refrigerator has sufficient ventilation to avoid the compressor does not end up running continuously
- Keep the refrigerator full. A full refrigerator retains cold better than an empty one. If the refrigerator is nearly empty, store water-filled containers inside. The mass of cold items will enable the refrigerator to recover more quickly after the door has been opened
- Do not overfill your refrigerator or freezer since that will interfere with the circulation of cold air inside

APPLIANCES

REFRIGERATORS & FREEZERS

An old refrigerator can use twice as much energy as a new one. Replacing an old refrigerator may not be something you can do, but if you have an extra fridge or freezer plugged in that you don't really use, you may want to consider unplugging it. That extra fridge may be costing you \$80 a year.



ALLOW SPACE

Refrigerators will run more efficiently if air is allowed to circulate behind and around them. Refrigerators next to ovens, dishwashers or other heat sources may need more energy to keep cold.



CLEAN THE COILS

Unplug refrigerator before cleaning. If coils are the on back, use brush, soft cloth or vacuum to clean. If coils are not visible, they may be covered or underneath. If possible, move refrigerator and clean underneath. Plug back in when finished. Check the door seals and if one is cracked, or cold air is leaking out, the seal should be replaced.



Check them by closing the door on a dollar bill. If you can easily pull out the dollar bill, the seals may need to be replaced.



Keep the refrigerator section between 36 and 40° degrees, and the freezer section near zero.

HEATING & COOLING

ZONAL SYSTEMS

A zoned heating and cooling system breaks your home into different areas or “zones”, each controlled separately by a thermostat. A thermostat is placed in each zone so that it can control the electronic dampers in your air ducts. Zonal systems may use electricity, gas, propane or other fuel.

KEEP YOUR FURNACE CLEAN



Proper maintenance helps your air conditioner run more efficiently. Replace disposable filters or clean permanent filters every few months during the cooling season.

A furnace with a dirty filter has to work harder to heat air for your home. Check filters at least twice during the heating season, and either clean or replace them. You only need an expensive filter if you have serious allergies.

LOWER INDOOR TEMPERATURE

In winter, wear warm clothes and turn down the thermostat. Each degree you lower the thermostat means a 3% savings. Start with a couple of degrees. You may find you get used to a lower temperature over time.



Weather striping and caulking your doors and windows can save you as much as 6% on your heating cost

WATER HEATING

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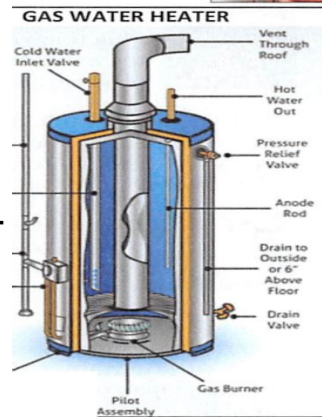
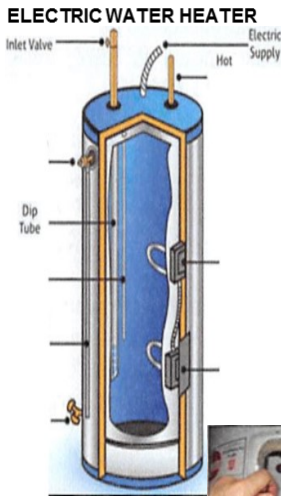
For energy-savings, hot water should be set to 120°. Check the temperature of your hot water. If it is above 120°, you're paying extra and reducing the life of your hot water heater.



To check the temperature, turn on the hot water and let it run until it's as hot as it will get. Then, fill a cup with the water and use a cooking thermometer to check the temperature.

GAS WATER HEATERS are simple to adjust using dial at the bottom.

ELECTRIC WATER HEATERS are more difficult. You need to turn off breaker, remove two panels and adjust two thermostats. Replace panels and turn on breaker when done. Water will take a while to adjust to the new temperature.



Water heaters are complicated and expensive. Don't make a change you don't feel comfortable doing. There may be other problems that require a plumber. Renters should always talk to their landlords first.



Soap kills germs, not hot water. You would burn yourself if the water was hot enough to kill germs

WATER HEATING

HOT WATER TIPS

TAKE SHORTER SHOWERS

Obviously taking a 5 minute shower will cost half as much as a 10 minute shower. If you aren't sure about how long your showers are, use a timer.



DO LAUNDRY IN COLD WATER



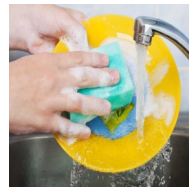
Simple. Washing machines account for about 26% of the average household's hot water use. Liquid detergent dissolves better in cold water. Consider a new washing machine that saves energy.

STOP DRIPS

Drips are a drag on your wallet. Even a slow drip can fill a tub in a month. If that drip comes from your hot water supply, well, add more money wasted. Fix the hot water drip and save \$25 a year, plus the water.

WASH DISHES SMARTER

In dishwasher, wash full loads only. Use the energy saver (no heat) dry feature. Open the dishwasher right after the cycle is done to allow flash drying.



TURN WATER OFF

When you brush your teeth, shave or use water in any way, turn water on when you need it and turn it off when you don't.



Install a Low Flow Shower Head