

# 66 Ways to Save Energy and Lower Your Electric Bill



[www.lipower.org](http://www.lipower.org)

1-800-692-2626

Want to learn how to  
lower your electric bill?  
Just follow some of these  
easy inexpensive energy  
saving tips and you can  
really reduce your bill.



# 66 Ways to Save Energy

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Keep in mind that with changes in our lifestyles we now have more appliance and electronic choices available at home such as cell phones, iPods®, PDAs, laptops, HDTVs, and others that were not common 10 years ago. Now, you can enjoy these conveniences and still save energy and money. We hope this booklet helps you make better energy choices, become more energy-efficient, lower your bill and ultimately reduce your carbon footprint.



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## Lighting Tips

Making improvements to your home’s lighting is one of the simplest and least expensive ways to reduce your energy costs. Lighting accounts for about fifteen percent of your home’s electric use. New technologies can reduce the amount of energy used for lighting in your home by fifty to seventy-five percent.

Use compact fluorescent bulbs (CFLs) in all table, floor lamps and light fixtures in your home. CFLs use seventy-five percent less energy than incandescent bulbs and last six to ten times longer, while providing the same amount of light. Although CFLs cost a bit more, they pay for themselves by saving energy over their lifetime. Today, CFLs are available in a variety of shapes and styles, including spirals, mini-spirals, A-lamps, globes, 3-way, dimmable reflectors and flood lamps.

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**1** Always look for the ENERGY STAR® label when purchasing lighting products.

**2** Consider installing timers or occupancy sensors to turn off the lights when you leave a room.

**3** The same technology in the form of motion detectors outdoors will also save energy while providing security.

**4** Three-way lamps make it easier to keep lighting levels low when brighter light is not needed. Dimmers can vary the level of illumination according to how much light you may need. Make sure you purchase CFLs specifically made for either technology.

**5** Use fluorescent fixtures with reflective backing and electronic ballasts for your workroom, garage, and laundry areas because they are not just more efficient but provide better illumination.

**6** Use light emitting diodes (LED) holiday lights to decorate your home. LED holiday lighting comes in a variety of festive styles and colors, uses up to ninety-six percent less energy, and operates at a cooler temperature than standard holiday lights.



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## Home Electronics Tips

**Many products continue to use energy even when they are turned off, so that they come on instantly when you turn on the switch.**

**7** Many electric items in your home continue to draw power when they are switched off and still plugged in. This is referred to as “phantom load” or “stand-by power”. These phantom loads occur in VCRs, televisions, stereos, computers, and kitchen appliances. In the average home, seventy-five percent of the electricity used to power home electronics is consumed while the products are turned off. Avoid phantom load by simply unplugging the item when not in use.

**8** To find phantom loads turn off all lights at night and look for any LEDs or other “glows” in the house. Keep in mind that any device that requires resetting after a blackout or power surge generates a phantom load.



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## Refrigerators & Freezers

Like other appliances that heat and cool, refrigerators and freezers are big energy users and have to be “on” all the time.

**9** A new refrigerator with an ENERGY STAR® label is at least twenty percent more efficient than new conventional models and forty percent more efficient than an older conventional model sold in 2001.

**10** Make sure the seals on your refrigerator and freezer fit tightly. A door seal leak allows cool air to escape, forcing your refrigerator to use more energy to keep food cold. Test the seal by closing the door over a piece of paper that is half in and half out of the refrigerator. If you can pull the paper out easily, the latch may need to be adjusted or the seal replaced.

**11** Vacuum and clean condenser coils on your refrigerator twice a year. Make sure to leave space between the refrigerator and surrounding walls to allow air to circulate.

**12** Be sure to place your refrigerator away from appliances that generate heat, such as ovens and dishwashers. Otherwise the refrigerator will have to work much harder to cool and its efficiency will decrease.

**13** Don't keep your refrigerator or freezer too cold. Check temperature settings by placing a thermometer in the appliance for one hour. Refrigerator temperature should be 35-38 degrees Fahrenheit and freezer temperature should be 5 degrees Fahrenheit.

**14** If you have an old refrigerator or freezer in the basement or garage, it could be costing you an extra \$200 or more per year. LIPA will pay you to recycle it and you'll save energy and money.

## Laundry

Simply hanging a clothes line in your yard and using it to dry your clothes in the summer months will save the energy you would use to run a dryer. It may be inconvenient at first, but the dollar savings will be worth it.



**15** In addition to buying ENERGY STAR qualified clothes washers, be even more efficient by checking the Modified Energy Factor (MEF). The higher the MEF the more efficient the clothes washer.

**16** Ninety percent of the energy your washer uses goes towards heating the water. Save by using hot water only for very soiled laundry, especially since today's detergents are formulated to work just as well in cold water.

**17** Front load washers are far more gentle and effective on your clothes, as well as much more energy-efficient when compared to traditional top-loading clothes washers.

**18** If you are in the market for a new clothes dryer, consider purchasing one with a “moisture sensing” device that shuts off automatically when it senses your clothes are dry.

**19** Clean your dryer's lint filter after every load to improve air circulation and efficiency. Lint build up blocks air flow and lengthens drying time.

**20** For greater efficiency, always run the washer and dryer when you have a full load of laundry.

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## Dishwashers

Washing dishes by hand may not save energy or money. In fact, you can probably save energy using the dishwasher when full since hand washing usually requires more hot water.

**21** ENERGY STAR® qualified dishwashers are forty-one percent more efficient than conventional dishwashers, using less energy and less water than conventional models. Based on the average of four cycles per week, electric hot water customers can save up to \$230 in electric costs over the life of their dishwasher with an ENERGY STAR product.

**22** When shopping for a new dishwasher, look for models that require less hot water. Dishwashers differ in the number of gallons of hot water used in the wash cycle. Using a new ENERGY STAR qualified dishwasher instead of hand washing dishes can save nearly 5,000 gallons of water per year. The manufacturer's specifications or the Energy Guide label should list this information.



**23** Take advantage of the energy saving control on many dishwashers. It turns off the heat during the drying cycle. Opening the dishwasher after the rinse cycle and letting the dishes air dry is also an easy way to save energy.

## Cooking

There are many steps you can take to conserve energy while cooking, such as using the correct oven temperature and using smaller cooking appliances such as microwave ovens to prepare food.



**24** A microwave oven is an energy-efficient alternative to a conventional oven. It cooks food more quickly and it uses seventy to eighty percent less electricity.

**25** Use pots and pans that are properly-sized to “fit” your stove top burners. Using a small pan on a large burner wastes energy and can be a safety hazard. Cookware with flat bottoms and tight covers is your best choice.

**26** Avoid “peeking” by opening the oven door. Each “peek” lowers the oven temperature.

**27** When preparing a meal in your oven, choose foods that are cooked at about the same temperature. That way your oven can cook several dishes at the same time.

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## Consumer Electronics

ENERGY STAR® qualified office and imaging products use sixty percent less electricity than conventional electronic products.



**28** Plug your battery charging devices or power adaptors into a power strip that you can easily shut off with the toggle switch.

**29** Turn off electronics such as personal computers, monitors, copiers, printers and fax machines when they are not in use.

**30** Consider a multifunction device which combines a number of operations into one device, such as a printer/fax/copier combo.

**31** Ink jet printers can be as much as ninety percent more efficient than a laser printer.

**32** Avoid leaving charging units for appliances and battery operated devices plugged in when they are not being used.



**33** Consider a laptop over a traditional desktop computer. They are not just more convenient but use less electricity. ENERGY STAR computers and monitors save energy only when the power management features are activated. Read the owner's manual for more information.

**34** ENERGY STAR qualified cordless phones use about one-third the energy of a standard cordless phone.

**35** Always be sure to turn the TV off when no one is watching. Consider plugging your DVD and other video components into an advanced "smart" power strip so that when the TV is turned off, the other components will turn off too.



**36** When shopping for a high definition TV (HDTV), a liquid crystal display (LCD) model can cut your TV power usage by approximately fifty percent compared to a plasma screen model.

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## Cooling

Cooling your home uses more energy (and energy dollars) than any other “comfort system” in your home. You can save money and increase your comfort by properly maintaining and upgrading your equipment.

**37** It is important that the size of your central air-conditioning system is correct for the amount of square footage that needs to be cooled. Properly-sized units also help keep the humidity down, making for a more comfortable as well as an efficiently cooled room.

**38** The location of your room air conditioner has a lot to do with how efficient it will be. Try to locate your units on the north, east or the best-shaded side of your home. A unit exposed to direct sunlight has to work much harder and use more energy to cool your home.

**39** Regular maintenance will insure that your room air conditioner operates efficiently throughout the summer. Check the filter once a month by holding it up to a bright light. If you cannot see through it, it's time to clean or

replace the filter. Also check your owner's guide to find out how to safely clean the condenser coils and fins on the outside of the unit.

**40** If you have central air conditioning, regular maintenance is essential to keep it working efficiently. Keep the condenser unit's coils and fins clean. Remove grass, leaves, and other debris that



may collect on them. Keep shrubbery away from your air conditioner because it can block vents and reduce the unit's ability to exhaust air. If your system is 10 years old or more it could be 40% less efficient than today's high-efficiency systems. LIPA's Cool Homes Early Retirement program can save you money on a new system that will save energy dollars for years to come.

**41** Seal spaces around the air conditioner with caulking to prevent cool air from escaping and hot air from entering.

**42** Fans can make your air conditioner's job easier. Pedestal and ceiling fans improve the air circulation in your home, allowing you to raise the air conditioner's thermostat.

**43** When it is not too hot, consider using portable or ceiling fans instead of air conditioners.

**44** Whole-house fans help cool your home by pulling cool air through the house and exhausting warm air through the attic. They are most effective when operated at night and when the outside air is cooler than the inside.

**45** To stay most comfortable during the hottest hours of the day, do your cooking, ironing, laundry and bathing in the early morning or late evenings. These activities all increase the level of humidity in your home, making it less comfortable. By using heat-generating appliances in the early morning or late evening, when the outside temperature is still not so high, your home will stay cooler.

**46** Turn off kitchen, bath, and other exhaust fans as soon as they are no longer needed after cooking or bathing. This type of fan removes cooled air from your home.

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**47** Of course, always look for ENERGY STAR appliances. In addition, look for a high Seasonal Energy Efficiency Ratio (SEER) on air conditioning for optimum efficiency and lower cooling bills.

**48** Storm windows keep cool air in and hot air out. Weatherstripping and caulking windows and doors will also keep cool air from leaking out and hot air from entering.

**49** On hot summer days the temperature in your attic can reach 150 degrees. Improving the ventilation in your attic will lower the temperature of the entire house and make your air conditioner's job much easier.

**50** Depending on the size of your home, you can save three percent on your cooling costs for every degree you raise your thermostat in the summer. Raising the thermostat from 73 to 78 degrees can equal savings of up to fifteen percent in cooling costs.

**51** Don't set your thermostat at a colder setting than normal when you first turn on your air conditioner. This will not cool your home any faster and could result in excessive cooling and an additional expense, as the unit will need to work harder.

## Hot Water

Electric hot water heaters are the second largest energy user in the home. Even if your water heater is oil- or gas-fired, electricity is needed to run the circulator motor, which brings the hot water to your sink or shower. Using hot water efficiently can add up to big savings.

**52** If you have an automatic dishwasher, the hot water heater setting can be lowered to 120-140 degrees and the dishwasher will still clean your dishes effectively.

**53** Repair leaky faucets promptly. A leaky faucet wastes gallons of water in a short period of time. A small drip can be the equivalent of wasting a bathtub full of hot water each month.

**54** Bathing uses the most hot water in the average household. To save energy, take short showers instead of baths. Any hot water you can save not only reduces your energy bill for heating the water, but reduces your water bill as well.

**55** Lower your water heater temperature to 120° F (or "Warm"). You may save even more energy by wrapping an older water heater in a special insulation blanket. A quick check: if your water heater is warm to the touch, additional insulation may be needed.



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## Heating

Many customers have electric baseboard heating and will benefit directly from the following tips. But keep in mind that all heating systems need electricity to run, whether it is a fan for forced-hot air systems or a circulator for hot water units. An energy-efficient furnace alone will not have as great an impact on your energy bills as using a “whole-house approach”. By combining proper equipment maintenance with appropriate insulation, weather stripping, and thermostat settings, you can cut your energy use for heating and reduce environmental emissions.

**56** Check the filters in your forced-hot air heating system monthly and replace or clean them when they become dirty.

**57** Have your heating system checked periodically by a properly trained licensed professional.

**58** Properly insulating walls, ceilings, floors, hot air ducts and hot water pipes significantly reduces the loss of heat.



**59** At the same temperature, dry air makes you feel colder than moist air. Maintaining home humidity will produce personal comfort at a lower thermostat setting.

**60** Insulate heating hot air ducts and hot water pipes that provide heat to the rooms in your home.

**61** Purchase a programmable thermostat to automatically raise and lower the temperature in your home according to your lifestyle. Homeowners can save up to 18 percent on their yearly heating and cooling costs by properly setting and maintaining their programmable thermostats. Keep your heating thermostat at the lowest temperature comfortable for you.

**62** Storm windows and doors are big energy and money savers. They can reduce heating costs by as much as 15 percent by preventing warm air from escaping. Double-glazed and thermopane windows or even clear plastic across windows can minimize heat escape.

**63** Keep the fireplace damper closed tightly when not in use.



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**64** Avoid portable electric heaters as they are extremely costly to operate.

**65** Let the sunlight in! Open curtains, blinds and shades over windows facing the sun to help keep your home warm and reduce heating needs.

**66** Clean warm-air registers, baseboard heaters, and radiators as needed. Make sure they are not blocked by furniture, carpeting, or drapes.



The programs of LIPA's Efficiency Long Island initiative can help you lower your energy costs and use energy more efficiently. Our online services provide convenience and time savings...another way of saving "energy."

**If you would like more information about LIPA's programs, or if you have any questions, please visit us online at [www.lipower.org](http://www.lipower.org) or call the Infoline at 1-800-692-2626.**