

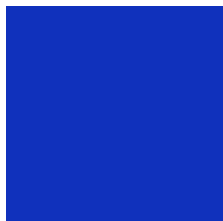
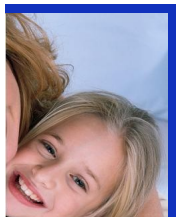
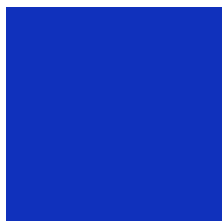


# 103

## tips to save energy.

At **Guardian Fuel & Energy Systems Inc.**, we are concerned about our environment, as well as helping you save money on energy usage. We realize that rising energy costs are impacting you. Unfortunately, a large portion of that energy is wasted.

There are some simple things you can do to achieve a better level of energy efficiency in your home as well as help reduce your energy costs. This is not a complete listing, but some very simple ways you can begin saving today!



Brought to you by

**Guardian**  
FUEL & ENERGY SYSTEMS, INC.



# Lighting & Electrical

- 1** Turn off lights when you leave a room or when they're not needed.
2. Use a timer to turn house lights off and on automatically.
3. Replace your incandescent light bulbs with compact fluorescent light bulbs (CFLs). CFLs last longer and use as little as one-quarter the energy of regular light bulbs.
4. Put lamps in corners of rooms so light reflects off two walls. Use light colors on walls, ceilings and floors to reflect more light.
5. Use task lighting over desks, tables and workbenches rather than lighting the whole area.
6. Take advantage of natural light whenever possible. Keep windows clean and unobstructed.
7. Clean bulbs and fixtures regularly for brighter illumination.
8. Install dimmer switches. In addition to enhancing the mood, they'll extend the life of your bulbs and help you save up to 60% on your lighting costs.
9. When turning off dimmer switches, make sure the fixture is switched off. In certain instances, the light can appear to be off, but it is still consuming electricity.
10. You can now purchase the Smart Strip Power Strip—Automatic Switching Surge Suppressor which turns off your computer peripherals when you turn off the computer.





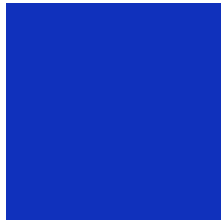
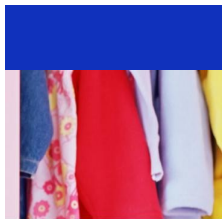
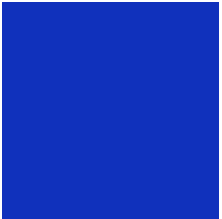
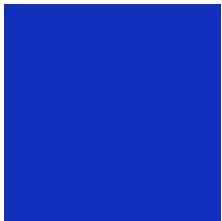
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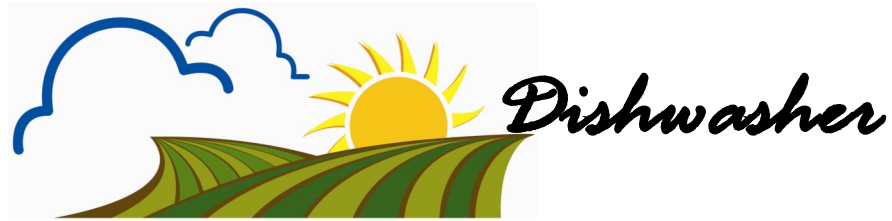
If you need to replace your washer, choose an ENERGY STAR qualified model. They consume less electricity and water than other models.

- 12. Wash clothes in cold or warm water rather than hot, and rinse in cold water. The temperature of the rinse water has no effect on cleaning.
- 13. Always fill the washer and dryer to capacity whenever possible. If you wash smaller loads of laundry, use the proper water level for each individual load.
- 14. Fold your laundry immediately after drying to reduce ironing.
- 15. Dry your clothes on an outside line whenever possible.
- 16. When you use a dryer, be sure to clean the lint filter after each load.
- 17. Dry all your lightweight clothes together to shorten your dryer cycle.

18. Dry two or more loads in a row to take advantage of the heat from your dryer.

19. Keep the outside vent of your clothes dryer clean. A clogged vent lengthens the drying time and increases the amount of energy used.





## 20

If you are buying a dishwasher, look for ENERGY STAR qualified models with features like air power drying and overnight drying settings.

21. Scrape dishes instead of rinsing them in hot water before loading. If you choose to rinse your dishes, use cold water.
22. Wait until your dishwasher is full before running it. Use the shortest wash cycle that will clean your dishes properly and be sure to use the right amount of detergent.
23. Keep your dishwasher drains and filters clean.
24. Turn off the drying cycle on your dishwasher, open the door and let the dishware and silverware air dry.
25. Fill the sink and use a stopper, or fill a large pot rather than wash or rinse dishes under running hot water.
26. Use cold water instead of hot water when running your garbage disposal. With hot water, fats can melt and clog the drainpipe when they cool.





**27**

Don't line oven racks with foil. It blocks heat flow and makes the oven work harder to cook food.

**28.** If you cook on an electric range top, bring foods to boil on high; then turn to a low setting to continue cooking.

**29.** Put a lid on a pot to boil water. The water boils faster and you'll use less energy.

**30.** Pre-heat the oven only when necessary.

**31.** Bake more than one item at a time so you can use one and freeze the other.

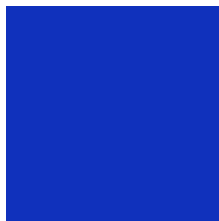
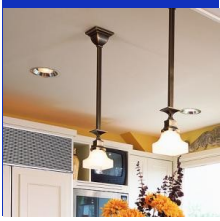
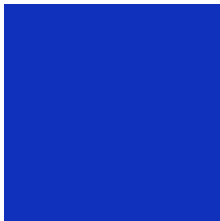
**32.** When baking, limit the number of times you open the oven door.

**33.** Don't use your oven to heat the kitchen. It not only wastes energy, it's dangerous.

**34.** When cooking vegetables, a small amount of water in a covered pan is more effective than a large amount.

**35.** If you have an electric oven that's self-cleaning, use this feature after baking or broiling to utilize the existing heat in the oven, rather than cleaning it from a cold start.

**36.** Allow frozen meats to thaw completely before cooking. A frozen roast placed directly into the oven without thawing will require one-third more cooking time.



37. Use flat-bottomed cookware that fits on the appropriate stove burner.
38. Invest in a pressure cooker. It cuts cooking time and energy use by a third.
39. Heat water in a tea kettle instead of an open pan.



## 40

A microwave or toaster will use less energy than a full-size, so use these when you can.

41. Don't leave your electric coffee pot on 'simmer' to keep coffee warm for an extended period of time.
42. To cook small amounts of food, use an electric frying pan or toaster oven—even better—use a microwave. They're faster than using the large oven, and cheaper, too.
43. Since an iron heats faster than it cools, iron fabrics that require lower temperatures first; then work up to fabrics that require a hotter setting.
44. When buying small appliances, read labels carefully to compare energy use information and operating costs of similar models.
45. Keep kitchen appliances in good working order so they last longer, work more efficiently and use less energy.
46. Buy electric power tools with the lowest horsepower or amps adequate for the work you want to do.



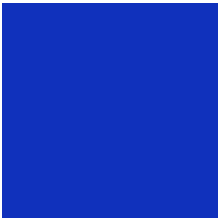
47. Keep electrical tools in top operating condition. Lubricate them properly and clean them after use. Keep cutting edges sharp on bits or saws, so they operate more quickly and therefore use less power.
48. If you own a waterbed, make the bed up everyday to keep it covered and reduce heating costs. By purchasing an insulated mattress pad, you can eliminate the need for a heater.



## 49


When purchasing a new refrigerator, choose an ENERGY STAR qualified model.

50. Avoid locating your refrigerator in direct sunlight or near equipment that generates heat, such as a range or dishwasher.
51. Leave several inches of space behind and on the sides of your refrigerator so air can circulate around the unit.



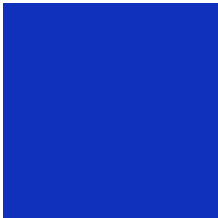
52. Every three months, clean the condenser coils located underneath or in the back of your refrigerator or freezer.

53. Be sure your refrigerator stands level so the door seals evenly and tightly.



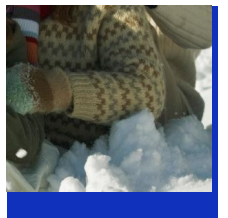
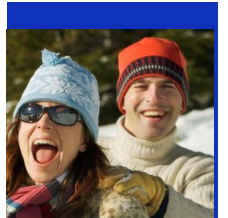
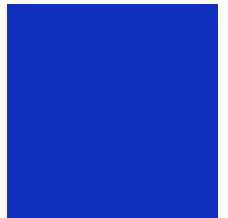
54. Check the door gaskets for air leaks by shutting a piece of paper in the door. If you can slide the paper out without resistance, your refrigerator may be leaking cold air.

55. Let hot foods cool before placing them in the refrigerator. Cooked meats, however, should be refrigerated immediately.



56. If you wonder how efficient your appliances are, you can get the Kill A Watt electricity usage monitor. You can figure out electrical expenses with the voltage, line frequency & power factor displays.

57. Liquids should be covered. Moisture is drawn from uncovered liquids, forcing your refrigerator's 'no-frost' unit to work harder.
58. If your refrigerator has steel racks, don't cover them with paper or foil. Doing so will reduce the flow of cold air.
59. Don't overload! Cool air should be allowed to circulate around each container.
60. Don't overcool! The recommended temperature is 38° F to 40° F. Keep your refrigerator just low enough to chill milk. For the freezer section, 5° F is recommended, low enough to keep ice cream hard. (You may need to adjust the setting during the summer months.) Use a thermometer to check settings.
61. Try to cut down on the number of times you open the refrigerator door. Plan ahead and take out everything you'll need at one time.
62. If you're going away for a long period, use up perishable foods, turn your refrigerator off, and leave the door open.
63. Consider removing your second refrigerator or freezer. Remove door when not in use.
64. Get rid of any refrigerator or freezer in your home that's more than ten (10) years old and you'll save as much as \$100 annually in energy costs, when you replace it with an ENERGY STAR qualified model.
65. Remove frost when it is 1/4 inch thick. Heavy frost buildup decreases efficiency and uses more electricity to maintain the same temperature.





# 66

Save water costs by turning off the tap when you shave, wash or brush your teeth.

- 67. Many hot water heaters are factory-set for 140° F. That's a lot higher than you need. Reset it to 120° F.
- 68. If you have an off-peak electric hot water heater, set your bottom thermostat at 135° F and the top thermostat at 125° F for maximum efficiency.
- 69. If you are buying a new electric hot water heater, make sure to buy the highest efficiency energy rating available.

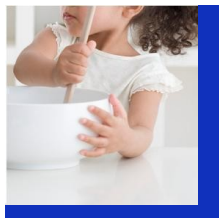
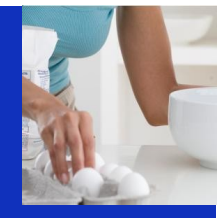
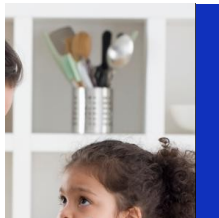
70. When installing a new hot water heater, locate it in a warm place rather than an unheated garage or basement, if possible.

71. Wrap your hot water heater with an insulation blanket, if allowed by manufacturer's recommendation.

72. Turn off your electric water heater when you leave home for extended periods, such as vacations.

73. Take showers instead of baths. A three– minute shower uses about half the water of a bath.

74. In the summertime, take warm or even cold showers whenever possible.



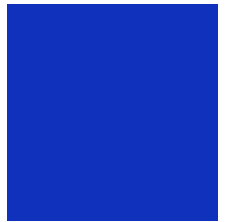
- 75. Turn off the hot water tap each time you rinse dishes, or better yet—scrape, don't rinse. Letting the tap run wastes up to 30 gallons per meal.
- 76. Replace washers on faucets that drip. A leaky faucet can waste 2,500 gallons of hot water per year.
- 77. Insulate at least ten feet of hot and cold water pipes attached to your hot water heater.
- 78. Install water-saving low-flow shower heads and sink aerators.



**79**

Keep your heating equipment well tuned with periodic maintenance by a service professional. If you do buy a new heating unit, select the most energy-efficient one you can afford. The initial cost may be high, but in the long run, your operating costs will be lower.

- 80. Dust or vacuum radiator surfaces and vents frequently to cut down on heat loss. If they need painting, use a flat paint which radiates heat better than glossy paint.
- 81. Make sure radiators and/or heating vents are not blocked or obstructed by furniture or drapes.
- 82. During the hot summer months, close insulated drapes or shades to help keep out unwanted heat.
- 83. On sunny winter days, open your insulated drapes or shades to get the full benefit of sun shining through the windows.
- 84. During the winter months, close your curtains or drapes at night to cut down on heat loss.



85. Install wall outlet and switch plate gaskets to cut down on a flow of cold air.
86. Keep doors and windows closed as much as possible. This includes closet doors and rooms not in use.
87. Check for drafts around windows and doors. Caulk and weather-strip wherever necessary.
88. Install awnings over exterior windows exposed to direct sunlight.
89. Keep your daytime winter thermostat setting to 65° F; at night, lower it to 55° F. (Use your judgment. Babies and the elderly may need higher room temperatures.)
90. Install clock thermostats to automatically control heating and cooling when you are home and away.
91. If you're purchasing a new room air conditioner, buy an ENERGY STAR qualified model with a high energy efficiency rating (EER). The higher the rating, the more efficient the unit and the less costly it is to operate.

92. It's a waste of money and energy to run your room conditioner all day long just to cool an empty house. Instead, install an appliance timer that will activate the unit five minutes before you arrive.

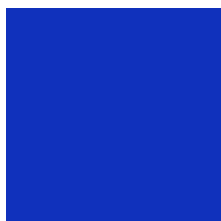
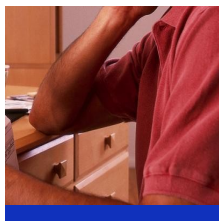
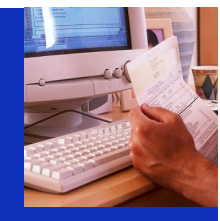
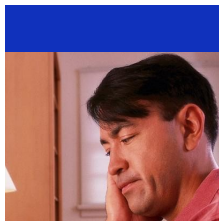
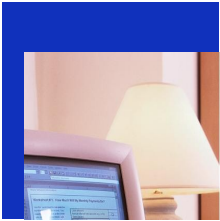
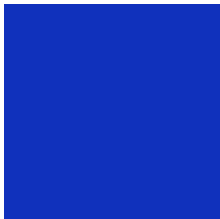
93. Get rid of any room air conditioner that is more than ten years old and you'll save when you replace it with an ENERGY STAR qualified model.

94. Clean or replace furnace filters often.

95. Have your furnace burner checked and cleaned annually.

96. If you have a fireplace, make sure the damper is shut when the fireplace is not in use. A chimney can draw out as much as 25% of the heated air in your house if the damper is left open.

97. Exhaust fans vented to the outside in the kitchen and bathrooms help remove excess humidity and keep rooms comfortable.



98. Installing a thermostatically controlled attic exhaust fan can lower inside temperatures in the summertime by as much as 50%.
99. Use ceiling or portable fans in place of room air conditioners whenever possible.
100. If possible, install storm windows. If not, tightly tape heavy duty clean plastic sheets to the inside of the window frames to reduce drafts.
101. If you use an electric furnace to heat your home, consider replacing it with a high efficiency heat pump system, which can cut electricity use for heating by as much as 30%.
102. If you have a simple open masonry fireplace, replace your fire screen with glass doors and convective grate to reduce the loss of warm air.
103. Tune up your central air system once a year (or your heat pump system) to lower operating costs and obtain the maximum operating efficiency from that unit.

Conserving energy is really very easy. Try as many of these energy-saving tips as you can throughout your home, and see how much your energy bills go down. You may be amazed. Call us for more information on energy conservation and steps you can take to help the environment as well as making your family safe and comfortable.

**Sources: Energy & Environmental Building Association; CT Energy Efficiency Fund**

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