



53 Ways to Conserve Energy*

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From heating and cooling tips, to advice on appliance use, this information sheet supplies information your family needs to make your home energy efficient.

Your local utility company's conservation programs and services can help you lower your energy costs and use energy more efficiently. For example, you can achieve significant savings by using fluorescent light bulbs in place of the standard incandescent bulbs. One 18-watt fluorescent bulb will last the same number of hours as ten 75-watt incandescent's, with life-cycle savings of more than \$80.00 over the life of the bulb. If you would like more information about these types of programs, or if you have any questions about energy-saving tips please call your local utility.

Heating Tips

1 - Heating is the single biggest energy use in homes. A well-maintained heating system will hold down fuel costs and provide reliable comfort. Check the filters in your warm air heating system monthly and replace or clean them when they become dirty. Have your heating system checked periodically by a licensed professional.

*Information Source: Redding Electric Utility @ <http://www.reupower.com/>

2 - Proper insulation in walls, ceilings and floors also significantly reduces the loss of heat to the outdoors. Insulation will pay for itself in fuel cost savings and home comfort.

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

4 - The many small openings in a home can add up to big heat losses. Caulking and weatherstripping cracks in walls and floors, windows and doors will save fuel and money. Keeping the fireplace damper closed tightly when not in use will also result in heating cost savings.

5 - Letting sunlight in by opening curtains, blinds and shades over windows facing the sun helps keep your home warm and reduces heating needs. At night or when the sky is overcast, keeping drapes and curtains closed will help keep the warmth indoors.

6 - Dry air makes you feel colder than moist air at the same temperature. Maintaining home humidity will produce personal comfort at a lower thermostat setting and save money. Shallow pans of water near radiator tops or near warm air vents, or a room humidifier, will help raise humidity levels.

7 - Keeping your heating thermostat at the lowest temperature comfortable for you will save on heating costs.

8 - Insulate heating hot air ducts and hot water pipes that provide heat to the rooms in your home. This will reduce heat loss in areas that are not insulated and will help your heating system work more efficiently.

Cooling Tips

9 - Make sure your air conditioner is the proper size for the area you are cooling. The wrong size air conditioner will use more electricity and increase your energy bills. A unit that is too large for a given area will cool the area too quickly, causing the air conditioner to frequently turn itself on and off. If a unit shuts off quickly, chances are it hasn't been running long enough to reduce the room's humidity and you'll be uncomfortable. If your air conditioner is too small, it will run constantly on hot days without ever achieving good results.

10 - The location of your air conditioner has a lot to do with how efficient it will be. If you have a choice, locate your units on the north, east or the best-shaded side of your home. If the unit is exposed to direct sunlight, it has to work much harder and use more energy to cool your home. Keep shrubbery away from your air conditioner since it blocks vents and reduces the unit's ability to exhaust air.

11 - Regular maintenance will insure that your air conditioner operates efficiently throughout the summer. Check the filter once a month by holding it up to a bright light. If you can't see through it, it's time to clean or replace the filter. You can also check your owner's guide to find out how to safely clean the condenser coils and fins on the outside of the unit.

12 - On very hot days, you can save energy by closing the fresh air intake on your unit. Cooling fresh, warm outside air requires more electricity than re-cooling the air that is already circulating in your home.

13 - You can save on cooling costs by avoiding cooling rooms that are not occupied. If you like your home to be cool when you come home at the end of the day, special automatic timers for air conditioners are available that will turn the unit on before you arrive home.

14 - On hot summer days, the temperature in your attic can reach 150 degrees. Improving the ventilation or increasing the insulation in your attic will lower the temperature of the entire house and make your air conditioner's job a lot easier. Installing an attic fan that is controlled by a thermostat to exhaust the hot air or increasing the insulation factor in your attic can greatly improve the comfort of your home.

15 - Depending on the size of your home, you can save 3% on your cooling costs for every degree you raise your thermostat in the summer. Raising the thermostat from 73 to 78 degrees can mean savings of up to 15% in cooling costs.

16 - Fans can make your air conditioner's job easier while saving you money. Pedestal and ceiling fans improve the air circulation in your home, allowing you to raise the air conditioner's thermostat. In moderate heat, fans can sometimes completely replace air conditioners. Ceiling fans use only about one tenth the electricity of a typical home air conditioner.

17 - To stay most comfortable during the hottest hours of the day, do your cooking, 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 and forcing the air conditioner to work even harder. If other heat generating appliances, such as irons, ovens and blow dryers are used only in the early morning or late evening, your home will stay cooler.

18 - Drapes, shades and awnings shield windows from the hot sun, keeping your home cooler. Your storm windows also come in handy during the summer since they keep cool air in and hot air out. Weatherstripping and caulking windows and door frames will also keep cool air from leaking out. Certain reflective films can be used on windows to screen out the hot rays of the sun without reducing the amount of light you receive. And, when doors and windows are shut, your air conditioner will operate more efficiently.

Refrigerator & Freezer Tips

19 - Like other appliances that heat and cool, refrigerators are big energy users. If your refrigerator door does not shut tightly, check the door seal to see if it needs to be cleaned or replaced. A door leak allows cool air to escape, forcing your refrigerator to use more energy to keep food cold.

20 - Cleaning the condenser coils found in the back or bottom of the refrigerator will maximize its efficiency. A brush or vacuum can be used. Be sure to unplug the refrigerator before you start cleaning.

21 - Keep the refrigerator away from heating appliances (ovens and dishwashers), windows, and heating ducts. Direct exposure to heat forces the unit to work harder and use more energy. If you have a freezer or refrigerator in your garage, remember that the garage is not cooled and it will run more to keep cool.

22 - When purchasing a new refrigerator consider a high efficiency model. Compare [yellow Energy Guide labels](#) and choose the unit that uses the least amount of electricity.

23 - A freezer's efficiency is increased by keeping its compartment full. Be careful not to block the fan that allows cold air to circulate.

24 - Although automatic defrost refrigerators are convenient, their defrosting features use a lot of electricity. A manual defrost refrigerator typically uses 36% less energy.

25 - Check temperature settings for the most efficient appliance operation. Refrigerator temperature should be 36-38 degrees and freezer temperature should be 0-5 degrees.

Laundry Tips

26 - Ninety percent of the energy your washer uses goes toward heating water. You can save energy dollars by using hot water only for heavily soiled laundry. Most laundry can be washed in warm water and lightly soiled loads can be washed in cold water. You can also save by using cold water rinses for each load, because the temperature of the water used during the rinse cycle will not make your clothes any cleaner.

27 - Run the washer only when you have a full load of laundry to save energy and water.

28 - If you have more than one load of clothes to dry, try to do each load immediately after the one before to use the heat left over from the previous cycle and increase the efficiency of the dryer.

29 - If you're in the market for a new clothes dryer, consider purchasing one with a "moisture sensing" device that shuts off automatically when your clothes are dry so the dryer doesn't run longer than needed.

30 - You can reduce drying time and energy use by setting your timer carefully. Over-drying your clothes uses more energy than necessary, and shortens the life of the fabric. Other side effects include shrinkage and static cling.

31 - Drying heavy and light fabrics separately will also keep drying time to a minimum. Mixing different weight fabrics causes the dryer to run longer than necessary.

32 - Remember to check the lint filter before each load. Lint buildup blocks air flow and lengthens drying time, costing you energy dollars.

Hot Water Use

33 - The water heater is the second largest energy consumer in the home and using it efficiently can add up to big savings. For families with an automatic dishwasher, the hot water heater setting can safely be lowered to 130-140 degrees. If the automatic dishwasher has a water temperature booster, the water heater temperature can be set to 110-120 degrees. If your house will be vacant for two or more days, you can lower the temperature of your water heater even more until you return. If you have a new water heater, drain a few gallons from your tank every six months to remove sediment that accumulates and reduces the heater's

efficiency. If you only use your hot water once or twice a day, you may consider installing a timer on your hot water heater and set it up to run two hours in the morning and the evening.

34 - Wrapping a fiberglass blanket around your water heater and securing it with duct tape, or installing a ready-made insulation kit can save up to 10% on water heating costs. Most new water heaters are already insulated, so this tip is most effective for heaters that are more than five years old. Also, insulate hot water pipes to reduce heat loss as the hot water is flowing to your faucets.

35 - Leaky faucets can add to your hot water bill so repair them as soon as possible. The constant drip wastes water, energy and money. You can also save by installing an inexpensive "flow control" device in shower heads and faucets.

36 - It pays to operate appliances that use hot water wisely. Running the clothes washer with a full load and using cold water whenever possible can lead to big energy savings. Use detergents that clean clothes effectively in cold water. Rinsing dishes with cold water before loading them into the dishwasher and running the dishwasher only when it's completely full will also save money.

Dishwashers

37 - Eighty percent of the energy used in automatic dishwashers goes toward heating water. Significant savings take place by running the dishwasher only when it is full. Running a half-filled dishwasher twice uses two times as much energy as running a full load once.

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

39 - 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. The manufacturer's specifications or the [Energy Guide label](#) should list this information.

40 - Many new dishwashers have an internal water heater that raises the temperature of the incoming water to 140 degrees. This device allows you to turn down the temperature on the water heater in your home and still have your dishes washed thoroughly.

41 - 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 another way to save energy.

Cooking Tips

42 - A microwave oven is an energy efficient alternative to a conventional oven. It cooks food more quickly and it uses 70-80% less electricity than a regular oven.

43 - When you're cooking on top of the range, use pots and pans that are properly sized to "fit" the burners. Using a small pan on a large burner wastes energy and can be a safety hazard. Cookware with flat bottoms and tight covers are your best choice. Always cook with lids on your pans, as this keeps the heat inside and speeds up cooking time.

44 - If you do use a conventional oven, try to avoid "peeking" by opening the oven door. Each "peek" can lower the oven temperature by 25 degrees. Use a toaster oven to cook small items.

45 - Although often recommended, it's not really necessary to preheat the oven for foods with a cooking time of over one hour. Using glass pans allows you to set the oven 25 degrees lower because glass retains heat.

46 - When preparing a meal in your oven, try to use foods that are cooked at about the same temperature. That way your oven can cook several dishes at the same time.

Lighting Tips

47 - Lighting accounts for about 15% of a home's electric use. New screw-in fluorescent bulbs can replace the incandescent ones most of us use. Fluorescent bulbs are more expensive, but they last 10 times longer and use 75% less electricity.

48 - If you prefer incandescent bulbs, try to use "energy saver" bulbs. These bulbs use halogen gases that allow the filament to burn brighter while consuming less electricity.

49 - A lot of energy can be saved by matching as closely as possible light bulb wattage to lighting needs. For example, a high wattage reading light in a hallway or alcove is not energy efficient.

50 - You can save by turning off incandescent lights when you leave the room. If you use fluorescent lighting, however, turn them off only if you'll be gone longer than 15 minutes. Fluorescent lights use as much energy in starting as they use during 15 minutes of operation, so it's not worthwhile to turn them off for brief periods.

51 - Lighting controls or "timers" can help save energy dollars, too. Timers can be set to turn lights on or off at predetermined times while photocell controls are sensitive to light and turn lamps on and off at sundown and sunrise. Dimmers can vary the level of illumination according to how much light you may want in a given situation.

52 - Consider using task lighting (lighting directed at a specific area) instead of overhead or general lighting, which may light unused areas of the room. By limiting lighting only to areas where it is needed, savings in the cost of bulbs and energy can be made.

53 - Keeping lights and fixtures clean can improve efficiency as much as 20%. Take advantage of reflected light by keeping portable fixtures as close as possible to light colored walls or other surfaces. These easy steps may reduce the number and wattage of bulbs you need and help you save on your energy bills.

New Appliances

Most of these tips focus on how you can get the most from the appliances you now own. However, when you are shopping for a new appliance, check for the yellow Energy Guide label that tells you the unit's energy efficiency. This is particularly important for appliances which use a lot of electricity, such as air conditioners and refrigerators. The higher the EER, the more efficient the appliance. The label provides the estimated yearly energy cost for operating the appliance based on an average national utility rate. With any appliance, it's helpful to compare units in the same size range when you are trying to determine which model has the lowest annual operating cost. Although very efficient appliances may cost more to buy, they pay for themselves through lower energy bills. For example, by purchasing a very efficient refrigerator, you could save up to \$1,200 over its life. This energy conservation guide is one of the ways we are helping our customers manage their energy costs.