

### **Install energy-efficient lighting.**

- Lighting accounts for about 15% of a home's electric use. By using energy-efficient compact fluorescent bulbs instead of standard incandescent light bulbs, you use 75% less electricity.
- By replacing your home's 5 most frequently used incandescent lights with CFLs, you can save more than \$60 a year in energy costs.

### Other Lighting Tips:

- ✓ ENERGY STAR CFLs emit less heat and are cooler to the touch than incandescent bulbs.
- ✓ Be sure to turn off the lights when you leave a room.
- ✓ Keeping your lights and fixtures clean can improve efficiency as much as 20%.
- ✓ Directing lighting at a specific area instead of lighting unused areas of the room saves on the cost of bulbs and energy.
- ✓ Place fixtures as close as possible to light-colored walls to take advantage of reflected light.
- ✓ Use floodlights only when needed; they use 2.5 times more electricity than indoor lights.
- ✓ Energy efficient holiday lighting comes in a variety of festive styles and colors, including light emitting diodes (LEDs), fiber optic lights, candelabra CFLs, and rope lights, all of which use substantially less energy than standard holiday lighting.
- ✓ LED holiday light strings last up to 10 times longer, as many as 20,000 hours than incandescent strings. They are more durable and shock resistant than conventional lighting strings. They are also cool to the touch, reducing the risk of fire.

### **Weatherize and insulate your home.**

- Attics are typically the easiest place to insulate and it's also where you'll see the greatest energy savings.
- Insulate and seal heating and cooling ducts - poorly sealed ducts can waste 10-30% of your

energy costs.

- Caulk and weather-stripping around doors, attic access, windows, outlets and any area that can let the warm air out.

#### More Weatherizing Tips:

- ✓ Keep the warm air in by adding insulation, caulking and weather-stripping around doors, attic access, windows, outlets and any area that can let the warm air out.
- ✓ Install inexpensive Styrofoam or foam rubber gaskets on outside electric light switches and wall outlets.
- ✓ Install a vapor barrier in your attic to reduce the flow of moisture from inside your home through the insulation. This eliminates the condensation that reduces insulation efficiency.

#### **Lower your thermostat when you're not at home and at night.**

- Install a programmable thermostat that will automatically lower and raise the temperature. You can save 20% or more of your heating costs by lowering your thermostat 10 degrees for two eight-hour periods a day.

#### **Use fans more and air conditioners less.**

- Fans can make rooms feel five to ten degrees cooler and use 80% less energy than air conditioners
- Ceiling fans can keep you comfortable in the winter too. Reversing the direction of the blades pushes warm air down in to the room.

#### **Keep your heating/cooling system running efficiently.**

- Taking measures to properly maintain your heating system. For most consumers, the heating system is the single largest energy user in the home and can account for more than 60% of your total energy bill.
- Clean or replace your filter once a month or as needed and have your system checked at least once a year.

#### Additional Heating/Cooling Tips:

### *Cooling -*

- ✓ Set your air conditioner at 78 degrees or higher to save on your cooling costs.
- ✓ Place your air conditioner in a central window, rather than a corner window, to allow for better air movement.
- ✓ Consider placing the unit on the north, east or the best-shaded side of your home. Your air conditioner will have to work harder and use more energy if it is exposed to direct sunlight.
- ✓ When purchasing an air conditioner, be sure to know the size of the area you want to cool. 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.
- ✓ When purchasing an air conditioner, look for the energy efficiency rating (EER) on the ENERGYGUIDE label. The higher the ERR, the more efficient the air conditioner. Look for "Energy Star" air conditioners because they are at least 20 more efficient than other utilities.
- ✓ When running any kind of air conditioner, close the damper on your fireplace. An open damper will pull hot air into your house.
- ✓ If you have a window air conditioning unit, remove it for the winter months to prevent heat from escaping through and around the unit. If it can't be removed, buy a cover to prevent drafts.
- ✓ Seal spaces around the air conditioner with caulking to prevent cool air from escaping.
- ✓ Clean the cooling and condenser fans plus the coils to keep your air conditioner operating efficiently and check the filter every month and replace as needed.
- ✓ Attic fans provide cooling at a much lower cost than air conditioners.

### *Heating –*

- ✓ Clean warm-air registers, baseboard heaters, and radiators as needed; make sure they're not blocked by furniture, carpeting, or drapes.
- ✓ Keep the fireplace damper tightly closed to prevent heated air from escaping up the chimney.
- ✓ Place heat resistant reflectors between radiators and walls. In the winter, this will help heat the room instead of the wall.

- ✓ If you replace your heating system, consider purchasing ENERGY STAR® labeled equipment, properly sized and installed by a professional.
- ✓ Make sure outdoor portions of your heating system are not blocked by leaves, shrubbery, or other objects.
- ✓ Bleed the air out of your radiators twice a year to maintain efficiency.

### **Control energy costs by reducing hot water use and improving the efficiency of your water heater.**

- Lower your water temperature to 120 degrees (or 140 degrees if you use a dishwasher). Most water heaters are set around 145-150 degrees and each 10-degree drop will save 3-5% on water heating costs.
- Wrap your water heater and pipes.

More Water Heating Tips: You can reduce your energy and water bills by cutting down the amount of hot water you use and by making your water heating system more efficient.

- ✓ Take a short shower instead of a bath. A bath uses much more water than an average length shower.
- ✓ Turn off the tap while brushing your teeth or shaving.
- ✓ Put aerators on all faucets
- ✓ Use the cold-water cycle on the clothes washer
- ✓ Install a low-flow showerhead
- ✓ Use cold water for cooking and cover pans when boiling water – its faster and uses less energy.
- ✓ Make sure your faucets are completely turned off. Hot water dripping from a faucet can cost you hundreds of dollars a year.

### **Use shading to maintain comfortable temperature in your home.**

- In the summer, close drapes, windows and doors on your home's sunny side to reduce solar

heat build up. In the winter, keep blinds and drapes of sun-exposed windows open in the daytime and closed at night.

- Plant deciduous trees for shade in the summer and solar gain in the winter.

#### More Window Tips:

- ✓ Try a desert trick - when the outside air is dry and cooler than the air inside, hang a damp sheet over an open window to cool incoming breezes.
- ✓ Plastic installed over windows will help reduce drafts when installed securely.
- ✓ Choose ENERGY STAR-qualified windows to keep your home cooler in the summer and warmer in winter.
- ✓ Use multiple panes of glass to insulate against the weather, sound, and impacts.
- ✓ Consider U-value and Low-E coatings. U-value is the measure of the window's ability to insulate. Low-E window coatings are thin and transparent, permitting visible light to pass through, while effectively reflecting radiation and keeping your home cooler in the summer and warmer in the winter.
- ✓ Close storm windows in the fall.

#### **Use appliances wisely and shop for energy efficient appliances.**

- Use appliances at off-peak hours (before 8 a.m. and after 8 p.m.) and on weekends whenever possible.
- Look for appliances with the EnergyStar label because they can save you 30% on your energy bill.
- Compare yellow Energy Guide labels, not just prices, to make sure you buy an energy efficient unit.

#### More Appliances Tips:

##### *Stove/Oven -*

- ✓ Use your microwave oven as much as possible in the summer rather than your regular oven. You'll stay cooler and save energy.

- ✓ Use small electric pans or toaster ovens for small meals rather than your large stove or oven. A toaster oven uses a third to half as much energy as a full-sized oven.
- ✓ Use pressure cookers and microwave ovens rather than your regular oven. They will save energy by significantly reducing cooking time and keep your home cooler in the summer.
- ✓ Match the size of the pan to the size of your burner for the highest efficiency.

### *Dishwashers*

- ✓ Load your dishwasher to capacity when possible (but don't overload).
- ✓ Use the "energy saving" setting for the drying cycle, or let dishes air dry to reduce energy use.

### *Washer/Dryer*

- ✓ When doing your laundry, use a cold-water wash on full loads.
- ✓ Dry two or more loads in a row to take advantage of the heat.
- ✓ Clean the lint trap in your dryer between loads and make sure the exhaust isn't blocked.
- ✓ Do your laundry during off-peak hours, after 6:30 p.m. and before 9:30 a.m., and hang your clothes outdoors in the summer.

### *Refrigerator/Freezer*

- ✓ Don't keep your refrigerator or freezer too cold. Recommended temperatures are 37° to 40°F for the fresh food compartment of the refrigerator and 0-5°F for the freezer section. Test your temperature by placing a thermometer in the appliance for one hour.
- ✓ If you use a separate freezer for long-term storage, keep the temperature at 0°F.
- ✓ Defrost your freezer regularly to keep it running efficiently.

- ✓ A freezer's efficiency is increased by keeping it full. Fill in the empty space in your freezer compartment with ice bags, but be sure you don't block the circulating fan.
- ✓ Vacuum and clean the condenser coils, motor and evaporator pan of your refrigerator once or twice a year.
- ✓ Leave space around your refrigerator to allow air to circulate around the coils and keep it away from the stove and heat registers which force the refrigerator to work harder.
- ✓ Make sure your refrigerator door seals are airtight. Test them by closing the door over a piece of paper or a dollar bill so it is half in and half out of the refrigerator. If you can pull the paper or bill out easily, it is not sealing properly.

### **Control electricity loss.**

- Turn off home electronics when not in use.
- Many electronics, such as personal computers, use electricity even when they are turned off but still plugged in. Unplug these appliances when you are done using them. The average cost per household is around \$20 per year.

### More Electronics Tips

#### *Home Entertainment (Televisions, VCRs, DVD Players, Etc)*

- ✓ Turn televisions off when no-one is watching them. A TV left on for 8 hours a day or while you sleep will cost you about \$41-\$102 per year.
- ✓ If considering a flat-panel or large-screen television, consider purchasing an LCD model rather than a plasma model to cut your power usage by approximately 50%.
- ✓ Don't forget to turn off your VCR, DVD player, and video game console. Plug your home entertainment products into an advanced power strip so that when you turn off the television, all the home audio and video components will also turn off.
- ✓ Consider combination products to save space, simplify set-up, and save energy in standby mode.

#### *Computers/Printers/Fax*

- ✓ When you shut down your computer, don't forget to turn off the monitor - it can use twice as much energy as the computer.

- ✓ Use an advanced power strip to turn off (or put in sleep mode) all your computer accessories with one switch.
- ✓ Use the power management feature on your computer monitor; it will turn off the monitor when idle for over 15 minutes when you leave your computer on.
- ✓ Consider a laptop computer over a traditional desktop – laptops use less energy.
- ✓ Consider a multifunction device, which combines printing, copying, faxing and scanning and look for the ENERGY STAR label to further increase energy savings.
- ✓ Ink jet printers use as much as 90% less energy than typical laser printers.
- ✓ Don't forget to turn your printer off at night as it still draws power even when not in use.

### **Control your energy bills.**

- Consider your utility's bill payment options such as budget billing.
- You may be eligible for energy efficiency programs and tax credits.