



ONE HUNDRED & ONE ENERGY EFFICIENCY TIPS

LIGHTING

- Replace halogen bulbs or incandescent bulbs with compact fluorescent bulbs (CFLs). CFLs use 75% less energy, last up to 10 times longer, produce the same amount of light, and do not get as hot as traditional light bulbs.
- Use motion detectors or timers for your outdoor lighting and porch lights.
- Clean or dust to improve lighting efficiency from lamps and fixtures.
- Use timers or CFL bulbs in high use outdoor lighting.
- Replace your five most-used lights with CFL bulbs and fixtures.
- Placing lamps in corners will reflect more light.
- Use dimming switches or three way lamps to reduce your energy consumption to the lowest needed wattage.

HEATING

- Replace your old heating system with an ENERGY STAR qualified boiler or furnace. Replacing your heating system with an ENERGY STAR qualified model can cut your annual heating costs by 20%.
- Install foam gaskets behind electric-outlet and switchplate covers (available at local home improvement stores). Many builders do not include these as standard in new homes.
- Examine ductwork in areas such as your attic, crawlspace, or basement. Use mastic to seal all exposed ductwork joints.
- Caulk frames around windows and doors using clear pliable caulk.
- Caulk foundation cracks and openings.
- Schedule heating system check-ups annually
- Consider splitting your heating system into multiple zones for bedrooms and living rooms. Put timers on thermostats in order to reduce heat in bedrooms during the day and in living areas at night.
- Lower your heat to 55°F if you are going away for a day or longer.
- Be sure to weatherize or air seal before you add insulation to attic floors, basements, and crawl space walls.
- If you do not use your fireplace, use a chimney block to stop heat loss.
- Add carpeting to bare floors in the winter. This adds to comfort and heat retention.

- Have a professional examine your duct work for leaks to seal, and to save heating and cooling costs.
- Check that existing insulation in your home is even with no gaps or voids. If you have R-22 (6 to 7 inches) or less, upgrade your attic insulation to R38 or R49. This reduces heating and cooling costs by up to 30%.
- Use a programmable ENERGY STAR qualified thermostat to reduce heating and cooling costs. Programmable thermostats will automatically raise and lower your heating and cooling systems when you are not home. The less difference between the indoor and outdoor temperatures, the lower your overall cooling bill will be.
- When not in use, close the flue in your fireplace and use glass doors to keep the heated or cooled air in your home from escaping out the chimney. Check regularly to make sure fireplace dampers are closed and fit tightly.
- Check warm air heating system furnace filters and HVAC filters each month. Clean or replace as needed. Dirty filters can block air flow and increase your energy bill while shortening the equipment's life.

COOLING

- Replacing your old central air conditioner with a new ENERGY STAR® qualified model can reduce your cooling costs by 20%.
- Use light colored curtains in the summer. Use light colored paint to reflect heat in porches or sunrooms.
- Fans can make you feel 3°F–4°F cooler. Use them in every room.
- Close blinds, drapes and shades during the summer. This keeps the strong sunlight from heating your home.
- Make sure your clothes dryer vent does not blow on the outdoor air conditioning unit.
- Locate room air conditioners on a north wall or a side of the building that's shaded.
- Use kitchen, bathroom, and other ventilating fans sparingly. These fans pull warm or cooled air out of your home.
- Apply a reflective coating to your roof to reduce heat buildup in your home and help save energy during the summer.
- Turn off exhaust fans in bathrooms and kitchen when not needed.

- If you have a room air conditioner, make sure to rinse and clean the filter to maximize its efficiency. Of course, replacing an older unit with an ENERGY STAR qualified model can save energy and money. ENERGY STAR qualified room air conditioners use at least 10% less energy than non ENERGY STAR models.
- Use ENERGY STAR qualified dehumidifiers to save up to \$50 per year in operating costs.
- Make sure doors close properly and replace non-working door-knobs and latches. Keep the tracks on sliding glass doors clean. A dirty track can ruin the door's seal and create gaps where heat can come in and cold air can escape.
- Make sure that drapes and furniture do not block vents or air returns.
- Keep central and room air conditioner units at the highest temperature that's comfortable in the summer. A suggested temperature range for summer is between 74°F–78°F.
- Remember to turn off ceiling fans when you are not in the room.
- Use ceiling fans or open windows first before you turn on your cooling system. Ceiling fans use the same amount of energy as a 60 watt light bulb.
- Keep storm windows and doors closed when air conditioning is operating.
- Use ceiling fans turning counter-clockwise in the summer. Reverse ceiling fans in the winter by changing the rotation direction to push rising warm air down into the room.
- When air conditioning is running, keep doors and windows closed and turn off all exhaust fans in areas such as the kitchen and bathrooms.
- Keep air conditioning unit set to the "auto" position instead of the "on" position. The "on" position keeps air flowing constantly even when you are not home which wastes energy.
- Use landscaping such as trees and shrubs to shade your home. Plant trees and shrubbery to shade the sunny side of your home (usually the east and south sides of your home).
- Use thermal-backed drapes, shades, or blinds to block out the sun in the summer but allow the radiant heat in during the winter.
- Schedule air conditioning tune-ups annually.

WATER HEATING

- If replacing your water heater consult a technical specialist about using a tankless water heater or an indirect water heater (super-insulated storage tank connected to a boiler) which could be more efficient for your home.
- Be sure to set your water heater to no more than 120°F.

- Running a fully loaded dishwasher saves energy. Let the dishes air dry once they are clean.
- ENERGY STAR qualified dishwashers use at least 40% less energy than non ENERGY STAR qualified models. They also use less water than conventional models.
- ENERGY STAR qualified dishwashers can save you up to \$50 per year in energy costs when you replace a pre-1994 model.
- Take a five minute shower instead of a bath to reduce hot water use.
- ENERGY STAR qualified clothes washers cut energy and water consumption by more than 40% .
- ENERGY STAR qualified clothes washers have faster spin cycle speeds which can reduce drying time.
- Turn your gas water heater to "vacation mode" if you are leaving your house for an extended period of time.
- Insulate the first six feet of hot and cold water pipes that are connected to the water heater.
- Buying a new house? Consider investing in a solar water heater or geothermal heating system.
- How old is your water heater? Consider replacing it with a new energy efficient model.
- Check faucets and all water pipes for leaks. Leaks can lead to additional energy costs.
- Install energy-saving aerators and low-flow showerheads in your bathrooms and kitchen. These devices lower water usage so you save on water and the energy used to heat it.

LAUNDRY

- Use cold water for washing clothes. About 16% of an average home's energy bill goes towards heating water.
- Line-dry your clothes whenever possible.
- If using a dryer, clean the dryer's lint screen after every load.
- Use less water for smaller loads by choosing the appropriate setting on your washing machine. Be careful not to over dry smaller loads of clothing.

KITCHEN

- Use microwaves or toaster ovens instead of the conventional oven or stove.
- Do not open the oven door as the temperature in the oven will drop 25°F–30°F each time.
- Grill out during the summer to avoid heating your home with your oven.

- Copper-bottomed pots and pans use heat most efficiently.
- Clean stove reflector pans regularly so they can efficiently reflect heat upward.
- Use tight-fitting covers on pots and pans as this shortens cooking time. Cook during the early morning or late evening hours in the summer. Be sure to thaw food before cooking it.
- Turn off the oven or burners when food is almost cooked as the existing heat will continue to cook the food.
- Do not use small pots on large burners. Use pots that match the size of your burners.
- Keep the inside of your microwave clean. It will cook your food more efficiently.

REFRIGERATION

- Look for the yellow "Energy Guide" label to compare costs and features of operating new refrigerators.
- ENERGY STAR qualified refrigerators use 40% less energy than conventional models sold in 2001.
- Cover liquids and wrap food stored in the refrigerator. Uncovered foods release moisture and make the compressor work harder.
- Defrost refrigerators and freezers regularly as frost buildup decreases the energy efficiency of the unit.
- ENERGY STAR qualified refrigerators use high efficiency compressors, improved insulation, and more precise temperature monitoring to improve energy efficiency.
- Refrigerators use the most energy of any large appliance. Clean the condenser coils of your refrigerator on a monthly basis to cut down on energy costs. Your refrigerator will run for shorter periods with cleaner coils.
- Keep your freezer full but don't overload your refrigerator.
- Consider removing your second refrigerator from the basement or garage.
- Keep refrigerator and freezer away from stove, range, dishwasher, water heater, clothes washer, and dryer.
- Set your refrigerator to 40°F and your freezer to 0°F.
- Remember to check the seals on your refrigerator door to make sure they are clean and tight. Your refrigerator accounts for up to 11% of your household's total energy use, which can have a significant impact on your energy bill.
- ENERGY STAR qualified freezers use at least 10% less energy than required by current federal standards.

WINDOWS

- Replace old windows with ENERGY STAR qualified windows that have a U-factor of .35 or lower. Repair broken or cracked glass and putty older windows. Make sure to close windows properly and use storm windows and doors during the winter.
- Install ENERGY STAR qualified windows and window films to minimize heat gain in the summer.
- Using storm windows and doors in the winter can reduce your heat loss by 25%–50%.
- Can't afford new windows? Install plastic sheeting on the inside of drafty windows. Also, window leaks can be caulked.
- Examine the caulking and weather stripping around your doors and windows and repair as necessary.
- Clean south-facing windows to take advantage of solar heat and draw shades on north-facing windows.

POOLS

- Use a timer for your pool pump. Pool pumps consume a lot of electricity and most people run pool pumps much longer than necessary.
- Use the minimum amount of time required for your pool pump. This will save you money and extend the life of the pump.
- Cover heated pools to keep the heat in.

HOME OFFICE

- Set your laptop or desktop computer to energy-saving sleep mode or turn off your computer when not in use. Screensavers do not save energy (nor do they save your screen).
- Use laptop computers instead of desktop computers.
- Use a power strip to turn off home electronics when you are not home. Products such as DVD players, VCRs, and computers that are plugged in but turned off may still be drawing power.

ADDITIONAL ENERGY-SAVING TIPS

- Water beds are costly to heat. Be sure to keep them covered and insulate heated water beds.
- Consider ENERGY STAR qualified appliances when you replace older appliances or when buying a new home.
- Learn about energy efficiency programs and incentives for making energy efficiency improvements to your home by visiting www.massave.com. Federal tax credits may also be available for home improvements including insulation and replacement windows.