

Energy Saving Tips

Practical solutions that can help you save energy at home.



Saving energy is easier than you think!

Every kilowatt of electricity or therm of natural gas you save gives you more control over your energy bill. This guide provides you with some easy, practical solutions, most of which you can do yourself, to help you become more energy efficient at home.

Always remember, SAFETY FIRST! No matter how simple a task may appear, it's important to use caution when operating electrical equipment such as power tools, installing new energy efficient lighting or working on projects involving ladders or other elevated surfaces. **When in doubt, consult with a professional.**



Heating and Cooling

- **Set your thermostat to 68°F or lower in the winter and 78° or higher in the summer.** Each degree higher or lower can significantly increase your heating costs in winter and cooling costs in summer.



- **Install a smart or programmable thermostat for added convenience.** This will allow you to automatically raise or lower the temperature settings when you're asleep or away from home. Make sure the thermostat is compatible with your HVAC system.

- **Check heating and air conditioning filters monthly.** Dirty filters not only increase energy usage, they can also damage your HVAC system.

- **Have your HVAC system serviced annually by a professional.** Regular maintenance can extend the life of the system while maintaining optimum efficiency.

- Move furniture away from your heating and cooling registers. When proper air circulation is inhibited, it can result in a higher energy bill. If applicable, make sure the area around your gas furnace is properly ventilated so that the gas burns efficiently and safely.



- **Periodically check your ductwork for leaks or tears.** Repair fallen or crushed ductwork and use mastic (a plaster-like substance found at your local hardware store) to seal leaks. Insulate ductwork that passes through unconditioned space and use ductwrap insulation.



- Leave interior doors open and don't close vents to allow adequate air flow through your HVAC system.

- **Cover window air conditioner units tightly on the inside with plastic or special air conditioner covers.** Also weather-strip around the air conditioner to seal between it and the window frame.

- Close the fireplace damper when not in use to keep air conditioned (or warmed) air in the living space.

- It's a common misperception that it takes more energy to cool off (or heat up) a house than it takes to keep it cool all the time. Turning up the thermostat in summer (or down in winter) will always save energy. It's best to only cool (or heat) a house as much as necessary, based on occupants and time of day.



- In the summer, make sure your fan is blowing air downward to help you feel cooler. On hotter days, dialing up the thermostat by only two degrees and using your ceiling fan can lower air conditioning costs by up to 14% over the course of the cooling season.

- In the winter, reverse the direction of your ceiling fan to force warm air near the ceiling down into the living space.

- **Use energy efficient LED bulbs in ceiling fan light fixtures** for cooler light bulbs and more energy savings. When you leave the room, turn the ceiling fan off.



Air Leaks and Insulation



- **Caulk, seal, and weather-strip around all seams, cracks and openings to protect against drafts.** Be sure to caulk and weather-strip all exterior doors and windows.

- Seal small gaps in plumbing stacks, vents, ducts, or electrical wires with caulk. Seal holes up to three inches in diameter with spray foam. Cover spaces larger than three inches with a piece of foam board and seal with spray foam.

- **Install a door sweep** to seal the gap between the bottom of your door and the threshold to prevent unconditioned air from coming in and conditioned air from escaping from your home. Stopping this air flow will keep indoor living space more comfortable and prevent increased energy bills.

- Install insulating gaskets in electrical outlets or switches on exterior walls. Kits are available at hardware and home improvement stores.

- **Upgrade your attic insulation to a minimum of R-38** (12-14 inches), which can help save on heating and cooling costs.

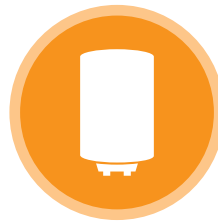
- **Before you install insulation in an attic, basement or crawlspace, seal any air leaks with caulk, spray foam or weather stripping.** The most common mistake homeowners make when installing insulation is to block the flow of air at the eaves. Never cover attic soffit vents with insulation — use rafter vents and soffit vents to maintain airflow.

- Proper ventilation of the attic with natural air moves super-heated air out of the attic, protecting roof shingles and removing moisture without using the energy needed to run an attic vent fan.



- **Weather strip and insulate your home’s attic hatch or door.** You can do this with weatherizing materials and insulation or with a pre-made attic cover available from local home improvement centers.

- Chimneys or furnace flues that penetrate your attic floor may have holes or gaps around them that can allow the air in your home to escape through the attic, increasing your energy bill and causing more drafts. Around chimney and furnace flues that can get hot, cover the gaps with metal flashing and caulk small gaps with high temperature caulk.



Water Heating

- **Check your water heater’s thermostat.** For electric models, make sure the thermostat is not set above 120 degrees. Make sure gas models are set to the “medium” setting. Heating water to a higher temperature than is needed not only increases your energy usage, but can also be a safety concern.



- **If you have a gas water heater, remember to set it on “vacation mode” when you go on vacation,** or whenever you’re gone for two days or more. If you have an electric water heater, consider adding a timer.

- **Insulate your electric water heater when needed.** Kits with easy-to-install jackets are available. **(Note: Do not insulate gas water heaters; it’s a hazard.)**

- Insulate hot water pipes that pass through unconditioned space using pipe insulation.



Lighting

- **Replace standard incandescent light bulbs with ENERGY STAR® LEDs,** which are 90 percent more efficient.

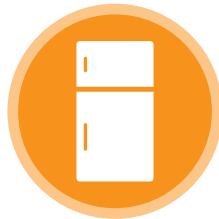


- Remember to always turn off your lights when leaving a room.

- The outdoor porch or post lamp is one of the highest used light fixtures in a home and is the perfect place to install ENERGY STAR® qualified

LED lighting products.

- **Install a new ENERGY STAR® qualified outdoor fixture** that saves energy through advanced LED technology, a motion sensor and/or a photocell that turns the light on only when someone is present or on at night and off in the morning.



Kitchen, Laundry and Bath

- **Repair faucet leaks.** Hot water leaking at a rate of 1 drip per second can waste up to 1,661 gallons of water over the course of a year.

- **Install a 2.5 gallon-per-minute (low-flow) shower head,** which saves five gallons of water over a typical bath.

- Don't let hot water run constantly while you're shaving or washing your hands and face.





- Turn faucets off tightly, especially the hot water.

- **Install a properly sized ENERGY STAR® qualified ventilation fan** to control moisture in the air while you shower or bath, as well as, control mold and mildew growth. Run your fan for 15 minutes after showering. Also, be sure the fan duct leads to the outdoors to prevent moisture problems.

- Run your garbage disposal with cold water only. Use your range exhaust fan as little as possible during the winter if it is vented to the outdoors.

- Don't rinse dirty dishes before loading your dishwasher to save water and energy. Most dishwashers today can thoroughly clean dishes that have had food scraped, rather than rinsed off.

- Run the dishwasher only when enough dirty dishes have accumulated for a full load to make the most efficient use of energy and water consumption.

- Refrigerators should be kept between 35-38 degrees and freezers at 0-5 degrees.

- **A full refrigerator and freezer retain cold better than an empty one.** If your refrigerator or freezer is nearly empty, store water-filled containers inside. The mass of cold items will enable the appliance to recover more quickly after the door has been opened. Don't overfill since that will interfere with the circulation of cold air inside.



- **When replacing your refrigerator, choose an ENERGY STAR® qualified model**, which uses at least 20 percent less energy than required by current federal standards.



- Unplug your second refrigerator or freezer, especially if it's in an unconditioned space, such as a garage. Also, consider recycling your old, secondary units if they don't get much use.

- **Don't open the oven door to check on food while it's**

cooking. Each time you open it, 25 percent of the oven's heat is wasted.

- When possible, cook in oven-safe glass or ceramic pans. These usually allow you to set your oven temperature 25 degrees lower than a recipe requires.
- Turn off the oven about 15 to 20 minutes before the end of cooking time. The leftover heat in the oven will finish the job, if you don't open the oven door.
- In the summer, try to cook early in the day or late in the evening when it is cooler, and cook outdoors when possible. Use the exhaust fan sparingly to get rid of unwanted heat in the kitchen.



• **Use your microwave or toaster oven to reheat or cook small portions.** You can reduce cooking energy by as much as 80 percent when using your microwave for small portions. This also helps save on a/c costs in summer, since less heat is generated when compared to using your stove or oven.

- Use the right sized pot on stove burners. A 6" pot on an 8" burner wastes over 40 percent of the burner's heat. Also, cover pots and pans to keep heat in.



- **Keep the burners on your gas range clean to ensure maximum efficiency.** Blue flames mean good combustion; yellow flames mean service may be needed to ensure the gas is burning efficiently.

- **Hot water heating accounts for about 90 percent of the energy your machine uses to wash clothes** — only 10 percent goes to electricity used by the washer motor. **Switch to cold water to save energy.**

- Washing full loads can save more than 3,400 gallons of water each year.



Doors and Windows

- Don't remove storm windows or doors in the summer if air conditioning is used often. Storm windows and doors help insulate the home and keep the air inside cooler longer.



- **Replace broken window panes immediately.** Cover the open pane temporarily with a tight-fitting piece of cardboard. If you have a cracked pane, tape the crack with weather stripping or freezer tape until you are able to fix it.

- In addition to storm windows, **use insulated or heavy curtains**, especially on windows facing north.

- During cold weather, take advantage of the sun's warmth by keeping drapes open during daylight hours. To keep out the heat of the summer sun, close window shades and drapes in warm weather.





Appliances and Electronics

- Office equipment that is set automatically to switch to sleep mode not only uses less energy, it runs cooler and helps the equipment last longer, allowing for savings on air conditioning, as well.
- Avoid using a screensaver when your computer monitor is not active (let it switch to sleep mode or turn the monitor off instead.)
- Even when turned off, electronic and computer equipment often use a small amount of electricity. Unplug appliances, lights, TVs, computers, and other electronics when not in use.



- Unplug battery chargers or power adapters when equipment is fully charged or disconnected from the charger.



- For added convenience, **use Advanced Power Strips (APS) vs. ordinary power strips because they include built-in features that are designed to reduce the amount of energy used by many of the consumer electronics noted above.** APSs shut off the supply power to devices that are not in use and can significantly cut the amount of electricity used by your home office and entertainment center devices.





Powering Your Every Day.SM

DominionEnergy.com