BGE®
We're on it.℠

BGESmartEnergy.com
2/08

Simple steps to saving energy

Little things you can do to make a BIG difference in your bill.

BGE®
We're on it.℠

LOURDES, BGE CALL CENTER

It's easy to adopt energy-saving habits

Use this handy checklist to see if you and your home are using energy wisely. Use the list to set your goals and keep track of them. Then read on for more information that will help you take control of your energy use.

Little or No Cost Energy-Saving Habits *Start saving right away!*	Already in Place	Family Goal	Date Goal Achieved
Lower water heater thermostat to 120°F			
Turn off lights when room is not occupied			
Thermostat setting: winter 68°F; summer 78°F			
Lower thermostat setting in winter (if you have a heat pump do not do this manually; use a programmable thermostat)			
Use energy-saving settings on washer, dryer, dishwasher, refrigerator; run dishwasher when full and use air dry feature			
Wash only full loads of clothes in cold water			
Clean refrigerator condenser coils frequently			
Repair leaky faucets and toilets			
Close drapes or blinds during summer days; open during winter to let sun in			

How can you control your energy costs?

Energy costs are rising, but you can save significantly by conserving energy at home. Several factors influence the amount of energy you use—the age and efficiency of your appliances and equipment, the condition of your home, and your own lifestyle choices for energy use. Evaluating how and when to use energy can save you money. Even small changes can add up to big savings. That's where this booklet can help. From enhancing insulation in the attic to sealing ductwork in the basement, the tips listed here can really make a difference in your energy costs!

Energy efficiency improvements will make your home more comfortable—and yield long-term savings. This booklet offers practical tips for insulating your home, maintaining your heating and cooling systems, lighting and evaluating your appliances. There are also suggestions on hot water use, thermostat settings and smart ways to use household appliances.

Saving energy isn't just good for your monthly budget—it's also good for the environment. Take a tip from BGE, your energy expert. You'll be amazed at how a few small changes can add up to big savings! The first step is to find out how and where you use the most energy.

> *"Make energy-saving a habit. It can make a big difference."*

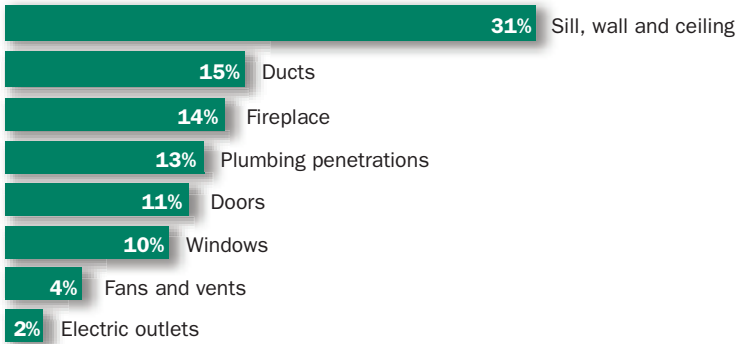
BOB, COMMUNITY RELATIONS AND OUTREACH

Weatherize your home

Most of your energy expenses are directly related to heating and cooling your home. Proper insulation and effective weatherization measures can dramatically decrease air leaks in your home, which can lower your energy use.

Once you identify where your home is losing energy, you can form a plan and prioritize efficiency projects. So, why not start at the top and work your way down!

Sources of air leaks



Attics and floors

Making sure your home is well insulated is an effective way to reduce energy waste. You can increase the comfort of your home and reduce your heating and cooling needs up to 30% by investing in proper insulation and weatherization products.

- Evaluate the insulation in your attic. The higher the R-value, the better the product insulates. Increasing insulation to at least R-30 is a good investment. R-30 insulation is around 10-14 inches deep.
- Keep access to your attic and other unheated/uncooled areas of your home closed, weather-stripped and insulated.
- Make sure that attic and crawl space areas are properly ventilated. Poor ventilation will add to your summer cooling costs and can trap moisture, which makes insulation less effective.
- Consider a whole-house fan for your attic—it will pull cool air through the house and exhaust warm air through the attic. These are most effective if operated when external temperatures are cooler than internal temperatures—usually at night.
- Insulate floors above unheated crawl spaces or basements.
- Insulate and seal ductwork that runs through unheated attics, basements or crawl spaces. Use specially designed duct tape or mastic to seal.

> ***"Close the gaps in those windows, walls, doors and ceilings."***

DARLENE, COMMUNITY RELATIONS AND OUTREACH

Doors and windows

- Upgrade inefficient windows and doors—about 1/3 of a home's total heat loss usually occurs through windows and doors.
- Energy-saving features of new windows include double panes; low-e coatings; low conductivity gas-fill between panes; and wood, vinyl or fiberglass frames.
- Install weather-stripping and sweeps on any exterior doors (including garage doors).
- Caulk around windows and doors to stop air leaks and check caulk annually to make sure it is in good condition. Don't forget to check basement and garage windows and doors when weather-stripping and caulking.
- In winter, close window coverings at night to keep out the cold and open them during the day to let in the sunshine. In summer, close window coverings during the day.



Fireplace

- Keep the damper closed when you are not using the fireplace.
- Install glass doors if you use your fireplace frequently.
- Avoid using your fireplace during extremely cold weather because you lose more heat up the chimney than you gain from the fire.

Other

- Plug gaps around pipes, ducts, fans, flues and vents that go through walls and ceilings. Especially check for gaps where telephone, cable, heat pump and air conditioner lines enter your home.
- Check heating/cooling system ductwork for air leakage, and seal with mastic sealant or metal tape designed specifically for that purpose. Specially designed tape or mastic will not degrade, crack or lose its adhesive characteristics with age.
- Check for and caulk gaps between your basement foundation and house sill plate.
- Install draft protectors on the electrical outlets and switch plates on outside walls. Remember to turn off the electricity before you do this.
- Insulate floors above unheated crawl spaces or basements.



Heating, cooling & lighting tips

Heating and cooling total about 45% of your home's energy costs, so careful attention to temperature settings can reap big savings! And regular maintenance on your heating and cooling system is one of the best investments you can make to lower your energy costs. To keep your heating and cooling systems running efficiently, be sure to make frequent maintenance checks, repair any mechanical problems promptly and have your system serviced annually.

Winter heating

- For each degree you lower your thermostat below 73°F during the heating season, you will save from 2-4% on heating costs.
- During the winter, for systems other than heat pumps, set your thermostat at 68°F or lower during the day and 65°F at night. If you have a heat pump, do not use lower temperature settings at night unless you have a programmable thermostat specifically for a heat pump.
- For better control of your heating and cooling systems, install a programmable thermostat, which can save 9-25% on heating and cooling costs. If you have a heat pump, make sure you select a programmable thermostat designed for use with heat pumps.
- Check filters on hot-air heating systems, air conditioning units and heat pumps monthly, and clean or replace as necessary.

- Check and adjust individual registers throughout your home to improve flow of heated or cooled air. And make sure window coverings, furniture or carpets don't block vents, cold air returns or radiators.
- Keep heat-producing appliances (like television sets and lamps) away from your thermostat—the heat from them during operation can "fool" your thermostat into heating or cooling your home unnecessarily.
- Consider installing a humidifier if your home is dry in the winter. This will help you feel warmer at lower temperature settings—keep the humidity level between 35-40%.
- Clean registers and returns regularly by vacuuming and/or dusting.
- Keep the outdoor unit (heat pump or air conditioner) clear of obstructions—including snow!
- Raising the temperature manually on a heat pump after a nighttime setback in winter causes the auxiliary heat to come on. This backup heat offsets any savings realized during the setback period. A heat pump programmable thermostat recovers the temperature gradually with very little or no expensive auxiliary heat.

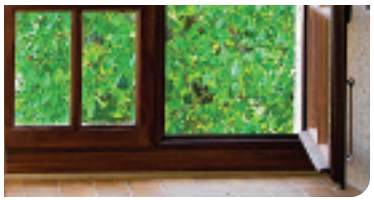
"A programmable thermostat can save 9-25% on your heating and cooling costs."

ERIC, ELECTRIC OPERATIONS

Summer cooling

- If you have central air conditioning, for every degree you raise your thermostat setting above 72°F, you will save about 5-7% on cooling costs. Set the thermostat at 78°F or higher during the summer months.
- Remember that cooking, bathing, laundering and dishwashing produce heat and humidity, which may make your air conditioner work harder.
- Use your kitchen/stove exhaust fan to get rid of heat, moisture and cooking odors. Turn off the fan as soon as it has done the job. Leaving your fan on for extended periods of time will also remove conditioned air.
- Ceiling and room fans can help move cooled air inside your home and help increase comfort levels.
- Minimize the use of appliances that give off heat while you are operating your air conditioner—these include lamps, televisions, range/oven, etc.

If you have a heat pump and would like additional information on how to operate it most efficiently, visit **bge.com.**


Light your house efficiently

Lighting represents 6% or more of your monthly energy expenses. There are many easy ways to keep your lighting costs to a minimum.

- Use compact fluorescent bulbs. They give off as much light as regular incandescent bulbs, use up to 75% less energy and last 10 times longer, quickly recovering the higher purchase price.
- Turn off lights when not in use.
- Install and use dimmers when possible to reduce lighting intensity, increase bulb life and save energy (use dimmers on compact fluorescent bulbs designed specifically for that purpose).
- Use three-way bulbs in lamps and use properly—higher wattage for tasks like reading and lower wattage for general lighting, watching television, etc.
- Use lamp shades with white or light colored liners to reflect more light.
- Use fluorescent light wherever you can—in the kitchen, porch lights, utility room, laundry room, workshop and bathrooms, garages and basements—they provide more light at a lower cost.
- Use photo electric cells or timers on indoor and outdoor safety lighting.
- If installing or replacing recessed lighting fixtures, consider airtight fixtures that reduce or eliminate air leakage.

Conserve water and energy

Water heating is the third largest energy use in your home, typically accounting for up to 13% of your monthly energy costs. Changing how and when you use hot water can save energy costs. Here are some tips:

- Lower water temperatures from 140°F to 120°F on your water heater.
- Install an approved insulation blanket over your water heater and save energy year-round. Insulate the first three feet of piping for additional savings—keep the insulation at least six inches from the flue of a gas water heater. Follow the manufacturer's installation guidelines.
- If you need to replace your water heater, select an energy-efficient model. Look for the EnergyGuide label on a water heater and compare the energy use among different models.
- Consider taking a shower instead of a bath; showers on average use 50% less water.
- Only run your dishwasher and clothes washer when full and use the energy-saving cycle whenever possible.
- Use the air dry option on dishwasher.

- Install energy efficient showerheads—one 10-minute shower per day with an energy efficient showerhead can save 10,000 gallons of water a year.
- Install faucet flow restrictors and/or aerators—these save on average 4,000 gallons of water a year.
- Install toilet dams or water savers, which can save between 10,000–14,000 gallons of water annually for a typical family of four.
- Don't let hot water run while washing hands, brushing teeth, shaving or washing dishes.
- When going on vacation, lower the temperature on your water heater. Consider turning off your electric water heater at the circuit breaker or turning your gas water heater to the pilot setting. Many new water heaters have vacation settings.
- Repair a dripping faucet or malfunctioning toilet pump as soon as possible. As little as two drops per second total 237 gallons in one month!

"A ten-minute shower using an energy-efficient showerhead can save 10,000 gallons of water a year."

LORENA, BGE CALL CENTER

Get more out of household appliances

While household appliances may not be used as often as your heating or cooling systems, they consume a significant amount of energy. You can curb your appliances' energy use with these tips:

Washing machines

- Consider using cold or warm not hot water settings on your washing machine—always rinse with cold water.
- Select the appropriate water level and use the shortest wash cycle to provide proper cleaning.
- Wash full loads of laundry.

Clothes dryers

- Use automatic dryer settings instead of timed cycles and do not over-dry clothes.
- Avoid drying very small loads, but do not overload dryer.
- To reduce ironing, hang up garments immediately after drying.
- Empty lint screens after each use to shorten drying time and prevent wrinkles.
- Check dryer door gasket frequently for wear and replace if necessary to prevent heat loss.
- Check exterior vent periodically for lint lockage to increase efficiency and prevent a fire.

Dishwashers

- Check the manufacturer's instructions for recommended water temperatures. If your dishwasher has a booster heater, make sure your water heater is set to 120°F.
- Keep drains and filters clean.
- Use less hot water by washing most of your dishes in the dishwasher instead of by hand.
- Select the proper cycle for the amount of soil on your dishes.
- Turn off dishwasher after the final rinse and allow dishes to air dry or use the no-heat air dry feature.
- Many newer dishwashers don't require pre-rinsing dishes. If you must pre-rinse, use cold water.
- Be sure your dishwasher is loaded properly and not overloaded.

"Choose ENERGY STAR® appliances when possible for lower operating costs."

TED, ELECTRIC OPERATIONS

Range/oven

- Arrange oven shelves before turning on oven. Minimize the number of times you open the door while cooking.
- Pre-heat the oven only for items requiring precise starting temperatures.
- When baking, set the temperature 25°F lower for glass containers.
- Match the size of appliance and cookware to the amount of food to be cooked.
- Keep burner pans clean and shiny to reflect heat efficiently.

Small appliances

- Keep coffee warm by storing it in an insulated container rather than leaving it on the automatic coffee brewer.
- Use the lowest heat setting on your iron to remove wrinkles, and iron more clothes at one time.
- When buying a new clothes iron or curling iron, consider one that automatically turns off.
- Frequently empty or replace the dust bag in your vacuum cleaner. A full bag reduces suction and increases



Refrigerators/freezers

- Set temperatures at 38°F for refrigerator compartment and 0°-5°F for freezer compartment. If your refrigerator is equipped with an energy saver switch, use it whenever possible.
- For the most efficient operation, keep refrigerator and freezer full and minimize the number of times you open the door.
- Allow sufficient air space around food containers in the refrigerator for good air circulation and make sure the inside vents are not blocked.
- Make sure the door gasket seals well. Clean external coils behind and beneath the refrigerator regularly. Keep kick plates free of dust for proper air circulation.
- Don't allow frost to build up more than ¼ inch on manual defrost freezers.



Other energy-using appliance information

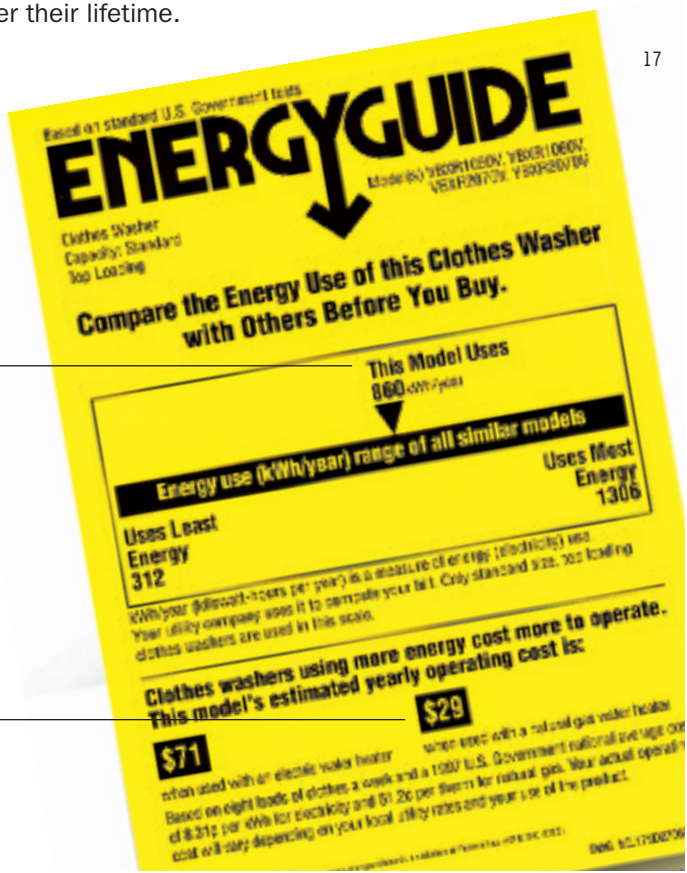
- Don't forget that computers, fax machines, TVs, DVD players, CD players, cable boxes and cassette decks also consume energy because of their standby features. Some will continue to consume energy even when turned off if they are plugged in. Consider unplugging when you leave home or go on vacation.
- Activate the "sleep" feature on home office equipment (personal computer, fax, printer and scanner), which automatically minimizes power consumption when not in use.
- If you have a pool, consider a pool cover to minimize the time the circulation pump operates.
- If you have Time of Use rates, you can save money by following the guidelines and using appliances during off-peak hours.

Finding qualified equipment

- Visit **energystar.gov** to find qualifying ENERGY STAR equipment.
- If looking for a new home, look for one that has earned the ENERGY STAR.
- Check the ENERGY STAR Web site at **energystar.gov** for more information on energy efficiency for your home.

Appliance replacement

- Heating/cooling systems and appliances lose efficiency as they age. Newer models often use less energy.
- Check the EnergyGuide label for the "Estimated Energy Consumption" and "Estimated Yearly Operating Cost" when comparing the efficiency of various models. Remember that actual operating costs will depend on your use and current energy prices.
- Consider replacement appliances that have ENERGY STAR ratings from the U.S. Department of Energy. Because of their efficient design, ENERGY STAR appliances will have lower operating costs over their lifetime.



Estimated energy consumption on a scale showing a range for similar models.

Estimated yearly operating cost based on the national average cost of electricity.

Quick reference appliance efficiency guide

APPLIANCES	RATING STANDARD	WHAT IT MEANS
Natural Gas Heating Systems	AFUE - Annual Fuel Utilization Efficiency	Measures seasonal or annual efficiency— the higher the rating, the better the efficiency
Air-Source Heat Pumps	SEER— Seasonal Energy Efficiency Ratio and HSPF—Heating Seasonal Performance Factor	SEER measures energy efficiency during the cooling season and HSPF measures efficiency during the heating season—the higher the number, the better the efficiency
Central or Room Air Conditioners	EER—Energy Efficiency Ratio	Measures efficiency level during cooling season—the higher the EER, the more efficient
Water Heaters	EnergyGuide Label	The EnergyGuide rating provides average energy use and operating costs. Also provides FHR—First Hour Rating—which measures the maximum hot water that will be delivered in the first hour
Windows	U-Value or NFRC	The lower the U-Value or NFRC rating, the better the efficiency
Refrigerators, Freezers, Dishwashers, Clothes Washers and Dryers	EnergyGuide Label	Check for lower energy use and operating costs

BGE is an ENERGY STAR partner

BGE has recently initiated a broad energy efficiency/conservation program to educate costumers on the steps they can take to mitigate the increasing cost of energy. As a part of this program, BGE has partnered with Energy Star to promote energy-efficient choices when buying new appliances and to endorse energy conservation practices around the home. Energy efficiency improvements will make your home more comfortable and extend the life of your appliances. Visit **BGESmartEnergy.com** to find out more.

Earning the ENERGY STAR means products meet strict energy efficiency guidelines set by the U.S. Environmental Protection Agency and the U.S. Department of Energy. Energy efficient choices can save families up to 30% on their energy bills without sacrificing features, style or comfort. ENERGY STAR helps you make the energy-efficient and environmentally friendly choice, since saving energy also reduces greenhouse gas emissions. If looking for new household products, look for ones that have earned the ENERGY STAR.

> *"Energy-efficient choices can save families up to 30% on their energy bills."*

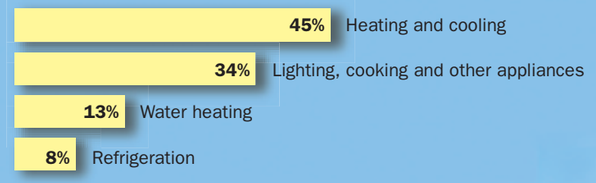
MARILYN, STRATEGIC CUSTOMER PLANNING

Home energy-saving checklist

Easy and Inexpensive *Likely payback is less than one year*	Already in Place	Family Goal	Date Goal Achieved
Install energy-efficient showerheads			
Install faucet aerators in kitchen and baths			
Install programmable thermostat			
Plug air leaks in attic, basement and around doors and windows			
Clean or change air filters on heating and cooling system monthly			
Use foam draft protectors to insulate around electrical outlets–turn off electricity when installing			
Use compact fluorescent lights in high or moderate use fixtures in place of standard incandescent bulbs			

More Expensive Improvements *Paybacks are generally one to three years*			
Install storm windows and doors, or energy-efficient insulated glass windows			
Insulate attic to at least R-30			
Insulate floors over unheated spaces			
Seal and insulate air ducts			
Have heating/cooling system checked by qualified contractor each year			
Upgrade water heater, heating and cooling system, heat pump, refrigerator, other appliances to energy-efficient models			

Where your home's energy dollars go!



Source: U.S. Department of Energy

BGE is here to help

Energy-Saving Programs

Visit **BGESmartEnergy.com** to learn about energy saving programs from BGE.

Billing options

Call BGE at **1-800-685-0123** for more information on the following:

- BGEasy—automatic payment plan
- Budget Billing—a convenient way to manage your energy bills
- Internet Billing—pay your bill online
- Heat Pump Comfort Handbook and Video

Power outages

Call **1-877-778-2222** to report electric outages. You will be connected to an automated phone system where BGE can pinpoint your location by matching it with your phone number.

Weatherline

BGE in cooperation with WBAL-TV InstaWeather offers Weatherline forecast service. Weatherline delivers the time, temperature, relative humidity, wind speed and wind chill, and WBAL's meteorologists provide a three-day forecast that is updated throughout the day. Weatherline is accessible 24 hours a day by phone at **410-662-9225.**