MORE THAN

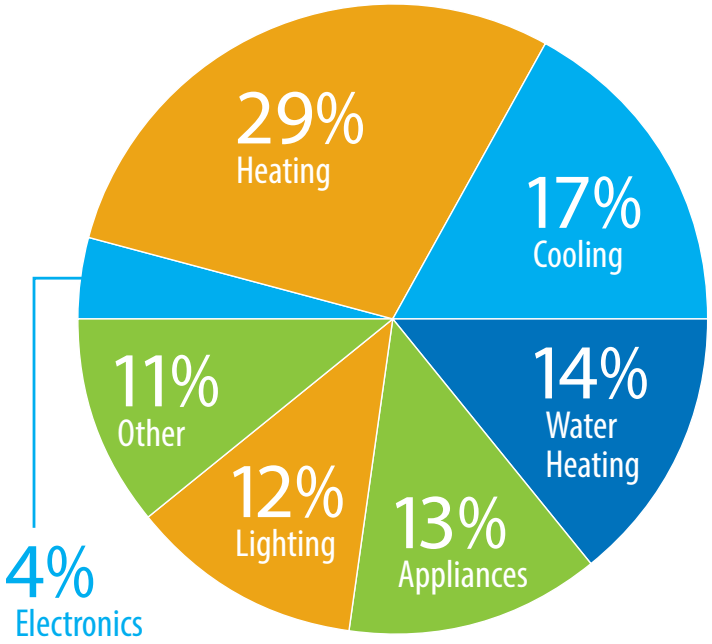
100 WAYS TO SAVE ON YOUR ENERGY BILL

Save Money by Saving Energy

Looking for ways to save money? We can help.

If you're like most people, you're already doing some things to cut down on energy use, such as lowering the heat at night. To help you save even more, we've put together this guide of more than 100 things you can do to make your home more energy efficient, without sacrificing your comfortable lifestyle.

It's simple. When you use less, you'll pay less.



Home Energy and You

As much as half of the energy used in your home goes to heating and cooling. So making smart decisions about your home's heating, ventilating, and air conditioning (HVAC) system can have a big effect on your utility bills – and your comfort.

Home Heating

Heating your home is the largest user of energy and offers the greatest opportunity for savings. About 30 percent of your total home energy budget goes for heating.

- Have your heating system tuned and inspected by a service professional before each heating season. Heat losses from a poorly maintained system add up over time, sometimes at a rate of 1 percent to 2 percent a year
- Clean or replace the furnace filter often during the heating season. Furnaces use less energy if they "breathe" more easily. Follow instructions in the furnace manufacturer's manual
- Keep furniture, carpeting and curtains from blocking heat registers and air return ducts
- If radiators are located near cold outside walls, place a sheet of aluminum foil between the radiator and the wall to reflect heat back into the room
- Don't overheat your home and overwork your furnace. Use supplemental heating equipment for hard-to-heat areas
- When replacing your furnace, look for one that's at least 90 percent efficient
- While sleeping, add an extra blanket for warmth
- Close your attic, basement, garage and exterior doors to prevent cold drafts and keep in heat
- Ceiling fans set at slow speed push warm air away from the ceiling and move it around the room without creating a chilling breeze. This spreads the heat more evenly and will make you feel more comfortable

Your Home Thermostat

A programable thermostat is a great way to dial in savings and comfort.

- A setback or programmable thermostat lets you automatically turn your heat up before you get out of bed, down when you leave for work, up before you return from work and down again when you go to bed. Installing one before the heating season begins could save as much as 20 percent on your heating costs and recover your investment in the first year.
- Turn down the heat. You'll typically save 1 percent to 3 percent on your heating costs for every degree you dial down
- Set your thermostat at 68 degrees when you're home and at 65 degrees when you're away for a short time. If you're used to higher settings, dial down 1 degree at a time until you feel comfortable
- Lower your thermostat to 58 degrees if you're away from home five hours or more. You use much less energy to heat the house up when you return than to keep it heated while you're away

REMEMBER:
Warmer temperatures are recommended for homes with ill or elderly persons or infants.

Cooling

Beat the summer heat and stay comfortable with these energy savers.

- Buy an air conditioner with a high energy efficiency rating (EER). It's printed on the EnergyGuide label attached to the unit. A unit with an EER of 10 will cost half as much to operate as one with an EER of 5
- If you have central air conditioning, clean leaves and debris from the unit. To save energy, make sure they're not too close to the compressor because they can block airflow
- Install your air conditioner in the shade. When it's in direct sunlight, it uses more energy
- Make sure your central air conditioning system is the right size for the area you want to cool
- Clean the filter regularly. Dusty filters make your air conditioner work harder. Check the manufacturer's manual

More ways to stay cool

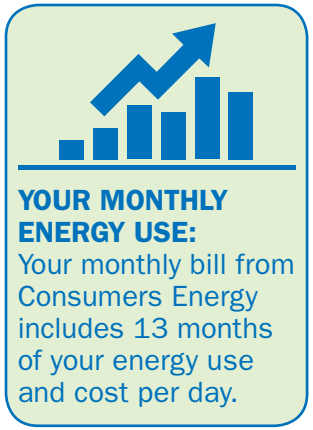
- Cool air from your window air conditioner can flow into open registers. Cover or close them so cool air doesn't escape
- Don't cool unused areas. Close doors and registers to cut energy costs
- Operate your stove, oven, dishwasher and clothes dryer in the morning or evening when it's cooler outside. They add extra heat to your home and make your air conditioner work harder
- Set the air conditioning thermostat at 78 degrees during the day when you're home and higher when you're away
- Install an automatic setback or programmable thermostat that starts your air conditioner shortly before you get home
- Reduce air conditioning needs by installing an attic fan. Hot air trapped in stuffy attics sinks into rooms below, adding to your summer cooling costs
- A ceiling fan cools fast and costs less than air conditioning

Water Heater

Water heating is a typical family's third-largest energy expense, accounting for about 14 percent of utility bills.

- Take a shower instead of a bath. You'll use less hot water
- Install a low-flow aerator or flow restrictor on an existing shower head, and you'll use less water when it seems like more! Both are inexpensive and easy to install—just screw them in
- Put an insulating blanket around your water heater. It holds heat in

- Set your water heater temperature at 120 degrees. A family of four, each showering for five minutes, uses about 700 gallons of water a week. By lowering the thermostat, you can cut water heating bills without sacrificing comfort
- Turn off hot water when you don't need it. Don't let it run when you wash or shave
- Save even more by setting your water heater to "on vacation" (if your unit has this feature) when you're away from home more than two days
- Fix defective plumbing or dripping faucets. A single dripping hot water faucet can waste 212 gallons of water a month. That can increase your water bill and your energy bill
- Keep your hot water hot by making sure pipes in unheated areas are insulated



YOUR MONTHLY ENERGY USE:
Your monthly bill from Consumers Energy includes 13 months of your energy use and cost per day.

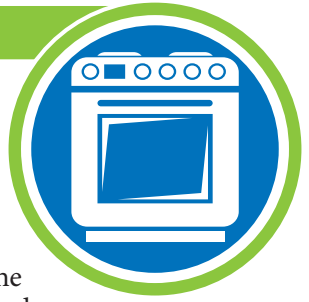
- Always use cold water when it will do the job as well as hot
- Once a year, drain the water heater tank completely. Then turn the incoming water on and off, alternately, for about 20 seconds. These actions flush minerals and sediment from inside the tank and make your water heater more efficient. Some newer models are selfcleaning. Check the manufacturer's manual

Dishwasher

Your dishwasher uses hot water to do its job. Here are ways to save on water heating.

- Set your dishwasher at 120 degrees or "low." Check your manufacturer's manual to see if you can use 120 degree water
- Wash only full loads and use the shortest cycle to get your dishes clean
- Turn off the dishwasher after the wash and rinse cycles. When dishes air dry, you'll save on heating costs. On newer models, use the heat-off setting or the energy-saver dry option
- Avoid using your dishwasher to warm plates. The extra heat will raise your energy bill
- A dishwasher will operate more efficiently if you unclog the drain of food particles and clean it weekly

Stove and Oven



You can cook delicious and nutritious meals and help lower energy costs by following these handy tips.

- Thaw foods and cut vegetables into small pieces. They'll take less time to cook
- Put lids on pots and pans and make sure they're the right size for the burners. Foods will cook faster and use less energy
- When the pot boils over or grease splatters, clean the reflector pans. They'll reflect more heat when they shine
- If the flames on your gas stove or oven are yellow, energy is being wasted and the burners need adjusting. Call an appliance repair professional

When using your oven, follow these suggestions.

- Preheat the oven only when the recipe calls for it. Don't preheat if you're using the broiler
- Use glass and ceramic dishes. They hold heat better and you can lower the oven temperature 25 degrees
- Your stove or oven may not always be the best choice! Small appliances, such as crockpots and electric frying pans, and your microwave oven may be more energy efficient
- Open the oven door to peek at food inside, and you'll lose 25 degrees to 75 degrees of heat. It's best to look through the window or wait until the food is almost done before opening the door
- If you have a self-cleaning oven, clean it immediately after use. Because it's already hot, it will take less energy to get to the heatcleaning stage

- In the market for a new gas stove? Choose a model with electronic igniters instead of pilot lights for the highest efficiency
- A microwave is best for defrosting and cooking small portions; an oven is more efficient for cooking large items such as turkeys and roasts
- When your electric burners are worn out and don't work properly, they use more energy. Save by replacing them
- Save energy by baking an extra dish or cooking entire meals in the oven at the same time

Clothes Washer

These helpful hints can save you money, and don't cost a penny.

- Wash and rinse your clothes in cold water instead of hot to save on water heating costs. Use a cold-water detergent
- Set the water level on your washer to match the size of the load and save two ways—on water and energy
- You'll save more by waiting to wash until you have a full load
- Add the right amount of detergent. Too many suds make your washer work harder and use more energy

Clothes Dryer

Here are more hot ideas to help you save.

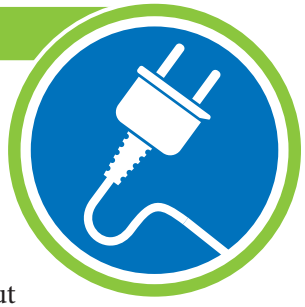
- Fill your clothes dryer, but don't overload it. Your clothes will dry faster when they have room to tumble
- Overdrying wears out your clothes and wastes energy. Stop your dryer when the laundry is dry by setting the timer or using the auto dry cycle
- Your dryer's lint trap helps warm air flow better and dries your clothes faster. Make sure to clean it after each load
- Dry your laundry in consecutive loads to take advantage of a heated dryer. Your laundry will dry faster and use less energy
- On sunny days, hang your clothes outdoors to dry

Refrigerator/Freezer

Your refrigerator/freezer uses more electricity than any other appliance in your kitchen. These tips can help you use less and save more.

- Avoid opening the refrigerator or freezer door to browse. Each time you do, cold air escapes and your energy costs increase
- Let hot foods cool before putting them in your refrigerator or freezer. Hot foods cause the motor to work longer and harder
- Leave room in front of your refrigerator/freezer to allow cold air to circulate better
- Because frozen food stays cold longer than air, it's good to keep your freezer full, but not packed. You'll save energy by placing water-filled containers in empty spaces
- Running two refrigerators increases your energy bill. Plus, older refrigerators are less efficient than new ones. To save, get rid of the second refrigerator
- Condenser coils remove heat from inside the unit. Make sure they're at least two inches from the wall and clean them twice a year
- If cold air is escaping around the door seal, adjust or replace the seal. To check, close the door on a dollar bill. If it's easy to pull out, cold air is escaping
- If you have a manual-defrost freezer, it will work more efficiently when ice buildup is kept to 1/4 inch or less
- Set the refrigerator thermometer at 38 degrees to 42 degrees and your freezer at 0 degrees to 5 degrees

Other Appliances



Most homes have at least 50 household items that use natural gas or electricity. Look around your home for places you can save.

- If your water pump stays on too long after using water, have it serviced. If it runs whenever water is turned on, it will wear out faster and use more energy
- To save water and energy, turn off faucets, indoors and out, when you're done using them
- Make sure the toilet handle doesn't stick after flushing. It wastes water and makes your water pump run longer
- Be sure the thermostats on appliances work properly. If the thermostat sticks, the appliance stays on and raises your energy bill
- Turn off the humidifier or dehumidifier when they're not needed
- After your second cup of coffee, turn off your coffeemaker and pour the leftover coffee into an insulated container to keep it hot
- Turn off the TV, DVR, DVD player, VCR, stereo or radio when no one is watching or listening
- If your water pipes are wrapped with insulating electric heat tape, turn it off when the weather warms up
- Use small appliances that plug into electrical outlets instead of rechargeable devices, such as hand-held vacuum cleaners and lawn trimmers which use more energy
- Unplug electronics when not in use. Computers, DVD players, VCRs, televisions and other electronics use energy when they're plugged in—even though they're turned off

UTILIZE POWER STRIPS
Many computers, televisions and other "vampire" devices use power when they're off. Plug these devices into an easy-to-reach power strip and turn it off when you're not using them.

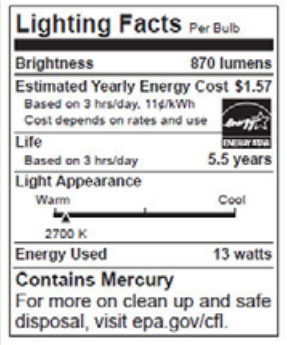
Lighting

Follow these bright ideas to save energy.

- Choose light bulbs carefully. Compact fluorescent light bulbs (CFLs) use 75 percent less energy than standard incandescent bulbs and last 10 times longer. For example, a 20-watt fluorescent bulb is equal to a 60-watt incandescent bulb. They can also be used as porch lights
- Install dimmer switches and three-way bulbs. They use less energy and let you enjoy a choice of lighting levels for different tasks
- For outdoor use, consider high-pressure sodium bulbs, which are more efficient and last longer than their incandescent counterparts
- When buying bulbs, check the lumens. The higher the lumens, the more light you'll get

More energy-saving ideas

- More light shines through when you keep dust off your lampshades, light fixtures and bulbs
- Because light bounces off walls and ceilings, you'll get more light for the money if you paint your walls light colors
- Increase the power of reflection by putting lamps in corners where two walls reflect light into the room
- Take advantage of free light from the sun by putting furniture near windows
- Place security lights on a timer or photo-electric control so they'll turn on and off automatically. Mercury vapor or high-pressure sodium lights are the best energy buys for outdoors



BRIGHT IDEA:
The Lighting Facts label on light bulb packages highlights brightness and yearly energy cost.

Windows

You can stop heat from going out your windows. Take a look at these energy-saving ideas.

- Drapes can cut heat loss in half if they have an insulating liner
- Let your drapes hang loose, and be sure they don't block heat registers and air-return ducts
- Vinyl shades and quilted curtains help cut heat loss. Shutters and blinds don't work as well because air travels through their open spaces
- Close drapes on north-facing windows to keep the chill out in winter
- On cool days, let the sun shine in by opening curtains, drapes, shades, shutters and blinds on the southern and eastern windows. Close them on cloudy days and at night to keep heat from escaping
- On hot summer days, open windows and doors in early morning and in the evening to let cool air in
- Cut your heating losses by installing storm windows. Double-pane or triple-pane windows are best
- Replace old windows with new high-performance windows
- Repair open spaces in broken or cracked windows and door glass
- Use clear plastic or vinyl sheeting on the inside of your windows to make a temporary double-pane window. Use weatherproof tape or duct tape, trim or tacking strips to hold it in place

FIRE AND CARBON MONOXIDE POISONING

Please don't use gas grills, ovens or range tops for heating. These items can cause a fire or result in deadly carbon monoxide poisoning. And to be safe, be sure your house is equipped with a carbon monoxide detector.

Insulation

More than 50 percent of energy used for winter heating leaves homes through uninsulated walls, floors, ceilings and attics. Insulation traps small pockets of air between warm and cold areas inside your home and helps keep warm air in during winter. Insulation is the key to big energy savings. Try these tips.

- Check your home's insulation in the attic, ceiling, walls and floor. Insulation is judged by its R-value. The higher the R-value, the better the material keeps heat in during cold weather and cool in during hot weather. Required R-values vary across Michigan. Check with a store that sells insulation or a local contractor for the requirements in your area
- Adding batts of fiberglass insulation in your attic is one of the most cost-effective savings measures and one you can do yourself
- Add extra insulation to floors by covering them with a pad and rug
- Heat rises, but it also sinks into the basement and crawl space through uninsulated floors. Make your home more comfortable and cut heating losses by insulating floors
- Prevent heat loss as warm air travels through heat ducts from your furnace by wrapping heat ducts with insulation. Also, use duct foil tape where rectangular heat ducts join, and waterbase acrylic latex caulk where round and rectangular duct fittings meet
- Seal cracks where pipes, electrical wires, vents and ducts enter your home
- About 2 percent of air escapes your home through electrical outlets, especially on outside walls. Install insulation made for electrical outlets. You can also use safety outlet plugs to stop cold air from entering your home
- Insulate hot water pipes in unheated areas to keep hot water hot

Caulk & Weather Stripping

You'll live more comfortably when you get rid of cracks and leaks that let warm air escape from your home on cold days. Here's how.

- Seal cracks in your basement floor to keep heat in and cold air out
- Caulk windows, doors and anywhere air leaks in or out
- Weather-strip around windows and doors
- Seal cracks where pipes, electrical wires and ducts enter your home
- Seal openings where doors and windows close into their frames with weather stripping—pieces of felt, rubber, metal or plastic that compress when you shut them
- Replace torn or worn weather stripping and caulk
- Do not caulk around your natural gas water heater exhaust pipes or furnace exhaust pipes

Fireplace

Add to the warmth and enjoyment of a fireplace by following these tips.

- Close the damper when the fireplace isn't being used. About 14 percent of air escapes your home through the fireplace chimney
- Try not to run the fireplace and central heating system at the same time
- Seal unused fireplaces to keep heat from escaping and cold air from coming in

Pool and Hot Tub

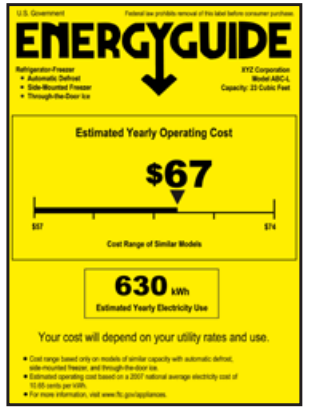
Efficient ways to heat your pool and hot tub can yield extra savings. Consider these recommendations.

- Use a solar cover to get free heat from the sun and prevent evaporation. If too much water evaporates, the water temperature drops
- Keep the filters clean. You'll save energy
- Be sure the water temperature is comfortable, about 80 degrees. Overheating wastes energy
- Cover your hot tub when it's not in use to retain heat

SHOPPING FOR NEW APPLIANCES

When shopping for new appliances, check EnergyGuide labels. They provide the annual operating cost and efficiency ratings of the appliance.

Look for ENERGY STAR® products that can save you money month after month. Buy the most energy-efficient model you can to keep your energy costs down.



SAVE ON ENERGY BILLS

With 50 rebates for residential customers and more than 150 for businesses, there is something to help you reduce your cost with energy effiiency.