

Information kit 9

Energy tips

At home

- Turning your thermostat down by one degree can save as much as 10% on your bill.
- Thermostatic Radiator Valves (TRV) allow you to control the temperature of each room and can reduce your energy bills.
- Set your thermostat comfortably low in the winter and comfortably high in the summer. Install a programmable thermostat that is compatible with your heating and cooling system.
- Lower the thermostat on your hot water heater to 48°C.
- Regularly defrost your refrigerator and freezer to keep them running efficiently.
- Defrost food in the refrigerator. Put frozen food in the refrigerator 24 hours before you need it. This will help keep the temperature down in the refrigerator while it thaws.
- The doors of the refrigerator should close tightly and stay closed. Replace the seals if there are cracks or worn areas.
- Open the refrigerator door as little as possible and do not leave open for too long. Every time the door opens, warm air rushes in. And for every minute the door is left open, it takes another three minutes to reach the set temperature.
- Always cover food in the refrigerator. Humidity escapes from uncovered foods, meaning the compressor has to work harder.



- Don't put warm food directly into the fridge. Let it cool first.
- Maintain the right temperature in your refrigerator and freezer. Refrigerators can use up to 20% of the total electricity in your home. The refrigerators should be set between 3°C and 6°C. The freezer should be set between -18°C and -15°C.
- Clean the condenser coils. Dust and pet hair can build up and cause the refrigerator motor to work harder. Clean them at least twice a year. The coils are located on the bottom or the back of most models.
- To save energy, wait until you have a full load before using your dishwasher.
- Wash and dry full loads of clothes. If you are washing a small load, use the appropriate water-level setting.
- Let your dishes air dry; if you don't have an automatic air-dry switch, turn off the control knob after the final rinse and leave the door open a little so the dishes will dry faster.
- Don't use the 'rinse hold' on your machine for just a few soiled dishes.
- Wash clothes on a cool water setting. Use cool temperature detergents. Also, 15 minutes of pre-soaking and five minutes of agitation gets clothes cleaner than 15 minutes of agitation.
- Don't over-dry clothes in the tumble dryer. Consider using clothes drying racks inside or an outside clothesline during nice weather.
- Dry towels and heavier cottons in a separate load from lighter-weight clothes.
- Use the cool-down cycle to allow the clothes to finish drying with the residual heat in the dryer.
- Use low energy light bulbs, such as compact fluorescent light (CFL) bulbs, wherever you can as they use less than a quarter of the electricity used by standard light bulbs and last up to 15 times longer.
- Use outdoor lights with a photocell unit or a motion sensor so they will turn on only at night or when someone is present. A combined photocell and motion sensor will increase energy savings even more.
- Don't place lamps or TV sets near your air-conditioning thermostat. The thermostat senses heat from these appliances, which can cause the air conditioner to run longer than necessary.
- Switch off your television, video, DVD player and music system at the set, they still consume electricity when left on standby
- Plug home electronics, such as TVs and DVD players, into power strips; turn the power strips off when the equipment is not in use.
- Turn off computers and monitors when not in use.
- Use all appliances wisely. TVs, radios, computers and vacuum cleaners use relatively small amounts of electricity. But they add up. Don't leave appliances on when they are not in use.
- Unplug battery chargers when the batteries are fully charged or the chargers are not in use.
- Turn off kitchen, bath, and other exhaust fans within 20 minutes after you have finished cooking or bathing. When replacing exhaust fans, consider installing high-efficiency, low-noise models.
- If you have a fireplace that you never use, plug and seal the chimney flue.
- Keep your fireplace damper closed unless a fire is going. Keeping the damper open is like keeping a window wide open during the winter; it allows warm air to escape up the chimney.
- Add caulking around the fireplace hearth.
- When you use the fireplace, reduce heat loss by opening dampers in the bottom of the firebox (if provided) or open the nearest window slightly and close doors leading into the room. Lower the thermostat setting to between 10°C and 13°C.
- Use high-density insulation, such as rigid foam boards, in ceilings and exterior walls.
- Caulk and weatherstrip doors and windows that leak air.
- Caulk and seal air leaks where plumbing, ducting, or electrical wiring penetrates through exterior walls, floors, ceilings and wall cabinets.
- Install rubber gaskets behind outlet and switch plates on exterior walls.
- Look for dirty spots on insulation, which often indicate holes where air leaks into and out of your house. You can seal the holes by stapling sheets of plastic over the holes and sealing the edges of the plastic.
- For new constructions, reduce exterior wall leaks by either installing house wrap, taping the joints of exterior sheathing, or comprehensively caulking and sealing exterior walls.
- Keep all south-facing glass clean.
- During the cooling season, keep window coverings closed during the day to prevent solar gain.
- During the heating season, keep curtains and shades on south-facing windows open during the day to allow sunlight to enter your house and closed at night to reduce chill from cold windows.
- Place heat-resistant radiator reflectors between exterior walls and radiators.
- Make sure that objects do not block the sunlight from shining on concrete slab floors or heat-absorbing walls.

- You can save energy and money by insulating your hot water tank.
- Replace appliances with modern energy-efficient models.
- Take short showers instead of baths.
- Solar pool heating systems are very efficient and can cut costs for heating swimming pools or hot tubs.
- Clean or replace filters on furnaces once a month or as needed.
- Clean warm-air registers, baseboard heaters, and radiators as needed; make sure they are not blocked by furniture, carpets or curtains.
- Bleed trapped air from hot-water radiators once or twice a year; if in doubt about how to do this, call a professional.
- If you use electricity to heat your home and live in a moderate climate, consider installing an energy-efficient heat pump system.
- Cover saucepans and turn the heat down.
- Use small electric pans or grills for small meals rather than ovens. A grill uses between a third and half as much energy as a full-sized oven.
- Use pressure cookers and microwave ovens whenever it is convenient to do so. They will save energy by significantly reducing cooking time. A microwave does small and medium cooking jobs more efficiently than an oven or stovetop cooker.
- Choose the right pan for the job. When using the stovetop cooker, remember to match the pan with a similar sized heating element.
- Reduce the amount of animal products you eat. Livestock contribute about 20% of the total methane emissions. By eating fewer animal products, our air will be cleaner, you will be healthier, and cows, chickens, and sheep will be happier.
- Reduce, reuse and recycle. Donate old clothes and toys. Consider buying used products, rather than brand-new ones. Choose products with less packaging. Recycle glass, metal, aluminium, paper, and plastics – and even mobile phones and computers.
- Composting helps the local economy, reduces trash in landfills, and creates nutrient-rich fertilizer.

At the office

- Turn off lights when you are not in a room.
- Use as much natural light as possible – working nearer windows will save turning on lights so often.
- Make sure the last person to leave in the evenings is responsible for turning off all lights.
- Turn off your computer and monitor when not in use.
- When using a laptop, put the AC adapter on a power strip that can be turned off (or turns off automatically); the transformer in the AC adapter draws power continuously, even when the laptop is not plugged into the adapter.
- There is a common misconception that screen savers reduce the energy used by monitors; they do not. Setting your computer to automatically switch to sleep mode, or manually turning monitors off is always a better energy-saving strategy.
- Do not switch on computers and printers until you need them.
- Make sure you share printers between colleagues.
- Switch off photocopiers and printers at night.
- Set your radiator thermostat to reasonable levels. Around 19 °C is normally adequate.
- Ensure radiators are not blocked by furniture or files, as they will absorb heat.
- If it gets too hot in the winter, do not open a window, turn the radiator down first.
- Ensure all extractor fans are off overnight and when not required.
- Do not leave doors open between areas of different temperatures.
- Put aluminium foil behind any radiators fitted to an outside wall to stop heat escaping through the walls.
- Keep doors and windows closed in air-conditioned areas. If you do not, you will let cool air escape and require further cooling.
- When you make hot drinks, boil only the amount of water you need.
- Fit a seven-day timer to vending machines and water coolers so that they are not unnecessarily using electricity at night and over weekends.
- Use stairs instead of elevators for short trips.
- Encourage your office manager to reduce operating costs by replacing old equipment with modern, energy efficient appliances.

- Ensure that documents and photocopies are double-sided.
- Use e-mail, instead of surface post, whenever possible in order to reduce the amount of paper used.
- Encourage the implementation of an office recycling programme.
- Encourage purchases of paper and other office supplies from environmentally-conscious manufacturers.

On the move

- Share a ride with friends or colleagues.
- Avoid aggressive driving and observe the speed limit. Speeding, fast acceleration and hard braking wastes fuel.
- Avoid high speeds. Driving 75 mph, rather than 65 mph, could cut your fuel economy by 15%.
- Keep tyres properly inflated and aligned to improve your fuel mileage by around 3.3%.
- Check your tyre pressure. Cars are most fuel-efficient when tyres are properly inflated. Also, take heavy items out of your boot to get better mileage. Think about upgrading to an energy-efficient, biodiesel or hybrid vehicle.
- Plan to do a number of errands in one trip rather than several trips and save both time and fuel. For short trips walk or cycle. This saves over a quarter of a kilogram of greenhouse gas emissions per kilometre, as well as giving you healthy exercise.
- Air conditioners can use about 10 per cent extra fuel when operating. However, at speeds of over 80 km/h, use of air conditioning is better for fuel consumption than an open window as this creates aerodynamic drag. If it is hotter inside your car than outside when you start a trip, drive with the windows down for a few minutes to help cool the car before starting the air conditioning.
- Use air conditioning only when necessary.
- The more weight a vehicle carries, the more fuel it uses. Don't use your car as a mobile store room. Leave heavy items like tools and sports equipment at home when you do not need them.
- Use the fuel that is recommended for your vehicle by the manufacturer. If you use regular unleaded in a car designed to run on premium unleaded you can expect slightly less performance and fractionally higher consumption.
- By walking, cycling or catching public transport you can cut emissions, save money and get fit.
- Cycling to work saves you money on petrol, parking and beats traffic jams.
- There are many benefits to using trains, trams and buses:
 - lower environmental impact
 - reduced congestion
 - more relaxing travel
- Walking is a simple form of active transport that
 - improves your health
 - costs nothing
 - produces no greenhouse gas emissions.

What is ManagEnergy?

ManagEnergy is an initiative of the European Commission Directorate-General for Energy and Transport. It aims to support local and regional actions on energy efficiency and renewable energies through training workshops and on-line events. In addition, information is provided on case studies, good practice, European legislation and programmes.

ManagEnergy is also a European network of local and regional energy agencies (LEAs). These agencies promote the introduction of good energy management practices, support sustainability, provide information and guidance, and offer other services depending on local needs.

www.managenergy.net

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