

# Do your own home energy audit

Are you spending too much on your energy bills? Find out how you use energy in the home and what you can do to start saving.

## How to complete your home energy audit.

You should edit everything inside your home, including your main household appliances. The following is a checklist of questions to ask yourself as you conduct your own home energy audit. The more things you answer "yes" to these questions, the more efficient your home is.

### HEATING AND COOLING

- Is your HVAC system less than 10 years old?
- Do you have a programmable thermostat?
- Is your thermostat set to low temperature?

### WATER HEATING

- Do your showers last for less than four minutes?
- Do you use energy efficient hot water system?
- Is there insulation on external water heater pipes?

### APPLIANCES AND ELECTRONICS

- Are your appliances and electronics energy efficient?
- Are they plugged into power strips?
- Is your microwave turned off if not in use?

### FRIDGES AND FREEZERS

- Are they energy efficient?
- Are they situated in a cool, well ventilated and shaded area?
- Do you run only one fridge and freezer?

### LIGHTING

- Do you use light with low voltage?
- Are you using energy efficient light bulbs?
- Can each light be turned on and off individually?

### COOKING

- Does the oven door seal properly?
- Do you use energy efficient appliances?

### WINDOWS

- Are your window frames timber, uPVC or combination frames, rather than aluminum?
- Do you have thick fabric curtains to help increase insulation?
- Are your blinds and pelmet fitted tightly so there's no room for air to be trapped?

### STANDBY POWER

- Do you use a standby power controller to reduce standby time?
- Do your appliances have low standby power?
- Do you turn off your appliances at the wall or power board?

### INSULATION

- Does your roof and ceiling have insulation?
- Do your external walls have insulation?
- Is there insulation under the floor?

## General Tips on Saving Energy at Home

Once you conducted your own home energy audit and have a good idea of your home's energy use, you can take these steps to reduce your energy consumption. Always check for leaking faucets and fix them as soon as you can.

- Use energy-efficient appliances with low standby power.
- Unplug appliances and electronics where you're not using them.
- Use a standby power controller to reduce standby time.
- Clean and replace the filter on your furnace and air conditioner on regular basis.
- Have a professional inspect your heating and air conditioning system once a year.
- Use a programmable thermostat that can be automatically turned on or off, it can also lower temperature when you're at home.
- Always check for leaking faucet and fix them as soon as possible.
- Use low – flow faucet aerators.
- Use energy efficient lighting such as LED (light emitting diode) or CFL's (compact fluorescent' lights).
- Seal air leaks around your window, doors, floors and electric outlets with draught – proofing products like caulk or weather stripping.
- Close doors, windows, blinds or curtains to prevent heat or hot or cold air from everything.
- Properly insulate your roof, attic, floor or external walls.

## SEASONAL ADJUSTMENTS: How to save energy in summer or winter

The summer and winter months usually mean increased energy usage, but there are many ways you can save energy on your heating and air-conditioning.

- Set your thermostat to 18-20 degree C in winter and 25-27 degree C in summer.
- Only heat or cool the rooms that you use often or when you need them.
- Use energy efficient heating or cooling units and install them in different areas in your home to reduce running time.
- Don't cover air vents or radiators to ensure airflow isn't obstructed and moves freely throughout your home.
- Use ceiling fans in summer to cool the place and run them in reverse in winter to bring the water warm air down.
- In winter, open your curtains or blinds during the day to let natural light in to warm up your home, and close them at night to keep the chill out. In summer, do the opposite.
- Also in winter, install area rugs in a room to add extra insulation to the floor, which traps the cool air underneath. Area rugs will also keep your feet warm.



## AROUND THE HOUSE

The following will look at the appliances used in each room of the home and some tips on how to save energy.

### BATHROOM

Appliances: Water heater, showerheads, radiator and heat pumps

#### Tips:

- \* Install an efficient water heater, like solar water heating
- \* Use water saving showerheads
- \* Add insulation to your hot water system and use low thermostat setting
- \* Invest in renewable heating technologies like heat pumps.

### KITCHEN

Appliances: Microwave, oven, stove, toaster, kettle, grill, fridge/freezer and dishwasher

#### Tips:

- \* Use the microwave instead of the oven or stove, and the toaster instead of grill
- \* When using the kettle, only boil the amount of water required.
- \* Only run the dishwasher when it's full using the economy cycle and let the dishes air-dry
- \* Make sure the fridge and freezer doors seal properly
- \* Clean the coils on the back of your fridge to help keep it running efficiently.
- \* Reduce cooking time by thawing food in the fridge and keeping lids on pots.

### LAUNDRY

Appliances: Washing machine and clothes dryer

#### Tips:

- \* Wash your clothes in cold water and select a short washing cycle.
- \* Only run the washing machine with a full load
- \* Dry clothes on the clothesline if you can.

## READING GAS METERS

### DIGITAL GAS METERS

Digital gas meters, also known as metric meters and record the amount of gas used in cubic meters.

- Read the numbers from left to right.
- Only read the black and readings as a row of numbers, like the white, ignore any red numbers, as these are used for testing purposes.

### DIAL OR CLOCK FACE GAS METERS

Imperial or clock face meters record the amount of gas used in cubic feet (ft<sup>3</sup>).

- Only read the four dials closest to the left.
- Read the dials from left to right and record the number the clock hand is pointing to.
- Each dial revolves in a different direction to the one next to it, e.g. anti-clockwise, then clockwise
- If a hand is between two numbers, note the lower number except when the hand is between 0 and Q, in which case read 9.

