

# 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?

### 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.

### LIGHTING

Appliances: Light bulbs, skylights and lamps

#### Tips:

- \* Use skylights to let natural light into the home
- \* Turn off the light when they are not needed
- \* Add lamps where necessary for more light and warmth

### 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.
- \* 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.

### ROOF

Appliances: Attic insulation and solar panels

#### Tips:

- \* Prevent heat escaping from the attic by insulating it approximately 12cm deep with high R – value material, e.g R-30.
- \* Clear attic vents of insulation to help with interior air circulation.
- \* Install solar panels on your roof to generate your own renewable energy.

## READING ELECTRICITY METERS

### DIGITAL ELECTRICITY METERS

- Read the numbers from left to right.
- If necessary, scroll through other screens (like date and time) to get the electricity meter readings. Look for numbers starting with: 03 or 003 for the peak electricity meter reading 07 or 007 for off-peak electricity meter reading.
- Homes with a solar panels will have an import/export meter, See 09 or 009 for the kWh exported back to the grid. Refer to the manufacturer's instruction manual or contact SA Power Networks to find out how to read this type of meter.
- If your meter is different, contact your retailer for help reading it.

### DIAL OR CLOCK FACE ELECTRICITY METERS

- Read the dials from left to right, ignoring the dial marked 1/10 as it is only for testing.
- Each dial revolves in a different direction to the one next to it, e.g. anti-clockwise, then clockwise
- Always note the number the pointer has just passed – e.g. if it is between 7 and 8, write down 7.
- If the pointer is directly over a number, underline that number when you write it down.
- If any of the underlined numbers are followed by an 8 or 9, reduce the underlined number by one.

