

# EASY WAYS TO SAVE ENERGY

## The Benefits of Saving Energy In the Home

An energy efficient home incorporates common sense design principles, selection of the most appropriate fuel sources, energy efficient appliances & technology, and the minimisation of our energy use - resulting in;

1. A reduced need for expensive heating & cooling appliances and systems
2. Reduced appliance and system running costs, and therefore energy bills
3. Reduced energy related greenhouse gas emissions

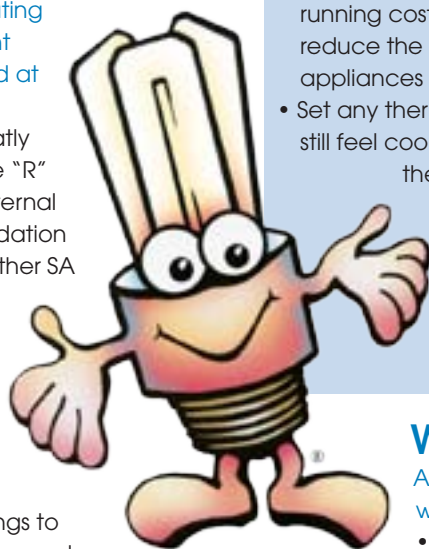
## Heating/Cooling

Around one third of home energy use is associated with general heating and cooling. Consider your heating and cooling needs together, as the most efficient and effective use of both needs to be evaluated at the same time.

- Heat entry and exit in your home can be greatly reduced by the installation of the appropriate "R" value level of insulation in the ceilings and external walls. For the Adelaide plains, the recommendation is R3.0 for the roof and R1.5 for the walls. For other SA locations please refer to our [Insulation fact sheet](#).
- Sealing gaps and draughts can save around 15% of heating and cooling energy needed. Close off chimneys when they are not being used, either permanently or with a damper.
- Where applicable use appliance Energy Ratings to select efficient heating and cooling appliances and systems - the more stars the more energy efficient.

### Heating

- Where possible zone your home by closing doors and windows to the areas being heated, and close curtains at night to help keep the heat inside.
- Use a correctly sized heater. Don't expect a small heater to heat a large area. It is unlikely to reach a comfortable temperature, making running costs unnecessarily high without providing adequate heat. Similarly, try not to use a large heater when only a small area needs heating.
- Set any thermostat temperature as low as possible. You should still feel warm enough at around 18°C. Each 1°C decrease of the thermostat setting will save around 10% of heating energy needed.
- It shouldn't be necessary to use the high speed setting of the fan unless you need to heat a room quickly, or in extreme conditions.
- Maintain your heater. Keep reflectors shiny and dust free, and clean air filters regularly. Service all heaters according to the manufacturers instructions.



### Cooling

- For insulation to be effective in summer, it must be used in conjunction with good window shading. Consider verandahs, pergolas and fixed shade/awning treatments. Ideally these shading devices should be designed to allow sun entry into north facing windows in winter, and totally shade all windows in summer.
- Delay switching on your air conditioner on a hot day by keeping all windows and doors shut, closing curtains/blinds and closing off rooms likely to become overheated eg. sun rooms and sleepouts.
- Fans are relatively inexpensive. They generally have low running costs, and while they do not cool the air they can reduce the need to switch on other higher energy consuming appliances and systems.
- Set any thermostat temperature as high as possible. You should still feel cool enough at around 25°C. Each 1°C increase of the thermostat setting will save around 10% of cooling energy needed.
  - The low speed fan setting should be sufficient to cool your home. Only use the high setting in extreme conditions.
  - Regularly clean cooling appliances and systems, keeping filters, coils and fans free of dust.

### Water Heating

Around one third of home energy use is associated with heating water.

- If building a new house, plan so that bathrooms, the laundry and in particular the kitchen are as close as possible to the hot water cylinder.
- Consider installing a solar hot water system - this will significantly reduce the need to heat water using electricity or gas.
- Use at least 10mm insulation around external hot water pipes to reduce heat losses, especially the first few metres from the cylinder.
- Use Energy Ratings to select energy efficient hot water services, clothes washers & dishwashers - the more stars the more energy efficient the appliance is.
- Installing a AAA rated water efficient shower rose can save up to two thirds of hot water needed.
- Take shorter showers, and to regulate shower temperature turn hot down rather than add cold.
- Fix dripping taps as soon as possible.
- If you are going away for an extended period consider turning off your hot water system.

## Refrigeration & Freezing

Fridges and freezers generally operate 24 hours a day all year long and can therefore account for a surprisingly large amount of energy use.

- Before buying, decide on the size (volume), type of refrigerator, and features you want. Don't buy a refrigerator that's too big for your needs, it will generally use more energy.
- Use appliance Energy Ratings to select an energy efficient refrigerator and/or freezer – the more stars the more energy efficient.
- Place the refrigerator and/or freezer in a cool location away from ovens, stoves and direct sunlight.
- Ensure that there is good air circulation around the refrigerator and/or freezer – refer to the manufacturers instructions.
- Check that the doors seals are clean and tight fitting. If the seal is good it will be difficult to slide a piece of paper between the seal.
- Avoid unnecessary opening of doors.
- If you have more than one refrigerator, switch off the additional one when it is not needed.
- Regularly clean any visible coils behind your refrigerator.

## Cooking

- Use small appliances like a microwave, electric kettle, vertical grill, electric frypans and mini ovens because they are more energy efficient than using your stove.
- Open the oven door only when necessary during cooking as heat is lost and energy wasted every time the door is opened.
- Ensure the seals on your oven are in good condition.

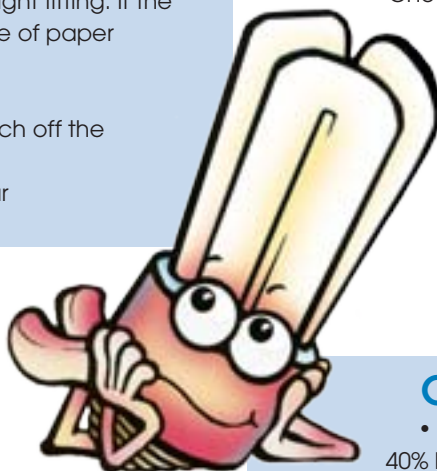
## Standby Power

Standby power is the energy consumed by an appliance while plugged in but not performing its primary function. It can also be described as the minimum power an appliance consumes while it is still connected to the mains.

- Switch appliances off where you can instead of leaving them on standby.
- Turn appliances off at the power point or unplug the ones you only use occasionally.
- When you need to buy an appliance such as a fax machine, computer or printer, use the Energy Star label to assist your purchase decision. In the future, the Energy Rating Label will also provide a figure showing the standby power consumption for appliances such as dishwashers, clothes dryers, washing machines etc.

## Lighting

- The most significant opportunity for reducing lighting energy use is the replacement of incandescent globes with compact fluorescent globes and fluorescent tubes. The initial higher capital costs are recouped through substantial energy savings, approx 75%, and the longer life of compact fluoro globes and tubes 8 – 10, 000 hours compared with 1000 hours of incandescent light.
- For general lighting use fluorescent lighting in the kitchen, lounge, family room and other areas where lights are on for more than 4 hours a day.
- Lights which hold multiple globes are less efficient than those with a single globe eg. six 25W globes are needed to provide the same light as one 100W globe.
  - Choose lampshades of light colours so they don't absorb light.
  - Dimmer switches can save energy but beware, a light dimmed down to one quarter of its input still uses half the energy. If you need to dim consistently, put in a lower wattage globe. Note that some dimmer switches cannot be used with compact fluorescent lighting.
  - Regularly clean light fittings and lampshades.



## Clothes Washing & Drying

- Front loading washing machines can use up to 40% less water and 50% less energy than top loaders of the same capacity.
- Use Energy Ratings to select energy efficient clothes washers and dryers – the more stars the more energy efficient.
- Avoid washing more loads than necessary – washing a full load or only a few socks uses the same amount of energy.
- Wash clothes in cold water and use the sun to dry clothes whenever possible.
- Run the dryer with full loads, but don't overfill.
- Clean the dryer lint filter after each load.

## Dishwashing

- Run the dishwasher only when full.
- Remove large food particles from dishes and run shorter wash cycles.
- Select the lowest water temperature and shortest washing program that will satisfactorily wash the load.
- Eliminate the drying cycle if possible – switch off the dishwasher after the final rinse and open the door to let dishes air-dry.
- Load the dishwasher according to the manufacturer's instructions.
- Check the filter after each wash and clean if necessary.



Where can I get further **energy efficiency** advice?

Log on to the *Energy Division* website for information and advice through the 'Advisory - Residential' links @ [www.energy.sa.gov.au](http://www.energy.sa.gov.au)

Call our **Energy SA Advisory Service** on 8204 1888 (Freecall™ for country callers 1800 671 907)

email us at [energy.sa@saugov.sa.gov.au](mailto:energy.sa@saugov.sa.gov.au)



Government of South Australia

Department for Transport, Energy and Infrastructure