



Sustainability in your home – How it can save our environment, and save *you* money....

This guide has been put together to help you to find ways to be more sustainable in your home, and to save money on your household running costs. This guide covers;

1. Sustainability in the Bathroom
2. Sustainability in the Kitchen
3. Sustainability in the Laundry
4. Sustainability in the Lounge Room
5. Sustainability in the Study
6. Keeping warm in Winter months
7. Keeping cool in the Summer months
8. Lighting – Bright ideas about lighting

Information for this booklet has been sourced from the NSW Government Save Power website <http://www.savepower.nsw.gov.au/> and the Australian Government Global Warming Guide <http://www.environment.gov.au>



1. Sustainability in the Bathroom.....



Showers are the biggest user of hot water in most homes

Tip

Taking shorter showers is an easy way to use less power. Cutting your shower time by three minutes can save \$25 per person per year on bills

Fact

Every 15 litres of hot water used from an electric water heater generates about one kilogram of greenhouse gas.

The power used by an electric hot water system may account for more than a third of your household's annual power bills. There are simple things you can do to use less hot water and start saving dollars right away

Install a water efficient shower head – a standard showerhead can use up to 25 litres of water per minute, whereas water-efficient showerheads use as little as seven litres per minute. Fitting a water-efficient showerhead can halve your hot water use which saves water as well as power. Switching from a one star to a three star rated showerhead can save a family of three \$90 a year

Take shorter showers: – it'll make it easier to have quicker showers you'll save up to half a kilogram of greenhouse gas for every minute you save in the shower



Fix dripping hot taps: a hot tap, dripping 45 times per minute, wastes around 1,000 litres of hot water each month, the equivalent of ten bathtubs or more than \$25 per year

2. Sustainability in the Kitchen



Saving Water in the Kitchen

Avoid using small amounts of hot water if cold water will do. Each time you turn on the hot water tap, a litre or more of cold water that had been heated but has cooled in the pipes runs down the sink before hot water is delivered. Doing this just 10 times a day will generate about 200 kilograms of greenhouse gas each year if you have electric hot water.

Avoid rinsing dishes under running hot water: it uses far more hot water than putting the plug in and using some water in the sink—and often the job can be done by scraping or rinsing with cold water.



Which cooking appliance????

Fact

An average Australian home produces about half a tonne of greenhouse gas each year from energy used for cooking.

Gas and microwave cooking generates 30 to 50% of the greenhouse gas generated by traditional electric cooking.

Up to 90% of the energy used by ovens is wasted: consider alternatives such as the microwave, electric frypan, or pressure cooker.

An electric kettle or gas cooker generates about half as much greenhouse gas as using a microwave oven or an electric cooktop—but be careful not to boil more water than you need.

Efficient cooking methods

Putting lids on pots, simmering gently instead of boiling vigorously, or using a pressure cooker can save half the greenhouse gas generated during cooking. Each litre of water boiled off generates up to a kilogram of greenhouse gas.

Use pots and pans with flat bases that match the size of the element. Avoid gas flames spilling up the sides of pots—turn the burner down to keep flames on the bottom.

Thaw food in the fresh food compartment of the fridge before cooking.

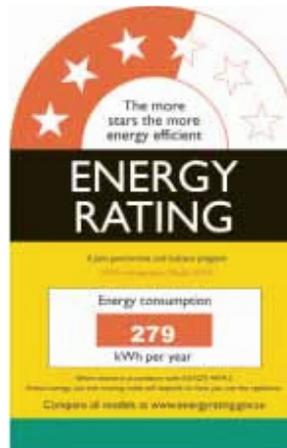
For small households, cooking in bulk, freezing the food, then reheating in a microwave oven cuts greenhouse gas emissions—and saves time.

If cooking in the oven, avoid opening the door unnecessarily and consider cooking several things at once.

Refrigerators and freezers

Tip

Buying a family fridge with an extra star on its label cuts greenhouse gas emissions by more than 100 kilograms each year. Over its lifetime it will save \$200 in running costs.



Use energy labels to choose your energy-efficient, greenhouse-friendly new fridge or freezer.

See

www.energyrating.gov.au

to compare products and

www.energyallstars.gov.au
to see the leading products.

Buy the right size fridge to suit

your needs: the star rating on the energy label compares energy consumption per litre of storage. Don't buy bigger than you need.

To compare different sized models, use the numbers on the energy labels—they show annual energy consumption (and annual kilograms of greenhouse gas).

Small fridges and wine coolers without energy labels are now being sold. Many of these are very inefficient, and cost much more to run than energy-labelled fridges of the same size.

Finding your way around the fridge : Ensure good air circulation around the coils at the back of the refrigerator. Appliances with no coils on the back need good air circulation around both sides and back: save up to 150 kilograms of greenhouse gas each year.

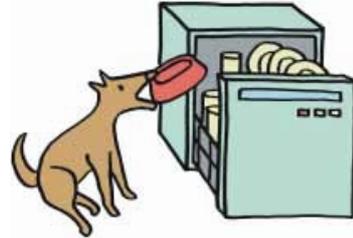
Locate refrigerators and freezers in cool spots, out of the sun: save up to 100 kilograms of greenhouse gas each year.

Ensure door seals are clean and the door closes properly—if ice builds up rapidly the door is not sealing. The seals may also need fixing or replacing.

A third of Australian homes have at least two fridges, many of which are old and inefficient. **Switch off the second fridge except when it's really needed:** for a single door fridge, this can save you up to \$130 each year.

Dishwashers

Dishwashers generate up to 500 kilograms of greenhouse gas each year. They carry energy labels to help you **choose energy efficient models**



To save on greenhouse gas:

Only run your dishwasher when it's **fully loaded**.

Use the shortest program sufficient to clean the dishes.

Clean the filter regularly to maintain washing performance.

Water-efficient dishwashers are usually also energy-efficient, as heating water is a major part of their energy use. Look for models with 4-star ratings. Or you can visit www.waterrating.gov.au for details.

3. Sustainability in the Laundry – Don't get your washing into hot water!!

Of course your washing machine uses electricity but did you realise that you're using even more power if the hot or warm wash cycles are selected? If you have electric hot water, it'll usually account for a third of your total power bill and if you use hot or warm water washing cycles this will really bump your bill up



By using cold water rather than a warm wash you can save about \$30 each year off your power bill - more if you regularly use the hot wash cycle. You'll also remove 400kg of dirty carbon pollution.



It's easy to save power and money by washing in cold water, and there are many environmentally-friendly detergents available for cold water washing. Take a look at the recommended care instructions on any garment and you'll see most clothes don't need a hot water wash your clothes wash just as well in cold water and are less prone to shrinking and fading

You can save even more money and further reduce carbon pollution by hanging your clothes out to dry rather than using your dryer.

Choosing a washing machine....Is your head spinning from all the different options?

Select a washing machine that uses the least energy, water and detergent, and has a high spin-dry speed. Front-loading models usually rate best, but some top-loaders now perform well. Check the energy label. For more information on choosing an energy efficient clothes washer or dryer visit www.energyrating.gov.au.

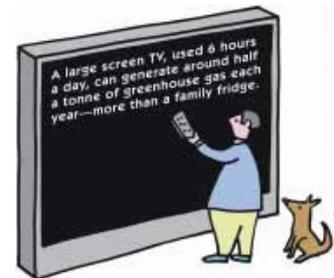
And most importantly..... choose a size that suits your household.

4. Sustainability in the Lounge Room

A large screen TV, used 6 hours a day, can generate around half a tonne of greenhouse gas each year—more than a family fridge.

So enjoy your big screen TV, **just turn it off if you aren't watching it!**

Most home entertainment equipment uses some electricity when it is switched off, as well as when it's operating!



DVDs, VCRs, TVs, packaged sound systems, computers and monitors, scanners, printers and fax machines may carry an Energy Star label. This shows the product has much lower standby energy consumption than standard products. Look up www.energystar.gov.au for more information.



5. Sustainability in the Study

Computers and laptops

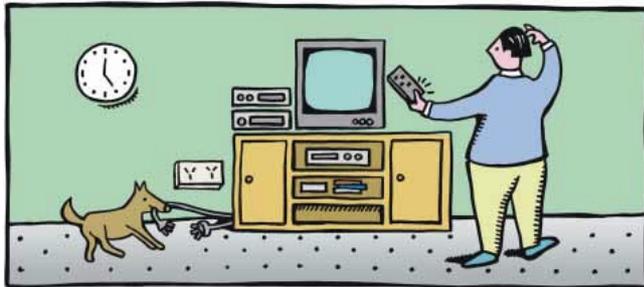
Screensavers don't save energy: switch the monitor off or use power management to control it.

A laptop computer used 5 hours each day generates around 40 kilograms of greenhouse gas each year. Desktop computers used the same way can generate between 200 and 500 kilograms. More than half of this is from using the monitor.

An LCD panel monitor generates around half as much greenhouse gas as a conventional monitor. And **adjusting its brightness lower** can cut emissions to a quarter.

Switch computers and equipment off when they're not in use. This cuts greenhouse gases, extends product life and avoids a potential fire hazard.

The truth behind *standby* power



Many appliances now use electricity even when they're doing little or nothing - **When appliances are switched off at the powerpoint, they use NO energy.**

When appliances are switched off at the appliance, but left on at the wall, they may use some energy called 'standby' power. Typically this is between 1 and 20 watts, with most appliances using less than 5 watts—that's around 45 kilograms of greenhouse gas each year for each item. For example over the whole year, some microwave ovens generate more greenhouse gas running the digital clock than cooking food

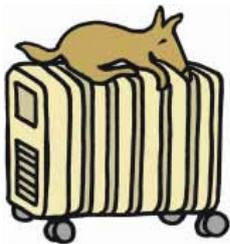
An average Australian home has many items of equipment on standby power, together generating over 750 kilograms of greenhouse gas each year.

Switch appliances off at the powerpoint (or use a powerboard with switches) to avoid this waste. You will lose the digital clock on that appliance, but do you really need every one of them?

6. Keeping warm in the winter months...

Tip

Seal out draughts by sealing cracks and gaps around doors, windows and skirting boards, and blocking unnecessary vents: and stop throwing money out the window!! Up to 30% of total heat loss in the home comes from uncovered windows. Simply choosing the right window coverings will save you money and increase the comfort of your home all year round.



Leaving heating or cooling running when no-one is home generates more greenhouse gas and costs more money. Timer controls can switch equipment on when it's needed.

Turning heating down, closing doors and not heating rooms you're not using, and using curtains will save you around \$180

You can easily save power in your home during winter by wearing warmer clothing or throwing an extra blanket over the bed. When your heater is on, make sure you always shut windows and doors and keep the curtains closed, especially at night when a window can lose 10 times as much heat as the same area of insulated wall.

Keep rooms at a comfortable 18-21°C in winter. Every one degree increase in temperature can increase your power bill by 15 per cent.



Make your home more efficient: Limit the flow of heat through your roof, walls, windows and gaps.

Insulate ceilings, walls and floors. As much as 35% of heat loss from a house is through an uninsulated ceiling; uninsulated walls account for a further 15 to 25% and uninsulated floors lose between 10 and 20% of heat

7. Keeping cool in the summer months...

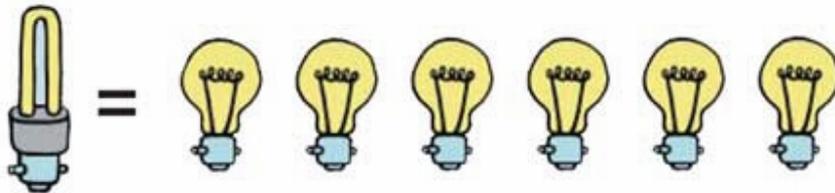


On mornings of hot days, **close up the house and shade all windows** to block out the summer heat. When it cools down outside, open up the house to breezes.

Clean filters of airconditioners and heaters as recommended by the manufacturer: a clogged filter reduces air flow and efficiency.

How cool is this? Using a fan instead of an air conditioner can slash your power bill by \$110 each year and reduce carbon pollution by 550kg.

8. Lighting - Bright ideas about lighting



Over its life, a typical compact fluorescent lamp saves around a third of a tonne of greenhouse gas and \$45 and avoids the cost of 6 or more incandescent globes. And you don't have to change the bulbs as often.

Install energy-efficient lighting

Fluorescent lamps cut greenhouse gas emissions and running costs by 75% while producing as much light.

tip

Remember, it's not the volts that matter: more watts means higher energy bills and more greenhouse gas.

Fit lower wattage globes (or compact fluorescent lamps) in bright lights, especially down lights and spot lights: save up to 75% of greenhouse gas.

LED (light emitting diode) lamps are beginning to appear for outdoor use and specialised applications like night-lights. These lamps are very long-lasting and efficient. We'll see a lot more of them in coming years.

Install efficient outdoor lighting

Just a few outdoor lights left on every evening can double a household's lighting costs: **switch them off if they're not needed.**

Install daylight and movement sensors so outdoor lights switch on when they're needed but don't waste electricity.

For outdoor lights that must stay on for long periods, use energy-efficient compact fluorescent or LED lamps and choose the lowest wattage lamp that gives enough light. **It's also worth considering solar-powered garden lights.**

Use lights efficiently



Turn off unnecessary lights, Paint often-used rooms with light colours. Dark colours absorb light, increasing the amount of lighting needed.

Modern dimmer controls reduce greenhouse gas emissions as they reduce light output. They also extend lamp life.

Clean lamps and fittings regularly: over time, dirt build-up reduces light output.