



Guide to
**reducing your energy use
and saving money**

No matter whether you're a home owner or a home renter, and whatever your income level, you can make changes to your home to make it more comfortable, save energy and money, and reduce your environmental impact. With the smallest effort, there are many simple, inexpensive things you can do to make a difference.

Disclaimer: Each State and Territory has legislation that regulates residential tenancies. Generally, for any changes you wish to make to rental properties you must receive permission, often in writing, from your landlord. You will need to check your own lease document for the requirements relating to your tenancy. If you have no lease then check with your landlord.

This booklet is designed to help low income households reduce their home's energy use without the need for major appliance investments or home renovations. Many actions can be done at zero or low cost, or through small changes in your behaviour.

To make it easier we have tips for each room of the house. These range from the simplest tweaks, to improvements that may require permission from your landlord if you are in a rental property.

Start out with small and easy-to-implement changes and let your sustainability grow from there.

If you are in a rental property, some changes require you to consult your landlord, real estate agent or property manager. But don't be discouraged! You might find they are more than willing to undertake sustainability improvements, or grant you permission to make changes yourself. After all, there are a number of government rebates and tax concessions available to assist with sustainability improvements, and these should ultimately improve the property's re-sale value.

If you rent from a public housing authority or community housing provider, contact them in the usual way and ask them for the designated contact for repairs and maintenance. Some state public housing authorities have programs in place to improve the energy and water efficiency of their properties; this may work to your advantage.



This icon means you will need permission from your landlord.



TIPS FOR THE WHOLE HOUSE

The following tips will help you improve your home's efficiency, making it cheaper to run and help to reduce your impact on the environment.

Lighting

Switch off lights when not in use and change to energy-efficient light bulbs. It'll make a huge difference to your power bills.

■ Turn off lights when not in use

If you're not using a room or an outdoor entertaining area turn the lights off. Leaving outdoor lights on for long periods can double your lighting bill. Smart use of sensors, particularly outdoors, can ensure that lights are only on when needed.

■ Let in natural light

Open blinds and curtains to let in natural light rather than turning on lights.

■ Replace incandescent light bulbs

Replace incandescent light bulbs with compact fluorescent lights (CFLs) or light emitting diode (LED) bulbs. Both CFLs and LEDs are cheap to run—they can reduce running costs by 75% and 90%

respectively – and they last much, much longer than incandescent bulbs.

LED bulbs are becoming more readily available. Despite their higher price, they are generally more efficient than CFLs and can last for up to 50,000 hours—that's over 22 years at 6 hours use per day!

■ Don't use halogen downlights

If your house is full of energy-hungry halogen downlights, replace them with good quality LED bulbs. Halogen downlights are the most inefficient type of lighting, with up to 90% of the energy used in the globe lost to heat.

As lights, halogens make great heaters, and they can noticeably increase the temperature within a room, to the point where you might have to run an air-conditioner to offset the heat!

Alternatively, you could buy floor and table lamps and fit them with CFLs or LED bulbs and leave the halogens off.





Heating and cooling

Heating and cooling are the most energy hungry activities in a home, but it doesn't take much effort to reduce their impact.

■ Pull on a jumper

Before turning on the heater, put on a jumper. By dressing appropriately for the weather you reduce the need for turning on the heater or airconditioner.

■ Use heaters and airconditioners wisely

Reducing the temperature on the thermostat of your heater or increasing it on your airconditioner by just 1°C can reduce the energy used by 10%. In winter, set the heater thermostat to a maximum of 18-20°C; in summer set your airconditioner to a minimum of 26°C.

■ Heat and cool only what you need

Only heat or cool rooms you are using, and keep the heat or cool in by closing doors and windows, including internal and external blinds.

■ Cool and heat the house naturally

On hot, still summer days close all windows, doors and curtains to help keep the house cool. And when that cool change arrives, take advantage of it by opening windows and doors to let the cooling breeze through the house.

■ Hang heavy, lined curtains

Heavy, lined curtains or blankets keep heat in during winter and heat out on hot summer days. For best results make sure they are close fitting, hang down to the floor, and have an overlap of 100mm each side of the window.

■ Install pelmets

Pelmets are covers over the top of curtains, and they stop draughts from windows coming into the room. If you live in a rental property, ask your landlord to see if permanent pelmets can be installed.

Alternatively, use a rolled towel, blanket or strips of thick cardboard over the top of curtains for temporary, removable pelmets.

■ Use timer switches

Set timers on your heater or cooler to switch off when not needed.

■ Direct the heat

If your house has central heating consider buying vent directors. These can be placed over vents to help direct the air into the centre of the room instead of straight up to the ceiling – and they're not expensive.

■ Seal up gaps and draughts

Stop draughts by closing gaps around doors and windows. Self-adhesive door and window seals are cheap, easy to install and removable if you live in a rental property. Alternatively you could use a 'door snake'.

■ Shade your windows

External shading of windows is twice as effective as internal blinds in keeping out the heat, so in summer place a removable external blind, shade cloth, sun sail or outdoor umbrella over a window to shield it from the sun. If you are in a rental property and want to install a permanent shade solution attached to the house, best to check with your landlord.

■ Close up ventilation outlets

Check whether chimney ventilation outlets, flues and extraction fans can be sealed when not in use. Removable dampers are available which can be placed over extraction fans which vent into roof spaces. Note that you shouldn't close up ventilation outlets in a house with un-flued gas heaters.

■ Install insulation

Insulation is generally the single most effective investment that can be made

to improve a home's energy efficiency. Insulation can be installed in ceilings, walls and floors, although the latter two may be difficult to do in an existing house.

Some state and territory governments offer rebates for insulation so it's best to check with a local supplier when obtaining a quote. Obviously, if you live in a rental property, this is an activity for which you would need landlord permission, however some landlords might be quite willing to pay for the insulation if you offer to do the installation yourself.





Living Room

You probably spend a lot of time in your living room, so it's the best place to start making your home more comfortable and energy efficient.

■ Turn appliances off at the power point when not in use

Many appliances such as DVD players, TVs, stereos and computers use electricity called 'standby power' when they are not being used, if they are left switched on at the power point. Standby power can account for as much as 10% of household energy bills. Turn off appliances at the power point.

To make things easier, place multiple appliances on a single or multiple switch powerboard to avoid hard-to-reach spots and reduce the number of switches to flick. Alternatively, at very low cost, you could buy 'eco-switches' or other types of remote switches that remotely switch off a powerpoint or powerboard, including all of the appliances connected to it.

■ Turn off computer monitors

Set your computer to enter 'sleep' mode after a certain period of inactivity and turn the computer monitor off when you're not using it, even for a short time.

■ Choose an LCD or LED monitor

LCD and LED computer monitors use less than half of the electricity of conventional monitors. Turning the brightness down can cut energy use by a quarter. All monitors now come with an energy rating, so you can see how much energy a specific monitor will likely use over the course of a year.

■ Don't super-size your telly

A simple rule of thumb is the bigger the TV, the more energy it will use. Indeed,

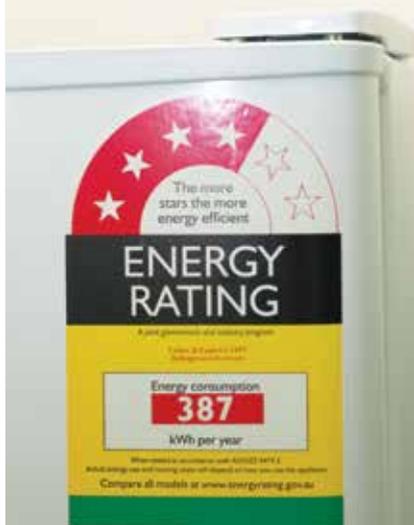
some larger TV models use more energy to run than a standard-sized fridge. This is particularly the case for plasma TVs. LCD and LED TVs are now far more prevalent and use significantly less energy to run.

www.livinggreener.gov.au/guides/home-entertainment-technology.au

Reach for the stars

When buying new appliances look for the energy label. The Energy Rating scheme rates the energy efficiency of electrical products and appliances to help you with your purchasing choices. The star ratings of all labelled products and appliances are also available on the energy rating website. When comparing different appliances or equipment it is important to look at comparative energy consumption, which is shown in kilowatt-hours, rather than just the number of stars.

www.energyrating.gov.au



Kitchen

While the kitchen is home to one of your home's biggest energy guzzlers, the fridge, simple tips can keep energy use down.

■ Don't open the fridge door too often

In most households, the fridge uses more power than any other appliance. To cut energy use, try to limit the number of times you open the fridge door, and never leave it open.

■ Don't place hot items in the fridge

Wait until a dish has cooled down before placing it in the fridge. Put cold items back into the fridge after use rather than letting them warm to room temperature.

■ Get the temperature right

The recommended operating temperature for a fridge is 3°C to 5°C. For freezers, the recommended range is -15 to -18°C.

■ Switch off the second fridge

If you have a second fridge (maybe a drinks fridge), consider how often it is really used. Turn it on only when you need it.

■ Keep the fridge well ventilated

Provide at least 50mm of space at the top, back and sides to improve ventilation and let your fridge work at its best.

■ Place the fridge in a cool spot

Locate fridges and freezers in cool spots, away from direct sun and other heat sources such as stoves.

■ Check fridge seals

Check and clean seals on your fridge to make sure the door closes securely. Regularly remove any frost buildup in the freezer.

■ Boil the water you need

Use an electric kettle instead of the stovetop to boil water. Fill the kettle with only as much water as you need. The less water boiled, the less energy is used.

■ Run a full load in the dishwasher

Wait until the dishwasher is full before running it. It wastes a lot of energy to clean a small number of dishes.

■ Cooking toast

Cooking toast in a toaster instead of the grill reduces energy use by up to 75%.

■ Cooking with gas

If possible, use gas for cooking. Gas is generally cheaper than electricity. Turn the gas down to keep flames under the pot rather than up the sides. Gently simmer pots with the lid on rather than boiling vigorously. If you have to use electricity to cook, use a microwave where practical.

■ Choose energy and water efficient appliances

When it comes time to replace fridges, microwaves and other appliances, buy the most energy and water efficient one. Buy the right size for your needs.



Bathroom

By using water wisely in your bathroom you can also save a lot of energy and money.

■ Have short showers

Take shorter showers to save both water and energy—particularly if you have an electric hot water system. Heating water using an electric storage water heater in particular is very inefficient. Electric water heating can cost up to three times more to heat the same amount of water than a highly efficient gas system, and up to five times more than a gas-boosted solar water heater.

So try to keep your showers to four minutes or less. Use a shower timer as a reminder.

■ Check flow rates of your showerheads

Check your shower's flow rate on the showerhead. If there's no rate written on the showerhead you can measure the

flow rate by turning on the shower at its normal rate for 30 seconds and capturing the water in a bucket. Measure how many litres of water are in the bucket and double the figure to get the flow rate.

Inefficient showerheads can use more than 15 litres per minute; a Water Efficiency Labelling Scheme (WELs) four-star rated showerhead uses 7 litres per minute. And remember that the water requires heating, so the more efficient the showerhead, the less energy will be required to heat the volume of water.

■ Install water efficient showerheads

One of the best ways to save both water and energy is to install an efficient showerhead. Water saving showerheads can be easily fitted to existing shower arms. Rebates are available and prices start from \$20. Regulations differ between states, and local councils and energy retailers often run exchange programs, so check with them before purchasing a showerhead.



Stars for water efficiency

The Water Efficiency Labelling Scheme (WELS) shows the consumption of water by appliances. The label gives products and appliances a star rating from one to six and also provides a number that shows the comparative water consumption in litres. The labels will be on the product or packaging to allow you to compare when you are purchasing. The WELS website contains a searchable database on a range of products including washing machines, dishwashers, showers, taps and toilets.

www.waterrating.gov.au

Laundry

Making changes in the laundry can be as simple as hanging up your clothes or as complex as researching and purchasing the latest in energy and water efficient appliances. It's up to you.

■ Wash in cold water

While some clothes need to be washed in hot water, eg, nappies or clothes with oily stains, most clothes can be effectively washed in cold. Washing clothes in cold water saves energy.

■ Hang it up

Avoid using electric clothes dryers. Use the natural power of the sun to dry your washing by placing your clothes outside on a clothes line or on a rack. During wet weather use a clothes rack inside your house.

■ Wash a full load

Always make sure you wash a full load of clothes. Not only will you save water but the less you use the washing machine the more energy you save.



■ Buy energy and water efficient appliances

If you need a new washing machine or other appliance check the energy and water star ratings. Look for the highest star rating and buy the right size for your needs. Make sure the washer can do a true cold cycle because some machines heat the water even during cold washes.

■ Reduce the temperature of hot water

Check the thermostat setting on your hot water system is set at 60°C. If it's set higher you will be wasting energy but any lower could pose a health risk as harmful bacteria may thrive. Instantaneous hot water systems should be set to no more than 50°C.

Setting the temperature on some types of hot water systems requires a plumber or electrician. If you're in a rental property, contact your landlord to have the system assessed.



Getting around

Transport is a major contributor to energy use, but there are many choices you can make to reduce your impact while still getting you from A to B.

■ Choose where you live carefully

If you're looking for a new home, whether it be to rent or own, think about its location. Is it within walking or cycling distance of public transport, schools, work, shops and your recreation choices? On average, Australian households spend around \$9000 each year on transport, with about \$3500 of that being for fuel. Reducing the amount of time you spend travelling will be better for the environment, your health and hip pocket.

■ Ride a bike or use public transport

Riding a bike is not only an eco-friendly way to travel, it's also cheap and good exercise. If you are unable to ride, catch a bus, train or tram—leave the car at home whenever possible.

www.livinggreener.gov.au/travel

■ Be car wise

If you are looking at buying a new car, choose a fuel efficient one. If you drive a car, minimise fuel consumption by avoiding traffic jams, combining travel tasks within one trip and sharing rides with other people.

www.greenvehicleguide.gov.au
www.livinggreener.gov.au/travel/motor-transport

KEEPING THE LIGHTS ON

Energy and water retailers should offer payment flexibility to customers in hardship; if you're having difficulties paying a bill it is vital that you contact them to let them know about the problem. Before doing so, think about what assistance you need and what payments would be affordable.

If there are ongoing financial or personal problems that make it difficult to manage bills on a regular basis, ask to speak to the hardship team directly. (Most retailers have specialist hardship teams to help households who are having ongoing difficulties with reducing their bills, managing energy use and keeping up with payments.)

All households have rights that protect them from disconnection if they simply can't afford to pay a bill, and ensure that retailers follow proper processes if, as a last resort, they do disconnect. If a retailer disconnects without following proper processes, the household may even be eligible for compensation.

If you are threatened with disconnection (or have been disconnected) despite your attempts to negotiate with the retailer, contact your state or territory Energy and Water Ombudsman (or equivalent body) for assistance:

■ **Australian Capital Territory: ACAT** on 02 6207 7740 or acat.act.gov.au

■ **New South Wales: EWON** on 1800 246 545 or ewon.com.au

■ **Northern Territory:** Ombudsman NT on 1800 806 380 or ombudsman.nt.gov.au

■ **Queensland: EWOQ** on 1800 662 837 or ewoq.com.au

■ **South Australia: (for energy) EIOSA** on 1800 665 565 or eiosa.com.au; **(for water) OmbudsmanSA** on 08 8226 8699 (metro), 1800 182 150 (non-metro), or ombudsman.sa.gov.au

■ **Tasmania: (for energy) Energy Ombudsman Tas** on 1800 001 170 or energyombudsman.tas.gov.au; **(for water) Ombudsman Tas** on 1800 001 170 or ombudsman.tas.gov.au

■ **Victoria: EWOV** on 1800 500 509 or ewov.com.au

■ **Western Australia: (for energy) Energy Ombudsman WA** on 1800 754 004 or ombudsman.wa.gov.au/energy; **(for water) Ombudsman WA** on 07 9220 7555 (metro), 1800 117 000 (non-metro), or ombudsman.wa.gov.au

CONCESSIONS AND HARDSHIP ASSISTANCE

All state and territory governments provide concessions (discounts or rebates) on utilities bills to improve affordability for low-income households. Some also provide other assistance such as one-off grants for unaffordable bills, extra discounts for people with special medical needs, and programs for replacing inoperable or inefficient essential appliances. Eligibility also varies between states and territories, with some limited to seniors and veterans while others include Pension and Health Care Card holders.

Find out what your state or territory provides:

- Australian Capital Territory: 13 3427 or bit.ly/act-concessions
- New South Wales: 1300 136 888 or bit.ly/nsw-concessions
- Northern Territory: 1800 421 887 or bit.ly/nt-concessions
- Queensland: 13 74 68 or bit.ly/qld-concessions
- South Australia: 1800 307 758 or bit.ly/sa-concessions
- Tasmania: 6232 7049 or bit.ly/tas-concessions
- Victoria: 1800 658 521 or bit.ly/vic-concessions
- Western Australia: bit.ly/wa-concessions

In most cases you will need to register your details with your energy or water provider to receive the concession. You may need to re-register periodically when your card reaches its expiry date (some Pension Cards expire yearly but some Health Care cards may need to be renewed as often as every three months).



IF YOU ARE A RENTER

Before undertaking any alterations to a rental property you must have the owner's written permission, but don't let this discourage you. Many landlords will agree to measures that improve the resale value of their rental property and keep their tenants happy – particularly if it means they're doing their bit for the environment at the same time.

Before contacting your landlord, it may pay to do a bit of research into State and Territory and Federal government tax deductions and rebates. If you have any concerns about contacting your landlord contact your State or Territory tenants' union or tenants' advocacy service.

The Australian Taxation Office offers tax deductions to landlords for energy efficiency improvements made to rental properties. Maintenance, repairs and servicing costs such as sealing cracks and gaps and repairing damaged insulation can be claimed at the end of each financial year. The depreciation on capital improvements such as erecting a pergola or replacing an inefficient hot water system can be claimed over a specified period of time.

When writing to your landlord, point out the benefits of the repairs and any available rebates they can receive to make sustainable changes to the property. If you are offering to make some minor changes yourself, such as installing a water efficient showerhead, outline what you would like to do and how much it would cost so that you can be reimbursed. See a sample letter on p16.

If you receive no reply after a few weeks, send a follow-up note, asking whether they

received your letter and whether they have had time to consider your request.

Even with the landlord's approval, once your lease expires certain measures may require you to restore the property back to the condition it was in when you moved in. You need to check your lease document or clarify this with the landlord.

For more information on Australian Government rebates go to:

www.livinggreener.gov.au/rebates-assistance

For more information on the available tax deductions go to:

www.ato.gov.au/corporate/content.aspx?doc=/content/00282530.htm

SAMPLE LETTER

[Your name and address]

[Date]

[Landlord's or agent's name and address]

Dear ...

Re: Repairs to [your address]

We would like to undertake the following alterations to the premises to improve the water and energy efficiency of the home.

We are willing to conduct the following repairs and request your permission to do so. We would appreciate reimbursal for the cost of the products outlined below:

- | | |
|--------|---------|
| • Item | Cost \$ |
| • Item | Cost \$ |
| • Item | Cost \$ |

The following repairs we are unable to undertake:

- | | |
|--------|---------|
| • Item | Cost \$ |
| • Item | Cost \$ |
| • Item | Cost \$ |

The Australian Taxation Office offers tax deductions for improvements made to rental properties. The ATO website has detailed fact sheets outlining what you can and cannot claim for your rental property:

<http://www.ato.gov.au/corporate/content.aspx?doc=/content/00282530.htm>

I look forward to hearing from you. I can be contacted on [phone] during daytime hours.

Yours sincerely,

[Your name]

BOOKLET DEVELOPED BY

Alternative Technology Association

The Alternative Technology Association (ATA) is a not-for-profit organisation that has been promoting the use of renewable energy, water conservation and sustainable building since 1980. ATA has thousands of members across Australia who are actively walking the talk in their own homes. ATA also produces two magazines *ReNew: technology for a sustainable future* and *Sanctuary: modern green homes*, available from newsstands across Australia.

www.ata.org.au
Ph: (03) 9639 1500



VCOSS

The Victorian Council of Social Service (VCOSS) is the peak body of the social and community sector in Victoria. VCOSS members reflect the diversity of the sector and include large charities, peak organisations, small community services, advocacy groups, and individuals involved in social policy debates. In addition to supporting the sector, VCOSS represents the interests of vulnerable and disadvantaged Victorians in policy debates and advocates for the development of a sustainable, fair and equitable society.

www.vcooss.org.au
Ph: 1800 133 340 or (03) 9654 5050



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Saving energy and saving money on your power bills can be easy. There are many easy and inexpensive things you can do to make your home cheaper to run and more comfortable.