



Reduce your bills

Stay cool in summer,
warm in winter

Solar for renters

Ways to work with
your landlord

RENTERS GUIDE TO SUSTAINABLE LIVING

Tips for a more comfortable and energy efficient home



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Level 1, 39 Little Collins St

Melbourne VIC 3000, Australia

Ph: (03) 9639 1500 Fax: (03) 9639 5814

Email: ata@ata.org.au

Website: www.ata.org.au

Reg No: A0017411T ABN: 57 533 056 318

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www.lmcf.org.au



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

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

To make it easier we show you what to check first in *The Biggest Impact* on p. 2. Just one or two tweaks could save you a lot on electricity bills and make your home more comfortable to live in.

Some changes to rental properties require you to consult your landlord or property manager. Don't let this discourage you. You might find that they are more than willing to undertake improvements or grant you permission to make some changes yourself. There are a number of government rebates and tax concessions available to landlords to assist with sustainable improvements and these will also improve the property's resale value. See *Working with your Landlord* on p. 20.

 This icon means you will need permission from your landlord.

There are also rebates, cash back offers and interest-free loans available to tenants for energy efficient appliances and other measures that will save energy. Take a look at the *Getting Help* section on p. 23 for more details.

Get support from the entire household. With everyone's help the changes you make will be easier to put in place and maintain. You might want to write up an action plan with tasks and dates when you aim to achieve things. If you have kids get them involved. You will be surprised how enthusiastic kids can be in coming up with ideas for smarter living!

Disclaimer: Each State and Territory has legislation that regulates residential tenancies. Generally, for any changes you wish to make to the rental property 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. Please see the sample landlord letter on p. 20 of this booklet.

THE BIGGEST IMPACT

It helps to know which improvements can make the most difference to the comfort and affordability of your rental. Some houses can be expensive to run, especially if they get overly hot or cold in summer and winter. Consider this list of household fixes and retrofits. Just one change could improve the liveability of your home and reduce your electricity bills at the same time.

Draughtproofing

Some houses are so draughty that the effect is like having a window open all the time, making it difficult to maintain a comfortable temperature and increasing heating and cooling bills. A windy day is a good opportunity to check for airflow around windows, floors and doors. There are many ways to draughtproof depending on the problem and whether the fix is DIY or landlord-assisted.

See page 4 for Draughtproofing advice.

Shade your windows

A room can become very hot very quickly if the sun is hitting a window in summer, with up to 87% of a home's heat gained through windows according to *Your Home*. The first step is to stop the sun hitting

the glass with external shading such as a removable blind, shade cloth or outdoor umbrella. A small step like this could improve the comfort and efficiency of your home considerably. Some shade solutions will need landlord support.

See page 7 for more advice on shading.

Replace halogen downlights

Halogen downlights use a lot of energy, so if your rental home is lit up with them, or even if you have just a few, your electricity bills will come down if you replace them with LEDs. There are affordable LED downlight replacements on the market that use around a quarter of the energy of halogens.

See page 7 for lighting tips.





Replace old, inefficient fridges

Old fridges can be really inefficient so it pays to check out how much energy yours is using. Use an energy use meter (such as a Power-Mate) or an in-home display connected to your smart meter to check the energy consumption of appliances—some libraries even have energy meters for loan. Rebates exist in some states to help buy a better fridge. Dryers also use a lot of energy so avoid using them.

Use the calculators at *Your Energy Savings* to estimate the electricity use of a new appliance.

Look at heating type

Heaters can be expensive to run, especially some of the older types that are common in rental houses. Gas price rises in recent years have changed the way we think about efficient heating, with ATA research showing that running a reverse cycle air conditioner on heating mode in winter can be more affordable to run than many gas heaters. Some tenants might not have much choice in the matter, of course, but it's good to be aware.

Go efficient electric

Electric appliances are much more efficient these days including heat pump hot water systems, reverse cycle air conditioners as well as some ovens and cooktops. While the replacement of an appliance or hot water system usually happens at the end of its working life and is decided by the investment property owner, do your research on better electric options around so you can recommend them to your landlord to help you save on bills.

Check your insulation

Ceiling insulation can make a big difference to the efficient heating and cooling of a home, and floor and wall insulation will make it even more efficient. If there's already insulation in place but it looks old or displaced then it won't be working very well and should be repaired. A landlord can claim depreciation on new insulation over a number of years, or the repair of existing insulation as an immediate tax deduction.

Find out more about insulation on page 5.

www.yourenergysavings.gov.au
www.yourhome.gov.au



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.

Draughtproofing

Draughtproofing is not too costly and a little bit will make the house a lot more comfortable year-round.

■ 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 can be removable when you leave. Alternatively, ask your landlord if you can install permanent draught stoppers and seals around doors and windows, such as Draught Dodgers, which are fitted to the door frame and make an air-tight seal.

Gaps in floorboards can be sealed with caulks and sealants. Large gaps could be filled with a rod made from HDPE foam (such as a sealant backing rod from Thermotech) and then finished with sealant.

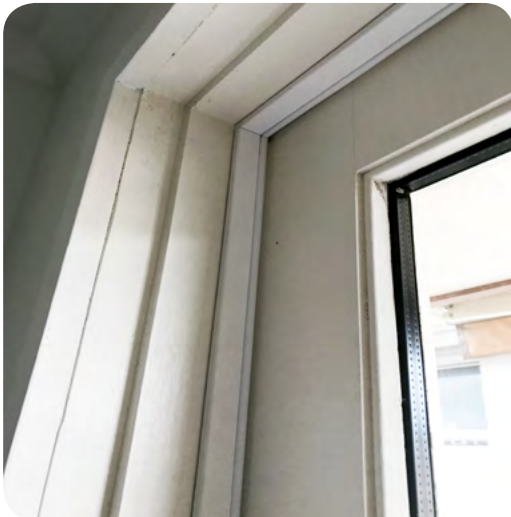
■ Close up ventilation outlets

Check whether chimney ventilation outlets, flues and extraction fans can be sealed when not in use. Removable dampers, such as the Draft Stoppa, can be placed over extraction fans which vent into roof spaces. This will prevent air leakage when the fan is not in use.

A lot of old houses have vents from back when gas lights were common. You can buy seals for these such as the Wall Vent Seal.

Stop draughts in the chimney by installing a chimney balloon, but make sure you install it properly for it to be effective.

Note that you shouldn't close up ventilation outlets in a house with un-flued gas heaters.



Weather-proof doors

Applying rubber weather seal tape around the edge of the door is the most cost effective way of draughtproofing a door. Rolls of tape can be bought from the hardware store. The product pictured uses a metal strip attached to the frame, with a flexible rubber seal against which the door or window closes.

Aluminium weather strips can be attached to the bottom of a door, and are sometimes installed as part of government energy efficiency programs. See *Getting Help*, p. 23.



■ 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 that can stop hot air circulating behind the curtains. If your house does not have pelmets ask your landlord 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.

■ Install insulation

Insulation is critical to a home's ability to be heated and cooled efficiently, so if your rental property is uninsulated ask the landlord to install some in the ceiling, assuming it is accessible. The landlord is eligible for a capital cost tax deduction on new insulation, or an immediate tax deduction if existing insulation is repaired. Rebates are available in some states.

www.yourenergysavings.gov.au/rebates

All-year-round

■ Use heating and airconditioning 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 keeping doors closed.

■ Use timer switches

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

In winter

■ Pull on a jumper

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



■ Heat the person, not the house

Think twice before heating the entire house or room to keep warm. An electric throw blanket can warm you up without resorting to space heating. They plug in just like an electric under-blanket for the bed, and use around 100 watts or just a few cents per hour to run, which is cheaper than flicking on a heater.

■ 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.

■ Clean your heater

Dust build up around vents can affect heater efficiency, so check the cleaning instructions for ducted heating systems, split systems or gas heaters. A vacuum around vents is probably all that's needed, although contact the landlord if the system needs a professional clean.

In summer

■ Shade your windows P

External shading of windows is twice as effective as internal blinds in keeping out the heat. Shade sails can be bought off the shelf or custom designed for specific spaces—or even made at home. See *Shade Your Windows* on the opposite page.

■ Cool the house naturally

On hot 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.

■ Working windows and flyscreens P

Windows that don't open and close properly can deter tenants from using them, so ask your landlord to fix them—it will make a big difference to the temperature inside. Likewise, ask your landlord to install flyscreens if you don't have them. No one wants to open a window if flies and mozzies blow straight in. If the landlord won't help look at DIY flyscreen kits instead, which can be constructed at home and taken with you at the end of the lease.



Shade your windows

Unprotected west and north-facing windows can make a room heat up in summer, making a home unbearable to live in and expensive to run. It's far more efficient to stop the sun hitting the glass in the first place with external shading.

One of the first things to consider is whether this shade is going to be removable at the end of the lease or permanent. Removable external blinds, shade cloth, sun sail or an outdoor umbrella over a window to shield it from the sun can be installed to be temporary, although once you need to drill into walls, fences or awnings it becomes a different project that needs landlord permission and possibly the help of a tradesperson. Shade sails are reasonably easy to install, although they require firm fixings, hence the likely need for landlord permission.

Deciduous plants are great for shading windows in summer, while dropping their leaves to let the sun back in during the cooler months. Depending on the space available, this could be a vine growing on a freestanding frame or pergola, or with permission a tree planted to block western summer sun. Think about foliage density, canopy height and spread to match your shading requirements, and choose local native species with low water requirements where possible. Plants in pots can also be used to shade your walls. Seek landlord permission before planting anything in the ground.

If you can't install external shade on windows then a product like Renshade might help reflect the sun. Renshade is an aluminium foil laminated/perforated cardboard sheet that you cut-to-size and fix to the inside of the windows to make a reflective barrier. It blocks around 85% of the heat and light and the holes allow you to see some of the view outside. Renshade can be taken down and stored in cooler weather, or used again at your next house, and costs around \$20 a metre on 1350mm wide rolls.



Cover your walls

It's important to shade your walls, particularly western walls. Extending awnings or blinds along an entire wall can be pretty expensive, so consider shading with deciduous greenery or something as simple as a length of shadecloth attached to the gutter with bulldog clips.





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 light emitting diode (LED) bulbs. And when they fail, replace compact fluorescents lights (CFLs) also with LEDs. LEDs can reduce running costs by up to 90% and last much longer than incandescent and CFL bulbs. LEDs can be taken with you at the end of the lease.

■ Don't use halogen downlights

If your house is full of energy-hungry halogen downlights, replace them with good quality LED bulbs. Alternatively, leave the downlights off and fit floor and table lamps with LED bulbs.

■ Smart lighting

Renters can use smart home technology to make their home more efficient including light automation systems. Smart lights can be controlled via an app on your smart phone or tablet, and the tenant can take the smart globes and associated equipment with them at the end of the lease. Being able to control lights remotely also gives some extra security if you're out late at night or away.

Switch to GreenPower

One of the easiest ways to make your home more sustainable is to buy GreenPower to offset your electricity use. Accredited GreenPower is electricity generated from clean, renewable energy sources. Accredited GreenPower products are individually assessed to verify they comply with high environmental standards. By buying GreenPower you are helping to support the development of the renewable energy industry and reducing the demand for electricity from the burning of fossil fuels. For the biggest impact ask for 100% accredited GreenPower.

GreenPower can be bought as an option alongside your electricity bill. Another way is to buy it separately from a community-run retailer such as the Community Climate Chest (C3), which ATA, publisher of this guide, is a co-operator. The non-profit scheme offers the community cheaper GreenPower from identifiable renewable energy generators, which is tax deductible while directing a share of the proceeds to local environmental groups.

www.greenpower.gov.au

www.greenelectricityguide.org.au

www.climatechest.org.au

Energy smart appliances

It's a case of the higher the star rating the better for new appliances.

■ Turn appliances off at the power point

Older versions of appliances such as DVD players, TVs, stereos and computers use electricity called 'standby power' when they are not being used and 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, or place multiple appliances on a single or multiple switch powerboard to avoid hard-to-reach spots and reduce the number of switches to flick. Standby power is not as much of an issue with newer, efficient appliances.

■ Turn off computer monitors and go LED

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. Again, this isn't as necessary with newer energy efficient monitors and computers. Turning the brightness down can cut emissions to a quarter of the standard.

■ Don't super-size your telly

Some larger TV models use more energy to run than a standard-sized fridge, but then again so can some smaller plasma units. Make sure you compare energy consumption specifications between different TVs of your chosen size before buying one, and buy one with an LED backlit display, or an OLED display if you can afford it.

■ Look at the stars

Check the Energy Rating label on TVs, stereos, computers and printers. Appliances that have a higher star rating use much less power.



Reach for the stars

Look for the energy label when buying new appliances. 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 the 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 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, consider how often your 'drinks fridge' 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.



A new fridge can save you money

Don't hold off replacing an old inefficient fridge, a new one might use much less energy. Some states offer rebates on the purchase of energy efficient fridges, including a 40% discount on the cost of an energy efficient one for NSW concession card holders. Use the Energy Rating label to find the most efficient fridge for your household.

www.yourenergysavings.gov.au/rebates

■ Save rinsing water

Rinse vegetables over a bowl and tip the water on the garden or a pot plant. You can also buy tubs with a handle and plug, which fit snugly in the kitchen sink to make it easy to transport water to the garden.

■ 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.

■ Run a full load in the dishwasher

Wait until the dishwasher is full before running it. It wastes a lot of water to clean a small number of dishes. Also, the less the dishwasher is used the more energy is saved.

■ Scrape rather than rinse

If you have a dishwasher, scrape dishes rather than rinse where possible, or use less water by not rinsing dishes under running water.

■ Cooking toast

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



■ Install tap aerators

Aerators can be fitted to taps to reduce water flow. They can be fitted inside or on the tap. Check with your landlord before installing.

■ 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

Fixing dripping taps and using the half flush are just two of the many things you can do to save water in your bathroom.

■ Don't leave the bathroom tap running

When brushing your teeth use a cup of water for rinsing – don't leave the tap running. Put the plug in the basin when washing or shaving.

■ Have short showers

Take shorter showers to save both water and energy. Hot showers cause up to half a kilogram of greenhouse gas every minute, so try to keep your showers to four minutes or less. Use a shower timer as a reminder.

■ Use the half flush

Use the half flush as much as possible if your toilet is a dual flush system.

■ Use a bucket

Put a bucket in the shower while waiting for the water to run hot, then use this cold water on the garden. You can purchase tubs big enough to stand in while you shower, which will capture a full shower's worth of 'grey water' for the garden. Make sure you use gentle, garden-friendly soaps and shampoos if you do this.

■ 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 WELS four-star rated showerhead uses around 5 litres per minute.

■ Install water efficient showerheads [P](#)

One of the best ways to save both water and energy is to install an efficient showerhead. Water saving showerheads that use as little as 4.5 litres per minute can be easily fitted to existing shower arms. Rebates are available and prices start from \$20. Regulations differ between states, so ask your landlord before installing a showerhead.

A showerhead can be uninstalled and taken with you at the end of the lease if you end up having to buy it yourself.

■ Fix leaking toilets [P](#)

To check the toilet for leaks take the lid off the cistern and add a few drops of biodegradable food colouring to the water. If food colouring comes into the toilet bowl without flushing this is a sign that the toilet cistern is leaking. Contact your landlord to have the toilet serviced.





■ Reduce water in the toilet cistern

If you have a single flush toilet, place one or two plastic drink bottles full of water in the cistern to reduce the volume of water in each flush. There are also flush modifying devices available which stop the flush as soon as the button is released. Check with your landlord before installing.

■ Fix leaking taps

A dripping tap can waste a lot of water, so install new washers to fix leaks. Regulations differ between states so ask your landlord before installing new washers.

■ Install aerators on taps

Aerators can be fitted to taps to reduce water flow and can be fitted either inside or on the tap. Once again, check with your landlord before installing.

Reach for the stars

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, flow controllers, 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, such as clothes with oily stains, most clothes can effectively be 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. 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 biodegradable detergents

Detergents made from biodegradable substances are a safer option for the environment.

■ Use your washing water on the garden

Providing you use biodegradable detergents, you can run a diverter hose, available from hardware stores, straight from your washing machine onto the garden.

■ Buy energy and water efficient appliances

If you need a new washing machine or dryer 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.

■ Fix leaking taps

A dripping tap can waste a lot of water so install new washers to fix leaks. Regulations differ between states so ask your landlord before installing new washers.

■ Install aerators on taps

Aerators can be fitted to taps to reduce water flow and can be fitted inside or on the tap. Once again check with your landlord before installing.



Efficient hot water systems

The installation of a new hot water system is often an urgent job after the old system fails. Don't leave it until the last minute to learn about efficient hot water systems—push for a better system that will save on bills and greenhouse gas emissions.

■ Modern efficient systems

Modern electric appliances are able to perform better than gas appliances, so replacing a conventional water heater with a heat pump or solar hot water system will help save the most energy.

Government schemes encourage the purchase of efficient hot water systems, including the federal government's Small Scale Renewable Energy Scheme (SRES). Eligible systems qualify for small-scale technology certificates (STCs), which are exchanged for a rebate at the time of purchase. STCs can save a landlord a great deal on the cost of a new heat pump or solar hot water system.

■ Reduce water use

Install low-flow shower heads to reduce hot water use.

■ 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 then 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 systems requires a plumber; contact your landlord if necessary.

■ Check the hot water system overflow

Check if there's any water dripping from the PTR valve drain pipe of the hot water system. If there's water dripping contact your landlord to have the system assessed.



■ Insulate the hot water valve

Add a Valve Cosy to the PTR valve on the hot water system. This insulating cover helps save energy by preventing heat loss from the water, and can be taken with you when you leave.

shop.ata.org.au/shop/valvecosy-hot-water-service-ptr-valve-cover

■ Insulate the hot water pipes

Make sure the hot water pipes are insulated to prevent heat loss from the water. Ideally all exposed pipes should be insulated, but the first two meters are the most crucial for energy efficiency. This can be done with a pipe insulation wrap, which is often just a foam tubular sleeve.

Efficient Hot Water: Plan the right hot water system for your home is a detailed guide to energy saving hot water.

shop.ata.org.au/shop/efficient-hot-water



In the garden

Plants and gardens can improve the livability of rental houses, both inside and out. Find out how to make a sustainable and relocatable garden, and use plants to improve your home.

■ Group pot plants together

Pot plants placed together create their own microclimate, which can reduce the number of times you'll need to water.

■ Plants for energy efficiency

Position plants so that they can shade a north or west-facing wall or window. Bamboo grows well in pots and provides excellent shade.

■ Use a wicking planter box

Wicking garden beds help reduce evaporation by delivering water straight to the roots from a reservoir at the base. Wicking beds are often DIY projects, but you can also buy wicking planter boxes with castors, which make them easy to relocate at the end of a lease.

■ Indoor plants

Plants can improve air quality within the home by

removing toxins from the air and turning carbon dioxide into oxygen. Plants are also beneficial in apartments where gardens aren't as common. Some hardy indoor plants include Mother-in Law's Tongue, Devil's Ivy and Peace Lily.

■ Water at the appropriate time

Water the garden early in the morning or late in the evening to reduce water evaporation. Watering longer, but less often, will encourage the plants to grow deeper roots which will help them grow more resilient to drought conditions. Make sure any watering complies with local water restrictions.

■ Use greywater

Greywater from baths, showers and washing machines can be reused on the garden in most locations. While bucketing shower water can be a chore, small pumps are available that let you pump it straight to the garden via the bathroom window. Some greywater systems are also suitable for renters as they don't require permanent installation if the pipes are accessible from outside the house.

■ Invest in a portable rainwater tank

Rainwater tanks which come with a lid, stand and plastic tap are available in small sizes of around a

few hundred litres. Just position your tank under a convenient hole in a downpipe to collect water. If there isn't a hole, ask permission from your landlord to make a hole and seal it up when you move.

■ Mulch garden beds

Mulch on garden beds and pots can help reduce water evaporation by up to 70%. The mulch shields the soil from the sun and reduces run off during watering.

■ Add compost or a wetting agent

Add compost and wetting agents to soil to help it hold water, reducing the number of times you'll need to water.

■ Compost your food scraps

Install a compost bin or worm farm for your food scraps to reduce the amount of organic matter going to landfill. Organic matter buried in landfill produces methane, a potent greenhouse gas. The compost you'll produce is also great for your garden.

If you live in an apartment consider buying one of the small composting systems that use a mixture of bacteria, fungi and yeasts to produce high-grade fertiliser for pot plants.



Reducing waste

Reducing your impact on the environment is as much about your behaviour as it is about your home and its appliances. Reduce waste and you reduce your carbon footprint.

■ Avoiding waste

Being conscious of the amount of waste that is associated with the products that we buy and avoiding products that have unnecessary or excessive packaging is a good first step in reducing household waste.

■ Recycle household waste products

Most local councils supply a service for residents to recycle common waste products such as glass, cans, some plastics, paper and cardboard. If you do not have a recycling bin contact your council to arrange for one to be delivered.

■ A new life

Save useful items from landfill by finding them a new home. As the saying goes, one person's trash is another's treasure. There are many ways to give life to unwanted clothes, furniture and books such as charity stores, markets, online buy swap sell sites and resource recovery centres.

■ Reduce e-waste

Electronic waste, or e-waste, is a growing contributor to landfill and a growing concern for the environment. Each year millions of computers, modems, printers and mobile phones are thrown out. This e-waste not only adds to landfill, it contains toxic components which can leach into the water table.

Check with your local council to find a safe way to dispose of old equipment. Look for charities which collect old equipment and recondition them to give away to the disadvantaged and community groups.

www.recyclingnearyou.com.au
www.mobilemuster.com.au



Getting around

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

■ Ride a bike or use public transport

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

■ Be car wise

If you are looking at buying a new car, choose an electric vehicle or 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

■ Car share

Avoid the costs associated with car ownership and join a car share scheme, where you collect a car from a designated spot and hire it by the hour or day. While it's easier to access car sharing in capital cities the schemes are expanding all the time, including options to rent privately-owned cars from nearby residents such as Car Next Door.

Sustainable living in apartments

Most of the tips in this booklet can be implemented in apartments, yet some aspects of strata-living can make energy efficiency measures tricky for tenants. Individual owners need body corporate permission to make changes to common property such as lawns, courtyards or wiring or pipes in common property walls. So, if a tenant wants to install a shade sail in a courtyard to protect their windows, the landlord should be consulted who then seeks permission from the body corporate. Follow the advice in the *Working with Your Landlord* section on p. 20; a good relationship with your landlord or agent is vital for energy efficiency in apartments.

For more ideas on making apartments sustainable read *Common Ground: Building Momentum for Quality Apartments* in *Sanctuary 38* published by the ATA. Also check out *Green Strata's* website, a non-profit organisation showing how to live more sustainably within a building legislated under Strata Title.

www.greenstrata.com.au

www.smartblocks.com.au



Solar for tenants

Tenants increasingly want to access the benefits of a household solar power system such as a clean energy supply and cheaper electricity bills. There are many new ways to install solar on rental houses.

Some landlords are willing to install a solar power system on their rental home without any expectation of compensation. For most landlords, though, financial realities require some sort of arrangement with tenants to ensure a return on investment.

The simplest approach to sharing the costs of solar to rental properties is via an ad hoc agreement between the tenant and the landlord. One way is to increase the rent to reflect the improved energy performance of the property. It can be tricky to quantify an appropriate rental increase, as it depends on many factors including the size and expected generation of the system.

Another method involves the tenant paying the landlord per kilowatt-hour for the solar energy they use, at an agreed rate lower than the grid import price, plus passing on to the landlord the feed-in

tariff for solar that's exported.

Some community energy groups are helping facilitate solar on rental properties by offering interest-free loans to landlords, and helping to assess an appropriate rent increase.

An Environmental Upgrade Agreement (EUA) is an innovative financing method for solar and other building improvements. The property owner borrows money to install the system, then repays the loan via a special charge on their council rates. The landlord is not out of pocket because, with the tenant's agreement, they can increase rent to cover the loan repayment. The tenant is better off, as their solar bill savings should outweigh the rent increase. EUAs are not common, but some councils, such as the City of Darebin in Melbourne, offer them for residential properties.

For more ideas on solar for renters read *Solar for apartments and rentals* and *Sharing the solar benefits* in *ReNew 142* published by the ATA.

www.renew.org.au/articles/raising-the-roof-solar-for-renters-and-apartment-dwellers/

Working with your landlord

Don't hesitate to ask your landlord for help to make your rental home more comfortable and energy efficient to live in; it's their property so a lot of decisions lie in their hands.

Many landlords will be keen to improve the house, with tax deductions and depreciations available to offset some retrofits and repairs, and the knowledge that tenants are happier in the home thanks to lower bills and greater comfort in the peak hot and cold months.

You must have the owner's written permission before you make any alterations to the property, for example, to seal around a draughty window. Making contact also gives the landlord a chance to get a tradesperson to fix the problem for you.

When writing to your landlord, point out the benefits of the repairs and any tax deductions or 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.

If you don't receive a reply after a few weeks, send a follow up note asking if they have received your letter and if they have had time to consider your request. If you're renting via an agent send all communication in writing via your property manager.

If you hit a brick wall with your landlord remember that many changes can be non-permanent, meaning you could buy a water efficient showerhead yourself and take it with you at the end of the lease, as long as the property and its fixtures are restored back to their original condition when the lease expires. It's less than ideal, but it's an option.

Advice for landlords and agents

Landlords can take steps to make their investment property more comfortable and efficient to live in. Energy efficiency upgrades bring environmental





benefits, but they can also help alleviate some social issues by making houses more affordable to run and bearable to live in when it's hot or cold outside.

The following energy efficiency measures set a good minimum standard in rental houses.

- Installation of ceiling insulation
- Draught-sealing around doors, floors and walls
- Install dual-flush toilets and low-flow shower heads
- Efficient lighting such as LED replacement of halogen downlights
- Efficient electric hot water and heating systems such as heat pump hot water systems and reverse-cycle heating and cooling systems, as an end-of-life replacement for gas systems. Gas price increases mean that many old and

inefficient gas heaters and hot water systems are expensive to run and contribute to bill hikes.

These minimum standards are recommended by Environment Victoria as part of their *Bringing Rental Properties up to Scratch* campaign.

Tax offsets and other energy efficiency incentives for landlords

The Australian Taxation Office (ATO) offers tax deductions for energy efficiency improvements made to rental properties. Maintenance, repairs and servicing costs such as sealing cracks and gaps and repairing damaged insulation may be able to be claimed at the end of each financial year. The depreciation on capital improvements such as replacing an inefficient hot water system or new insulation may be able to be claimed over a specified period of time. To determine what is claimable for your circumstances, seek financial advice from an accountant or contact the ATO. The following deductions might be allowed.

Possible tax deductions for energy efficiency improvements in rental properties

- Maintenance, repairs and servicing
- Servicing and repair of hot water systems, heating and cooling equipment and appliances
- Repair of damaged or leaking water fixtures
- Installing insulation on hot water pipes
- Installation of draught stoppers and sealing of cracks and gaps in floorboards and walls and around windows and doors
- Repairing settled or damaged insulation.

Possible depreciable capital improvements

- Replacing a hot water system with a more energy-efficient one such as a heat pump
- Installing efficient water fixtures such as low-flow taps and AAA-rated showerheads
- Installing an energy-efficient heating or cooling

system such as a reverse-cycle air conditioner

- Installing insulation
- Installing double-glazed windows
- Installing blinds and awnings
- Erecting a pergola or similar external shading device
- Installing doors for zoning of heating and cooling
- Rewiring, including improving lighting controls, zoning and lighting type
- Purchasing energy-efficient appliances.

Rebates

The *Your Energy Savings* website has an easy-to-use rebates page for homeowners, landlords and renters around the country. Find out how to subsidise insulation, a new energy efficient fridge, draughtproofing, efficient lighting, an efficient heat pump hot water system and more.

www.yourenergysavings.gov.au/rebates

Sample letter to landlord

Want to make energy efficiency improvements to your rental house? Use this letter as a template to ask for your landlord's assistance.

[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 reimbursement 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:

www.ato.gov.au/individuals/income-and-deductions/in-detail/rental-property-expenses/

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

Yours sincerely,

[Your name]

Getting help

A number of state and federal schemes exist to help everyone save on bills and help the environment at the same time. The following list is a snapshot of what's available at the time of printing, so visit the *Your Energy Savings* website to search for the latest programs available to you.

www.youenergysavings.gov.au/rebates

Residential efficiency scorecard - VIC

The Victorian government's Residential Efficiency Scorecard gives a star rating for your home, which represents the running cost of the fixed appliances in your home such as heating, cooling, lighting, hot water and pools/spas, as well as your home's construction and features such as solar PV energy production. The Scorecard can be used to approach a landlord with a prioritised list of improvements to help make a home cheaper to run and more comfortable to live in.

www.victorianenergysaver.vic.gov.au/scorecard
www.renew.org.au/articles/scoring-your-home-energy-efficiency-scorecards/

Home energy incentives – VIC

The Energy Saver Incentive program helps Victorian households and businesses save energy with a range of discounts and special offers on selected energy saving products and services including fridges, freezers, heaters and hot water systems.

Showerhead exchange– VIC

The Showerhead Exchange Program can help Victorian households swap their old showerheads for free 3-star rated water-efficient showerheads, saving water, energy and money.

Home energy and water efficiency - ACT

The Actsmart Home Energy Efficiency Program provides eligible low-income Australian Capital Territory households with a practical approach to help them reduce their energy and water use and save on energy and water bills. An energy efficiency officer will visit your home, assess your household's needs, and provide advice, education and products to reduce your energy and water use. All these services are provided for free.





Home energy self-assessment kit - ACT

Australian Capital Territory residents can access an Actsmart Home Energy Action Kit to perform a self-assessment of their home's energy use. You can borrow a kit from any branch of the ACT Government Libraries and use it to develop your own Home Energy Action Plan.

The kits contain equipment, instructions and worksheets that will help you to find practical ways of saving energy around your home to reduce your energy bills and greenhouse gas emissions.

Fridge and freezer removal rebate- ACT

The ActewAGL Fridge BuyBack program rewards Australian Capital Territory households and businesses that have their old fridge or freezer removed. Your fridge or freezer will be collected and recycled for free. ActewAGL electricity account holders will also receive a \$30 rebate on their next electricity bill.

Energy Efficient Appliance Rebate – QLD

The Queensland Government Energy Efficient

Appliance Rebate provides financial assistance of up to \$300 to Queensland householders that purchase an energy-efficient appliance.

Energy Efficient Fridge and TV Discounts – NSW

The Appliance Replacement Offer provides eligible New South Wales householders with discounts of between 40 and 50% on selected new energy-efficient fridges and televisions to replace old inefficient models.

Financial assistance to buy energy efficient appliances

The No Interest Loans Scheme (NILS) provides individuals and families on low incomes across Australia with access to safe, fair and affordable credit. There are no fees, interest or charges.

The Tasmanian Energy Efficiency Loan Scheme (TEELS) assists Tasmanian residents and small businesses with loans from \$500 to \$10,000 to purchase energy-efficient products and appliances to reduce energy consumption and energy bills.

RENTERS DO-IT-YOURSELF

Gather more ideas on making your rental as energy efficient as possible from these *ReNew* articles.

ReNew 142

Solar for apartments and rentals

New schemes are evolving that mean renters and apartment dwellers can more easily join in on the solar revolution.

Case studies: sharing the solar benefits

Altruistic landlords, separate solar systems per apartment, innovative new sharing models: we track down rentals and apartments that have made solar work for them.

Landlords and energy efficiency

There's a lot landlords can do to make their investment more comfortable and efficient to live in. We talk to some great landlords, but also consider the need for minimum standards.

What can renters do?

Tips for renters on what they can do to improve energy efficiency at home.

DIY pelmets to reduce heat loss

A simple and cheap DIY pelmet that is so lightweight you can stick it to the wall.

Energy efficiency scorecards

A scorecard for your home's energy use promises benefits for both renters and homeowners in the quest to improve Australia's housing stock.

shop.ata.org.au/shop/renew-issue-142

ReNew 135

At home with water efficiency

Gadgets, habits and tools to help you save water at home and in the garden.

Wicking bed know-how

After a lot of research and experimentation, permaculture design consultancy Very Edible Gardens are wicking bed converts and explain the ins and outs.

shop.ata.org.au/shop/renew-issue-135

ReNew 134

Energy-efficient renters

Tips on what renters can do to reduce energy bills.

It's in the stars

With household appliances major contributors to a home's energy use, it makes sense to 'buy smart' and 'use smart'.

Buy your gran a cool corner

Professor Sue Roaf considers ways we could retrofit just a small part of our homes as a low-cost climate refuge.

shop.ata.org.au/shop/renew-issue-134

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www.renew.org.au

Alternative Technology Association

The Alternative Technology Association (ATA) is a non-profit organisation promoting the use of renewable energy, water conservation and sustainable building since 1980. The ATA has thousands of members across Australia who are actively walking the talk in their own homes.

ATA also publishes two magazines *ReNew: technology for a sustainable future* and *Sanctuary: modern green homes*, available from newsstands across Australia.

Become a member of the ATA and you gain access to a large support network of knowledgeable people and receive a range of privileges to help you achieve your sustainability dreams.

Your ATA membership also provides you with a number of benefits:

- Free advice service, with answers to tricky questions provided by the ATA's experienced advisors.
- Discounts from the ATA Shop and a range of sustainable products and services.
- Invitations to local branch activities. An opportunity to network and exchange information with like-minded individuals.
- Quarterly issues of *ReNew* and/or *Sanctuary* magazines; packed with practical information on the latest and greatest in sustainable technologies.
- Updates on the ATA's local, national and international projects



For more information go to www.ata.org.au or call (03) 9639 1500



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