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What about tenants?

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A green summer garden
Greywater buyers guide

on the basis that tenants will not be wasting money on excess heating, cooling or water costs, or contributing unwillingly to the world's climate problems. Property owners may wish to consider that the cost of losing a quality tenant—with the loss of income from a property vacant for weeks, along with the costs of advertising—may be more than the cost of a simple retrofit.

In some states, owners of properties with multiple dwellings (apartments, duplexes and so on) without separate utility meters for each dwelling must pay for all usage costs for that utility. This could include water, electricity, gas or oil. In those cases, the financial benefits of installing rainwater tanks and/or greywater systems, insulation, draught sealing, solar hot water and renewable energy generation for those properties become even more attractive.

Additionally, while sustainability features have not yet made an impact on sale prices, this could change. There may soon be a requirement for mandatory 'eco-audits' on the sale or lease of real estate properties, similar to the Energy Efficiency Rating (EER) scheme, current in Canberra. This gives an energy efficiency rating for the building and predicts running costs. Many future buyers will naturally be more interested in a property that has established a high rating, even if audits do not become mandatory.

Government and other rebates

Rebates vary from state to state and council to council; they are also changing all the time. Some are available to either the tenant or the landlord. To check federal and state-based rebates, go to the Alternative Technology Association website at www.ata.org.au/green-living/renewable-energy-rebates/. Ask your local council about



Looking to make the rental house more sustainable? Do your research and present a good case to your landlord.

what they can offer. Some water suppliers will also offer rebates on rainwater tanks or greywater systems. It is important to research your individual situation *before* money is spent, to ensure your or your landlord's eligibility.

Tenants and landlords in co-operation

Where the action suggested is costly and the landlord could be reluctant to go ahead, a co-operative agreement could be offered. Offer to share costs with your landlord, financially or in kind (e.g. offer to do the installation if the landlord pays for materials).

Adrian Butera, of real estate agent Compton & Green, and instigator of the Go Green program encouraging landlords to invest in sustainable features for their rental properties, suggests that future agreements similar to mobile phone contracts could eventually become common. Landlords may agree to insulate or to install a solar hot water system in return for a guaranteed length of stay and a small surcharge, for example.

Approaching your landlord

When proposing to the property owner what you have in mind, make a formal, written request including information on what you want to do and why. Emphasise what the landlord will gain from it as well as how they will be helping the environment. Include relevant statistics from the Australian Greenhouse Office (www.greenhouse.gov.au) if you think it will help your case. Then give your research (options and costs) on the particular improvements you wish for, asking for only one major item at a time, or giving a short list in order of preference. Indicate what costs (if any) you are prepared to contribute, including your own labour if appropriate. Finish with a statement requesting action, for example, 'I look forward to hearing your response to my request.' Give your contact details so they don't have to look them up in order to call you.

If you receive no 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.

Five best actions tenants can take on energy

GreenPower

If paying for utilities like electricity and gas, elect to switch to accredited GreenPower. For every kilowatt-hour consumed, the company must buy or produce that amount from accredited renewable sources. The more households switching to GreenPower, the more investment in renewable technologies there will be. For the most impact, ask for '100% government accredited GreenPower' from your supplier, for both electricity and gas, and make sure it has the GreenPower green tick.

Reduce energy use

- Turn off electrical devices at the power point: appliances on standby power; idle battery chargers; your fridge and your water heater when you're away.
- Where possible, close off the living space for winter heating and open it up for air circulation in summer. Set thermostats for optimum performance (heaters to 18-21°C and air conditioners to 25-27°C).
- Shade windows externally from summer sun. Shade blinds can be quite expensive, but you could try hanging shade cloth, or the cheap bamboo blinds available in variety stores. Let the winter sun in.
- Change lighting to low energy options. If you have energy-hungry halogen lights in your rented home, and can't afford to replace them with the low energy alternatives, consider using portable lamps (with CFL globes) instead and switching the halogens off.
- Insulate your hot water pipes using lagging (available at plumbing suppliers), a thick, foam rubber tubing with a lengthways slit. Tape or tie it around the pipes, ensuring you do not pull the closure tight enough to compress the

foam. There are also self-sealing types available.

Draught-proof

- Close gaps using door sausages or draught stoppers, weather stripping around doors and windows and caulking to seal cracks between walls, window frames and doors.
- Reduce heat transfer through windows by using heavy and/or lined, close-fitting curtains or blinds that hang to the floor, with closed pelmets at the top. Strip or venetian blinds are next to useless in protecting against heat loss. If you are stuck with less than ideal blinds or curtains, consider installing new ones that you can take with you when you leave the tenancy.
- Where there are no pelmets, and the curtains are not close fitting to the window, you can request or install proper pelmets (with the landlord's permission) or make and fit temporary, cardboard ones, removing them when you leave the tenancy. Use removable fixtures.
- Some older houses have permanently open ventilation outlets, originally meant to allow airflow as a precaution in the days of gas lighting. To maintain any decorative appearance, the cavity may be pumped full of expanding foam. Otherwise, it may be boarded up or covered with cardboard. To do this, cut a piece of cardboard to size, and back it with bubble wrap. Paint the cardboard, or decorate however you prefer. Fix this to the vent with removable, double-sided tape so you can remove it for summer (if there is no air-conditioning), or when you leave the property.
- Ceiling extractor fans letting out into the roof create a gap that insulation (if any) will not cover. A self-closing cover, available in hardware stores, will inexpensively and effectively cover the gap. It opens automatically when the fan is in use, and closes when it is not. In-

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.

Source: Australian Greenhouse Office

sulation fits snugly up to the cover.

- Similarly, heat-producing halogen lamp transformers in the ceiling cannot have insulation within 150mm of the transformer due to risk of fire. Covers are available, and you may fit insulation snugly up to these.
- Functional fireplaces may have a damper fitted, just above the fire and out of sight in the chimney, or at the top of the chimney. If not functional, they can be boarded up, or the chimney blocked with an old blanket, a garbage bag full of crumpled newspaper or a piece of foam or some cardboard cut to size.

Insulate

Insulation of the walls, ceiling and floor, plus draught-proofing, will make a huge difference to your energy usage. Without insulation, your house is 'naked':

no coat to stay warm in winter and no protection from the sun's heat in summer. Where the landlord will not invest in insulation, tenants may have to improvise.

Roof insulation may require bulk and reflective insulation, depending on your climate (see *Your Home Technical Manual* to find what insulation is recommended for your climate). Insulation should be pest and fire retardant. Insulate ceilings above heated rooms first if funds or materials are short.

- I heard recently of a share house in a cool temperate climate that had hundreds of inflated wine cask bladders in the ceiling for insulation, combining pockets of air (bulk) and reflective properties. While this idea might appeal to heavy drinkers, it might be cheaper, easier and healthier to simply buy a few batts and install them yourself.
- Polystyrene slabs can also be used in ceilings if you have access to enough of them.
- Concertina foil batts are reasonably priced and effective. These are used in the roof, walls or floor to prevent heat gain. They go outside any bulk insulation, leaving a minimum of 25 mm layer of air between.
- Heavy fabric wall hangings are an effective means of adding extra insulation to a southern wall. Make sure you use removable fixtures, or get permission to put hangings up.
- Use rugs on wooden or tiled floors for extra warmth in winter. Floors in warm, tropical climates may not need insulation.

Double-glaze (well, sort of): DIY bubble wrap 'double glazing'

Here I am indebted to Tom Chalko's article (*ReNew* Issue 71, page 27). This is an idea that may not be suitable for all windows, but is a clever, easily removable option where appropriate, diffus-



A submersible marine bilge pump is used to send water from the bath to the garden.

ing light without losing it and providing an effective heat loss barrier. Its 'frosted' appearance can be useful in rooms needing privacy, but may be undesirable for windows with a special view.

Make a light batting frame to fit snugly inside the existing window frame. Cut bubble wrap to be slightly larger than the window (the excess will be trimmed once the frame is in place). Where the window is wider than the bubble wrap, make extra batting spines to cover the joins. Note: the bubbles face toward the window, the flat side to the interior. Fix the bubble wrap to the top of the frame, using double-sided tape. Be careful not to touch the bubble wrap with the tape in the wrong place, as it will tear when the tape is pulled away. Fix the lower end to the frame, pulling it tight. Then do the same with the sides. Apply removable double-sided tape to the edges and fit to the window frame. Cut away excess bubble wrap.

Transparent membrane 'double-glazing'

This is a tough, clear membrane that attaches to the existing inside window

frame using double-sided, clear adhesive tape, and then is shrunk to be taut and smooth with a hair dryer. It is a cheap, do-it-yourself solution with instructions provided (for more information go to www.clearcomfort.com.au). According to the manufacturers, you will have 11% more efficient cooling and 17% more efficient heating when correctly installed.

We all need a rainwater tank

Do request that your landlord install an appropriately sized tank: the more of these that are installed and used, the more water is left in our catchments.

If this fails, invest in one or more mini tanks from a hardware store. These can be used singly or linked together, and are small enough to not require special foundations and may be taken with you when you leave. They range in capacity from 100 to 210 litres and cost between \$89 and \$189.

You will need permission to remove a section of down-pipe and install a diverter, but you can replace the section of pipe removed when you leave, if necessary.

Use greywater (carefully)

Realistically, the likelihood of a landlord retrofitting a costly, fully treated and plumbed greywater system is low. Tenants can still use simple systems to reuse greywater on their gardens, to flush toilets or wash clothes, however.

Bathroom

- Collect only the warm-up shower water in buckets or a tub. Shower water is full of soaps, shampoos, conditioners and whatever else you use to wash; the effects of these are untested and I therefore do not recommend using the 'washing' part of your shower or bathroom basin water on the garden. (See www.waterwiseworld.com.au for a clever invention that collects much of the clean shower water.) These kinds of greywater are, however, perfectly acceptable for flushing the toilet or washing clothes.

- There is an exception: in my experience, when sorbolene is used instead of soap—as well as being ideal for sensitive skin—gardens, including pot plants, have thrived when watered with the bath or shower water.

- Turn off the water supply to the toilet at its tap and keep a large jug in the bathroom for refilling the cistern with collected shower or laundry water. Place a plastic drink bottle filled with water in your cistern to reduce its size if you do not have a dual-flush toilet.

Laundry

- For gardens (not including potted plants), collect your rinse water into a water container or holding tank. Even when using eco-friendly detergents, I find plants do not thrive using the wash water. Decant into a watering can or attach a hose to the container.

- If funds allow, consider buying a *Wet Wheelie* (cost: \$395 from www.wetwheelie.com), an adapted wheelie bin. Collect rinse water from



Drill a hole (with landlord's permission!) through a window frame to allow a hose from the laundry or bath to feed through to the garden.

your washing machine in the wheelie, then use the submersible pump and hose supplied to send it out to your garden. Do not attempt to move the bin when it is full, it will be too heavy. When the bin is empty, you can wheel it out of sight.

- Use a diverter fitted to the inspection outlet of the waste pipe for your bathroom or laundry. A simple water diverter with three hose outlets is available with instructions from the Port Phillip Eco Centre in St Kilda, Victoria for \$8.00. Look around for a similar item in your area.

Install a low-flow showerhead

AAA-rated low-flow showerheads and flow regulators/aerators should be fitted to all tapware and any leaking taps fixed to reduce the amount of hot water used.

Water companies will often provide free low-flow showerheads, and flow regulators are cheap and easily installed. Technically, you need the landlord's permission to replace the showerhead, but this should not be a problem if you

are offering to do it yourself for free. Otherwise, just take your showerhead with you and replace it with the old one when you leave.

Step 1. Remove the existing showerhead using an adjustable spanner. Use a rag between the spanner and the nut to avoid damage to the fitting, and avoid using force.

Step 2. Clean off the old plumbers' tape from the shower stem.

Step 3. Wrap new teflon plumbers' tape three to four times clockwise around the shower stem. This will prevent leaks.

Step 4. Ensure a compatible washer is installed in the neck of the new showerhead. Attach the showerhead onto the shower stem using a spanner tightly, but without using great force. Again, use a rag to prevent damage to the new fitting.

Linnet Good is currently working on a renters guide to energy and water. She welcomes readers' ideas for innovative solutions to the problems renters face when trying to live more sustainably. Email: goodscribble@hotmail.com.

What about tenants?

Striving towards sustainable renting? Linnet Good looks at options for those who don't own the home they live in.

Most renters in Australia live in older dwellings, not designed or built with environmental principles in mind. Dependent upon the will of the owner to retrofit systems and appliances to bring them up to standard, tenants can be handicapped in the movement towards sustainability. Yet there are nearly two million renter households in Australia, and with housing affordability decreasing, the proportion of renter compared to owner-occupied households seems set to rise.

For most renters, even for those who could afford it, investing in a retrofit of their home is not viable. Spending money on another's property without secure tenure doesn't make much sense. Leases in Australia are typically six to twelve months long—often not enough for sav-

ings in bills to pay back an investment in energy or water saving measures.

If you rent, however, as well as approaching the landlord to request improvements, you can do some things yourself. Any alteration to the property must have the owner's permission, and many property owners may be open to energy and water efficient improvements.

Adopting a co-operative, non-adversarial approach in negotiating with your landlord is more likely to succeed. To strengthen your argument, you can point out the benefits to the landlord, let them know of any rebates or grants available to them and possibly offer to share costs.

Benefits to the landlord

Property owners can benefit in several

ways by upgrading their buildings to modern eco-friendly standards. Importantly, landlords will be doing their part in the necessary reduction in use of precious energy and water usage, cutting greenhouse gas emissions and building on the public awareness of those issues.

Many landlords may not be aware that the Australian Taxation Office allows them to make tax deductions for energy efficiency improvements on their rental properties. These improvements fall under two broad categories. Maintenance, repairs and servicing costs can be claimed at the end of each financial year; depreciation on the value of capital improvements can be claimed over a specified period of time.

The rental value of the property will be enhanced with each improvement added, and properties may be advertised

Allowable 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.

Capital improvements

Replacing a hot water system with a more energy efficient variety.

Installing efficient water fixtures such as low-flow taps and AAA-rated showerheads.

Installing an energy efficient heating or cooling system.

Installing insulation.

Installing double-glazed windows.

Installing blinds and awnings.

Erecting a pergola or similar external shading devices.

Installing doors for zoning of heating and cooling.

Rewiring a property, including improving lighting controls, zoning and lighting type.

Purchasing energy efficient appliances.

Source: Australian Greenhouse Office.