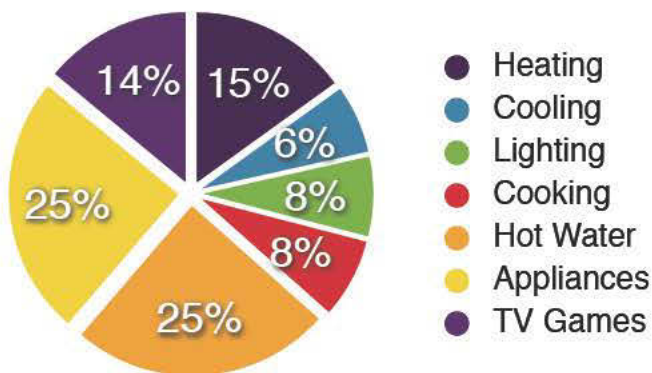
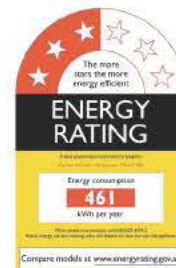


How Much Energy Do You Use?



Where does your energy go? You might be surprised - the Australian climate is kind to us and our major appliances and systems are pretty energy efficient (- look for the energy rating stickers)

But our hot water systems are old tech and our smaller items, lights, and set-ups that we tend to leave on stand-by, can be energy hogs.



For a detailed look at energy use and what to do about it go to our website [\[2.2\]](#)

Low-No Cost Tips for Saving Energy at Home

Living Areas

- ✓ In summer, keep cool by closing windows, doors, curtains and blinds.
- ✓ Use fans instead of air conditioners and set your air conditioner to 26°C.
- ✓ Aim for natural cross flow ventilation when the sun is off the house.
- ✓ In winter, reduce draughts by closing windows, doors and curtains.
- ✓ Set central heating to 18°C, dress warmly and use blankets and throw rugs.
- ✓ Put in LED lights and turn them off when not needed.
- ✓ Switch off appliances at the wall - most keep using energy in stand-by mode

Kitchen

- ✓ Make sure there is plenty of space around your fridge so it works efficiently.
- ✓ Check that the fridge door seals work, and keep the door firmly closed.
- ✓ Make sure the fridge and freezer isn't too full.
- ✓ Use the lids on pots and pans to reduce cooking time.
- ✓ Wait till the dishwasher is full, then put it on.

Bathroom and Laundry

- ✓ Use cold water for washing hands and clothes.
- ✓ Use a clothesline instead of the dryer.
- ✓ Set your hot water to 60°C and then use hot water as little as possible.
- ✓ Wait till the washing machine has a full load, then put it on.
- ✓ Put in low-flow shower-heads - and aerator heads on taps.
- ✓ Have shorter showers - no more than 4 minutes - use a timer.

Pools

- ✓ Use a pool cover to keep the heat in and put in an efficient filter pump.
- ✓ If you want a heated pool, install a solar heating system.
- ✓ Only use the lighting you need for pool safety.

Planned Spending for Saving Energy at Home

Heating & Cooling : 21% of our energy use

\$\$ Draught-proof and Ventilation - sealing gaps around doors & windows, adding self closer to vents, covering fireplace openings, using carpets and floor rugs.

\$\$\$ Insulation - clean and replace or install ceiling insulation batts to R4.1 rating, install underfloor insulation to R2.25, insulate walls to R2.4 rating.

\$\$-\$\$ Shading and Ventilation - grow shade trees and plants, install verandahs & shutters

\$\$\$\$ Double Glazing - DIY shrink film through to new installed double glaze windows.

\$\$ Personal Fans - ceiling fan or focussed zone fans instead of large zone systems

Lighting - 8% of our energy use

\$ LED lights - replace all existing with 10x more efficient LED bulbs and tubes.

\$\$ Skylights - install solar powered LED skylights in utility areas, plus pantry and toilet.

\$ Timer Switches - install time and motion sensors on selected lights

\$\$ Rewire - one light per switch instead of one switch turning on more than one light.

Cooking - 8% of our energy use

\$ Mini Electrics - match small fan-forced ovens, microwaves, rice cookers, sandwich makers, and steamers to your food preferences - can be efficient if used for short times

\$\$ Induction Cooking - less wasted heat and less CO2 than gas range tops.

Hot Water - 25% of our energy use

\$ Thermostat - install a controller so you can select the temperature to suit the use - 40 C for showers and 50 C for dishes for example.

\$\$\$ Heat Pump Hot Water - very efficient source of hot water, can act as a solar “battery” if linked to solar PV and timed to heat at midday using the surplus electricity.

Appliances - 25% of our energy use

\$\$\$\$ Replacement - compare the energy rating of your existing appliances to new ones, and also the age and ongoing repair costs, as replacement might be recommended. eg: front load washing machines vs top load; chest vs upright freezers.

\$ Placement & Ventilation - fridges and freezers need good ventilation to run efficiently, redesigning spaces and venting cupboards and pantries might be needed.

Zero Retirement - consider not using the appliance - air dry, non-iron, hand sweep - sell or gift, and borrow when needed - use a library of things, sharing sheds, neighbours.

TV & Games - 14% of our energy use.

\$ Power Controllers - any step to reduce stand-by, to limit extended item charging.

\$ Timers - any step to ensure items are only used when needed.

Zero Alternatives - explore other ways to entertain, other activities.

Solar Power & Renewables

Switching to “Green Power” with your electricity supplier won’t save you money, but will ensure that a growing percentage of power is sourced from renewable sources.

Domestic Solar Power - solar photovoltaic (PV) panels, usually roof mounted, and connected to the main electricity grid by an inverter, are now in over 2 million homes (17% nationally) Most States are offering rebates and incentives to reduce the overall cost - payback times can be as short as six years.

Challenges

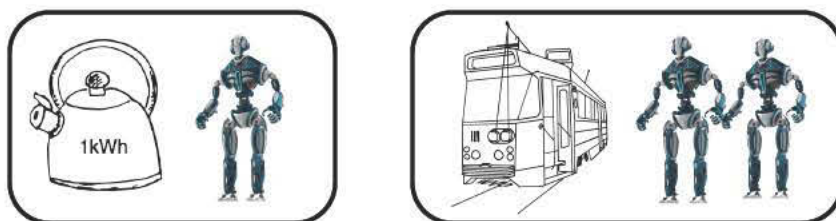
These are designed to be a fun way of exploring issues, making us aware of how reliant we are on the resources we have, as well as encouraging longer-term behavioural change.

For one week – Take a meter reading (Smart Meter / scroll button / O3 reading in kWh) Wait a week and take another, at the same time as before. How much did you reduce your usage by? Did it hurt? Which things would you consider doing long term? How does this compare to your average daily use according to your audit? How much (\$) did you save?

For one week, or one day – Try to go for a week (or a day) without TV, or lights, or heating. What did you give up for a week (or day)? Was it hard?

For one week – Make sure there is never more than one light globe per person on in your home - but do consider personal safety. Could you achieve this? What were the problems that stopped you achieving this?

Kids Fun - if 1 kWh is like having a “servant” for an hour - can you work out how many “servants” you have in a typical week? Hint: Toast for breakfast can add up to 1 “servant” Watching TV a few hours each night can add up to 4 “servants” in a week. Boiling a kettle can add up to 1 “energy servant” - catching a tram to work can add up to 2 “servants”



More Energy Robot pages on the website [\[2.3\]](#)

Suggested Session Plan	
Catch Up - how has everyone's week been?	10 min
Review Energy - what surprised you? how did your energy use compare? look back at where energy goes - how you you compare?	30 min
Low Cost Actions - which of these are you already doing? can you suggest other measures, other great ideas? how much (\$) did you save?	30 min
Planned Spending - which of these have you already done? how has it worked out? what actions do you think you might take on?	30 min
Challenges and Fun Ideas - suggest other ideas and activities?	10 min
Before you close Session 2, take time to reflect on how the session went, think of steps that might be taken in the next session, consider how the others are reacting and responding. Think Head, Hands, & Heart.	10 min

Further Information and Resources on our website.[\[2.4\]](#)