be energy smart



# Summer cooling guide 2023-24

Information to help minimise your costs and temperature this summer!



# Simple steps to help cool your home

Heating and cooling account for about 30-40% of the energy used in a typical Australian home. There are many ways to keep cool in summer that can reduce your need for cooling appliances and will help lower your energy costs.

### Keep heat out with shade

Shading the north and west sides of your home by using adjustable external blinds, leafy trees, or simply closing curtains and blinds, will keep your home cooler in summer.

If your home gets too hot during the day, the insulation in your ceilings and walls will keep the heat inside during the evening. Always aim to keep your house shaded, particularly the windows.



Leafy trees and external blinds can help prevent summer sun from shining directly through your windows and heating up your home.

### Insulation

Installing insulation in your ceiling and walls can significantly reduce the amount of heat transferred into your home. This diagram shows where a typical uninsulated home gains heat, with most heat gained through ceilings, walls and windows.

Ceiling insulation is a requirement in all new homes, and any additions to pre-existing homes. But keep in mind that insulation deteriorates over time and gradually becomes less effective. Topping up or replacing your old insulation can make a big difference to keeping your home cool.

If you don't have ceiling insulation, it's strongly recommended you have it installed. If you rent, ask your landlord to have it installed if it isn't already.

When choosing an insulation installer, make sure they have a South Australian builder's licence that permits them to install insulation.

Insulation is measured by its R-value, so make sure to ask the installer about the best R-value for your home and specific needs.

Visit yourhome.gov.au/insulation for more information.



Typical heat gain of an uninsulated home in summer.

### Make your cooling more effective

When using a refrigerative air conditioner, only cool the areas you need by closing internal doors, or by using the zone controls. Sealing gaps around doors and windows and using draught excluders under doors will reduce wasted energy, and will properly insulate your home.

Evaporative coolers work differently. Opening some doors or windows will increase air flow and improve the effectiveness of the system.

Research your cooling system online or follow the manufacturers instructions to ensure you are using it effectively and efficiently.

Also consider if you still need to use your cooling system at night. If it is cooler outside, you can save energy by turning off your cooling system and opening windows and doors. This allows breezes and cross ventilation into your home. Remember to use window and screen door locks for security.



Using cross ventilation is an effective way to cool your home.

### Other tips and tricks

Below are some simpler steps to help keep you cool this summer:

- Setting your thermostat to 24 27°C, or as high as is comfortable for you, will reduce running costs.
- Switch off and avoid using unnecessary appliances where possible, especially those that generate heat. For example, chargers, televisions, computers, and lights with warm bulbs.
- Invest in some house plants as they help improve air quality in your home and can provide extra shading near windows. They can also absorb some heat.
- Where possible, use lighter coloured materials around the house. Dark colours absorb more light and radiate it as heat. The same applies for your roof. If ever replacing or repainting your roof consider a lighter colour.
- Remove floor rugs to expose cooler flooring such as tiles and floorboards.
- Ensure fans are switched to summer mode.
- Follow the maintenance instructions for your cooling appliances and have them serviced regularly. This may include regularly cleaning the filters, fan blades or vents.
- Take actions during the middle of the day, so that you're not trying to cool an already hot house in the late afternoon and at night. For example, close blinds and curtains before the sun hits the window and heats the room. Consider using your air conditioner on a timer while you're not home, to maintain a cooler house during the day.

## **Cooling appliances**

### Shopping around for a cooling appliance requires a number of considerations.

The bigger the space you cool, the more energy you use and the higher your running costs will be. Read the information below and think about what will be best for your needs.

#### Fans

- are the cheapest type of cooling appliance to run
- create air movement that helps carry heat away from you and move natural breezes through your home
- can be used at the same time as other cooling appliances to help move cool air around your home.

### **Refrigerative air conditioners**

- cool air to a set temperature by removing heat from the room
- work better in humid or higher summer temperatures, but typically cost more to run than evaporative coolers
- work best in well-insulated and draught-proofed homes with closed windows
- work more efficiently when zoning controls are used, and doors are closed to unused rooms or spaces
- reverse cycle systems can be used for both heating and cooling.

#### **Evaporative coolers**

- use water and a fan to blow cool, humidified air into your home
- use small amounts of energy but also have a small, additional water cost
- work well in dry weather but can be less effective when it's humid
- need good ventilation
- can also be operated as a large fan without the water cooling.

### Ducting

- if your ducting is poor quality or has deteriorated, it may be wasting energy and losing a lot of cool air
- a qualified professional can help reduce the loss of air by sealing or insulating your ducts
- when purchasing a system or replacing ducting, look for an R-value of at least 1.5 for the ducting, and 0.6 for the fittings.

### Your electricity plan also has an impact!

Electricity plans can include different charges depending on the time of day and/or amount of energy you use. It's worth knowing if you are on a flat rate or time of use plan and adjust your usage accordingly.

### **Flat rate**

Customers on a flat rate are charged the same rate for electricity all day. Some flat rate plans may be tiered depending on the amount of electricity you use. Customers on a flat rate typically have an older type of electricity meter on their home (not a smart meter).

### Time of use (ToU)

If you have a smart meter, it is likely that you are on a time of use plan. This means you are charged different rates for your electricity depending on the time of day you are using it. Your energy retailer will set the prices for each usage period.

Typically, these periods are:

- Peak (6am-10am and 3pm-1am)
- Off-peak (1am-6am)
- Shoulder (10am to 3pm).

You could benefit from ToU pricing if you:

- are home during the cheaper tariff period (middle of the day) and shift using your appliances to this time
- can set timers on appliances to operate during the cheaper tariff period (middle of the day) while you're not home
- have a home battery that can store solar power for use in the more expensive tariff periods (morning, late afternoon and night).

If you aren't satisfied with your current energy provider consider looking for a better deal on the Commonwealth Government website Energy Made Easy at **energymadeeasy.gov.au** 

For more information about running costs, visit www.sa.gov.au/energy/runningcosts

Cooling appliance		Hourly running costs <sup>1</sup>		Works best in
Ceiling and portable fans	Sec.	<b>Flat rate</b> 3 - 5¢	<b>Time of Use</b> 2 - 3¢ (shoulder) 3 - 4¢ (off-peak) 4 - 5¢ (peak)	Models available for all room sizes and spaces
Portable evaporative		<b>Flat rate</b> Includes water costs 5 - 7¢	<b>Time of Use</b> Includes water costs 3 - 4¢ (shoulder) 4 - 5¢ (off-peak) 6 - 8¢ (peak)	Rooms up to 20 m <sup>2</sup>
Portable refrigerative		<b>Flat rate</b> 55 - 75¢	<b>Time of Use</b> 37 - 51¢ (shoulder) 44 - 59¢ (off-peak) 64 - 86¢ (peak)	
Window refrigerative system		<b>Flat rate</b> 44 - 60¢	<b>Time of Use</b> 30 - 41¢ (shoulder) 35 - 47¢ (off-peak) 51 - 69¢ (peak)	Rooms up to 36 m <sup>2</sup>
Split refrigerative system		<b>Flat rate</b> 69 - 93¢	<b>Time of Use:</b> 47 - 63¢ (shoulder) 55 - 74¢ (off-peak) 80¢ - \$1.08 (peak)	Rooms up to 75 m <sup>2</sup>
Ducted evaporative system		<b>Flat rate</b> Includes water costs 44 - 59¢	<b>Time of Use</b> Includes water costs 30 - 40¢ (shoulder) 35 - 47¢ (off-peak) 51 - 68¢ (peak)	Whole-of-house (200 m <sup>2</sup> home with 125 m <sup>2</sup> cooled)
Zoned ducted reverse cycle air conditioner		<b>Flat rate</b> \$1.79 - \$2.42	<b>Time of Use</b> \$1.21 - \$1.64 (shoulder) \$1.42 - \$1.92 (off-peak) \$2.07 - \$2.80 (peak)	

1. Running costs are a guide only. Calculations are based on AGL's standing retail contract electricity rates, which are generally aligned with the regulated Default Market Offer (DMO). Typical Time of Use shoulder period is 10am-3pm, off-peak is 1am-6am, peak is 6am-10am and 3pm-1am. Flat rate tariffs are charged at the same rate all day. Methodology is available from the Government of South Australia's Energy Advisory Service – email energyadvice@sa.gov.au

# Are you getting the best energy deal?

### Don't assume your energy retailer is offering you the best deal. Shop around and switch to save!

It's worth investigating other offers to see if there is a better energy plan to suit your needs. You could lower your energy bills by choosing a plan that is better suited to the energy usage patterns of your home, by switching energy retailers, or by changing how and when you use energy.

Ensure you are getting the best deal for you:

- 1. Check plans available to your area on the Australian Energy Regulator's *'Energy Made Easy'* website at **energymadeeasy.gov.au**
- 2. Use other energy retailers plans as a negotiating point with your current retailer.
- 3. Switch to a new retailer if your current retailer can't provide the better deal.

It is important to understand that eligibility for different plan types (e.g. flat rate or time of use) will vary depending on your location and meter type. To confirm eligibility you need to contact the energy retailer directly.



#### Always read the terms and conditions of your contract!

Energy plans can vary significantly and it is crucial for you to understand what you are signing up for. If you have questions contact the energy retailer directly for further information.

### **The Home Energy Toolkit**

### Audit how energy is used around your home with the tools and information available in our FREE Home Energy Toolkits.

### Save energy, and money!

The toolkit includes:

Find an en

- **Appliance meter** which measures appliance energy use, stand-by power, cost and greenhouse gas emissions.
- **Infrared thermometer** to measure the temperature of your hot water and pinpoint hot and cold spots in a room.
- Spirit thermometer to measure room, fridge and freezer temperatures.
- **Compass** to identify which direction your home faces to make the most of free heating from the sun in winter, or areas to shade in summer.
- **Stopwatch** to calculate the water flow rate from your showers and taps.
- Home Energy Toolkit Audit Guide with information, pictures and diagrams to help you carry out your audit.

Toolkits are available to borrow for free from most metropolitan and regional libraries in South Australia. Contact your local library to check availability.

Toolkits are not available for sale to individuals.

More information on how to conduct an energy audit at your home is available at www.sa.gov.au/energy



# Keeping safe in the heat

### Keeping your home cool in summer is important but keeping yourself and your loved ones cool is even more important.

It's easy to become dehydrated or overheat in very hot weather.

Keep yourself cool in your home by:

- drinking plenty of cold water.
- staying in the coolest areas of your home, especially when sleeping.
- eat cool foods with a high water concentrate, such as watermelon and cucumbers.
- do not over exert yourself.
- wear loose, light clothing.
- use light, breathable material for your bedding.

### Keep yourself educated on heat safety

Heat stroke and dehydration are very serious conditions which require medical attention. It is important to educate yourself on the signs and symptoms to ensure you can keep yourself and your loved ones safe.

#### **Extreme Heat guide**

SA Health's *Extreme Heat* guide is full of information about heat related conditions, tips for managing extreme heat, and treatment for people affected by heat. Get a copy of the guide from your local library or medical service, visit the **sahealth.sa.gov.au** website, or call 8226 7115 and ask to have one posted to you.

### **Red Cross Telecross REDi**

The Telecross REDi service supports people by calling them daily during declared heatwaves.

The service is for at-risk people such as those who are elderly, frail, housebound, socially isolated, recovering from an illness or hospitalisation, or who have a disability. If a call goes unanswered or if someone is in distress, the volunteers activate an emergency procedure.

To register, visit **redcross.org.au/telecross** or call 1800 188 071.

### Keep your pets safe in the heat

Ensure ALL pets have a cool area inside during the day, out of direct sunlight with plenty of cool water.

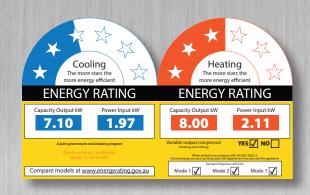
**CAUTION -** Dogs and cats paws can burn very easily. If the ground is too hot for your bare feet, it is too hot for their paws.

It's best to take pets out early in the morning and late in the evening on hot days.

### Energy rating labels

### Most heaters and coolers will have an energy rating label like the ones pictured below.

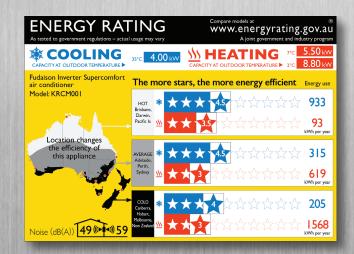
You can use these to compare the energy use and efficiency of similar sized appliances - the more stars the better. Knowing how much your appliance costs to run will help you keep track of your energy costs.



### Zoned energy rating labels

These labels feature different energy efficiency ratings depending on which of the three climate zones (hot, average or cold) an air conditioner is used in.

This helps you make meaningful comparisons when shopping, and also and enable retailers to promote different air conditioners better suited to different regions.





Find out more about energy rating labels at **energyrating.gov.au** 

# **More energy information**

### **Energy Saving Advice**

The South Australian Government's *Energy Advisory Service* offers free independent information about saving energy in your home.

See below for contact details.

### Environmentally sustainable building, buying or renovating homes

The Commonwealth Government's *Your Home* website offers guidance for building, buying or renovating a home. It shows how to create a comfortable home with low impact on the environment – economical to run, healthier to live in and adaptable to your changing needs.

Visit the website at yourhome.gov.au

### Are you eligible for a concession?

Call the *Concessions Hotline* on 1800 307 758 or visit **sa.gov.au/concessions** to find out if you can get financial help with your energy bills.

### Help to resolve a dispute with your energy retailer

*Energy and Water Ombudsman South Australia* offers a free independent service to all South Australian residential and business customers, and can help resolve disputes with gas and electricity retailers.

Call 1800 665 565 or visit ewosa.com.au

### Get your organisation involved to help others save energy

The *Energy Partners Program* works with organisations across the state to help South Australians manage their energy use and costs, and improve energy efficiency.

Visit the website at sa.gov.au/energypartners



Contact the Energy Advisory Service for free energy saving advice

Online: sa.gov.au/energy Email: energyadvice@sa.gov.au Phone: 8204 1888 or 1800 671 907 (free call from fixed lines)

