be energy smart

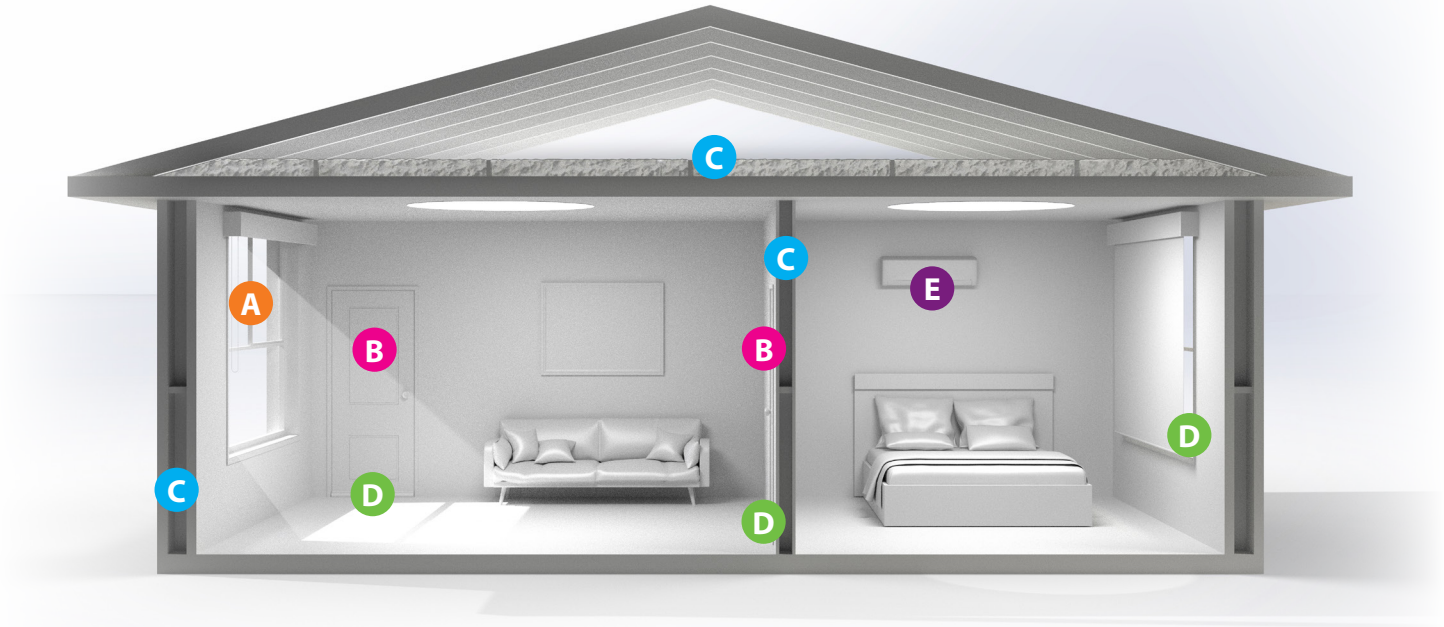
Government of South Australia

Winter heating guide 2022

How to efficiently stay warm and comfortable in your home this winter

Make your home winter ready

No one wants to spend more than they need to when heating their home. Before turning on your heater this winter, make sure your home is well-insulated, draught-proofed and that you're only heating the areas you need.



A Let the sun shine into your home

Use the sun to help heat your home for free. Open curtains and blinds during the day and move things blocking out light, such as external shading.

If the sunlight warms a tiled or concrete floor, some heat will be stored and released later, warming your home into the evening.

B Only heat the areas you need

The larger the area you heat, the more energy you will use and the higher your running costs will be.

Divide your home into sections (or zones) by closing doors to only heat the areas you're using and reduce your heating costs e.g. heat only your living areas during the day.

C Insulation

Insulation is any material that reduces the amount of heat transferred in to or out of your home through the ceiling, walls, windows, doors and floor.

Insulation will help keep your home warmer in winter, reduce your need for heating appliances and lower your heating costs.

D Draught proofing

Cracks and gaps can cause draughts and lose large amounts of heat from your home.

Simple changes, like using draught excluders under doors, sealing strips around doors and window frames and filling gaps, could help reduce your heating costs.

E Maintenance

Follow the maintenance instructions for your heaters and have them serviced regularly.

This may include regularly cleaning the filters, fan blades or vents.

Draught proofing and insulation

These diagrams show where heat is lost from a typical home.

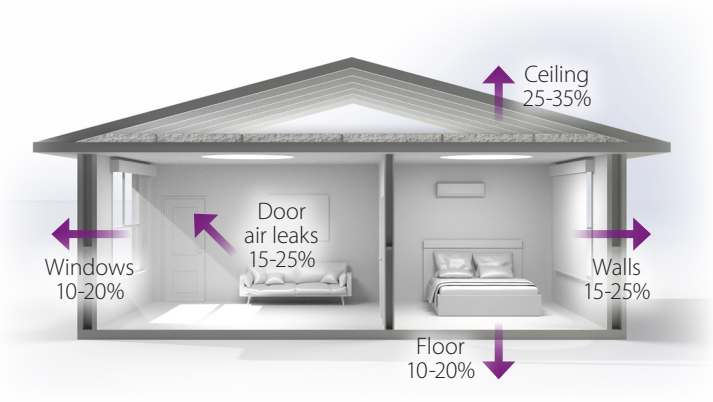
Up to 60% of your heating could be lost through your ceiling and walls.

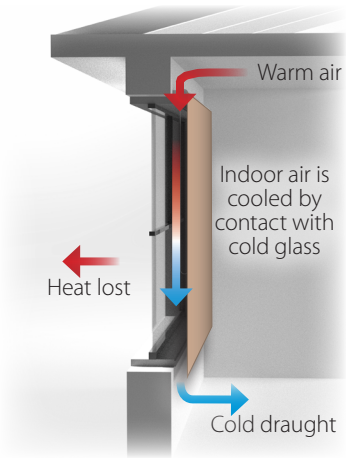
If you don't have ceiling insulation, consider having it installed. If you rent, ask your landlord if they will have it installed. Insulation can deteriorate over time (for example, batts can compress) and become less effective. Topping up or replacing your old insulation can make a big difference to the heat retention of your home.

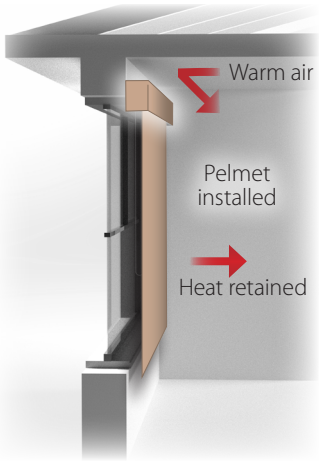
When choosing an installer, use a builder who is licensed to install insulation in South Australia. Visit sa.gov.au/energy for more information.

Up to 20% of your heating could be lost through your windows. Thick curtains with pelmets are an effective way to insulate windows, keeping rooms warmer in winter.

Warm air is cooled when it comes into contact with a cool window. Pelmets closed at the top minimise air flowing between the curtains and the windows, and reduce heat loss – see the diagrams to the right.







Choose the best heater for your needs

Heaters work in different ways — the best type of heater to use depends on what you want to heat.

When you have different heating options available for heating your home, you can reduce the amount of energy you need to heat your home and your energy costs by choosing the best option for your needs.

The table on the next page suggests the most effective heater types for different situations and provides estimated running costs. The costs are indicative for your existing heating appliances.

The first row shows heater options for one or two people staying in one space, e.g. watching television. These are best if your home has large living areas and your only heating option is a small heater which may not be large enough to heat the whole area. Radiant heaters and electric rugs heat you directly, but not the whole room.

The other rows show heaters that heat different sized areas and are best if people are moving around.

The heaters listed in the table will be most effective when used in a well insulated, draught proofed home (gas heaters require good ventilation see carbon monoxide safety on page 7 of this guide).

Be aware that portable heaters, such as oil heaters, may be low cost to purchase but can be very expensive to run if used to heat larger rooms. If a portable heater is your only option, you can lower running costs by reducing the size of the area you re heating, for example by closing doors.

Buying a new heater

If you are buying a new heating appliance, talk to a heating specialist about the best option for your needs and the associated costs of that heater. For example, if you are considering purchasing a gas heater but don t currently have gas connected to your property, you will need to take into account the cost of the gas supply charge. If you already have gas connected for cooking or water heating, it may be more cost effective to install a gas heater rather than an electric one.

Use energy rating labels to help you compare how much energy different heaters use. Refer to the back cover for more information.

Find out more about running costs online at sa.gov.au/energy/runningcosts or call the Government of South Australia s Energy Advisory Service on (08) 8204 1888

Heating appliance running costs

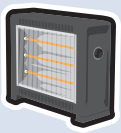
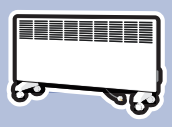
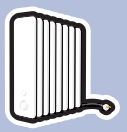
How much your heating appliance will cost to run is dependant on a number of factors. Not only is the type of appliance and it's energy rating a factor, but also the billing plan you have with your energy retailer.

Some energy plans, specifically electricity plans, can include different charges depending on the time of day. It's worth knowing if you are charged a **flat rate** all day, or if your plan has charges for **time of use**.

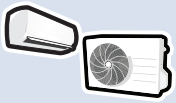
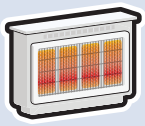
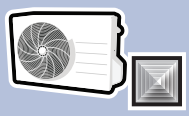
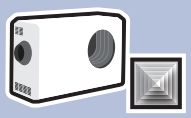
Flat rate
Customers on a flat rate plan are charged at the same rate for electricity all day. For example, using your heater at 9 am for 30 minutes will cost exactly the same as using it at 11 pm for 30 minutes. Customers on a flat rate typically have an older type of electricity meter on their home (not a smart meter).

Time of Use
Customers on a time of use plan will have a smart meter on their home and are charged a different rate for their electricity depending on the time of the day in which it is used. These often include a shoulder period (typically 10 am to 3 pm), an off-peak period (1 am to 6 am), and a more expensive peak period (6 am to 10 am and 3 pm to 1 am). Typical Controlled Load Time of Use shoulder period is 9.30 am to 3.30 pm, off-peak is 11.30 pm to 6.30 am, and peak is 6.30 am to 9.30 am and 3.30 pm to 11.30 pm.

Looking at your most recent energy bill will help you determine if you are on a flat rate plan or time of use plan, but if you are not sure it's suggested you contact your energy retailer.

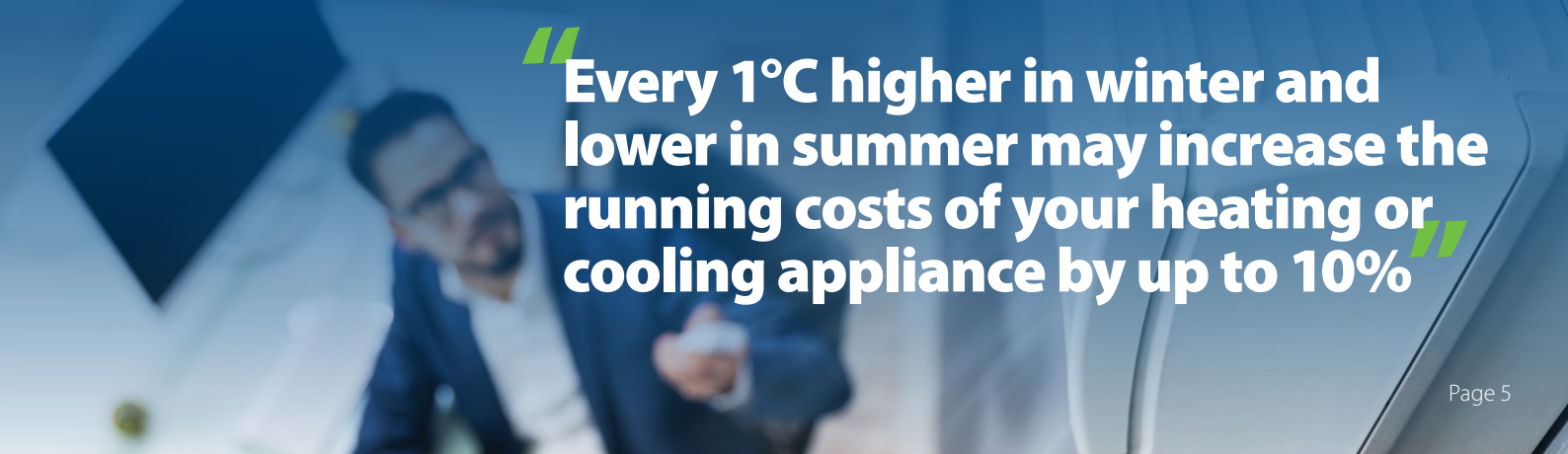
Heating appliance	Hourly running costs [1,2]		Works best in/on
Electric radiant heater (1 kW) 	Flat rate: 33-34c	Time of Use: 20-21c (shoulder) 25-26c (off-peak) 39-40c (peak)	1 or 2 people in one place 
Electric heated rug 	Flat rate: 4-5c	Time of Use: 2-3c (shoulder) 3-4c (off-peak) 4-5c (peak)	
Electric blanket 	Flat rate: 3-4c	Time of Use: 2-3c (shoulder) 2-3c (off-peak) 4-5c (peak)	
Small reverse cycle air conditioner 	Flat rate: 8-16c	Time of Use: 5-10c (shoulder) 6-14c (off-peak) 10-17c (peak)	Small room floor space 12 m^2 
Electric panel heater 	Flat rate: 40-41c	Time of Use: 25-26c (shoulder) 30-31c (off-peak) 47-48c (peak)	
Electric portable heater (2.4 kW) 	Flat rate: 40-41c	Time of Use: 25-26c (shoulder) 30-31c (off-peak) 47-48c (peak)	

Heating appliance running costs (continued)

Heating appliance	Hourly running costs [1,2]		Works best in/on
Reverse cycle air conditioner 	Flat rate: 38-57c	Time of Use: 24-36c (shoulder) 28-42c (off-peak) 45-66c (peak)	Large room floor space 36 m^2 
Gas heater 	Flat rate: 39-82c		
Electric heat bank (Controlled load (CL)) 	Flat rate: 58-59c	CL Time of Use: 51-52c (CL shoulder) 65-66c (CL off-peak) $1.41-$1.42 (CL peak)	
Small combustion fire 	Flat rate: 85-86c		
Zoned ducted reverse cycle air conditioner 	Flat rate: $1.83-$3.02	Time of Use: $1.15-$1.91 (shoulder) $1.35-$2.24 (off-peak) $2.12-$3.51 (peak)	Whole of house floor space 200 m^2 
Zoned ducted gas heating 	Flat rate: $1.85-$2.17		
Large combustion fire 	Flat rate: $2.95-$2.96		

1. Time of Use tariffs apply to electricity only. These often include a shoulder period (typically 10 am to 3 pm), an off-peak period (1 am to 6 am), and a more expensive peak period (6 am to 10 am and 3 pm to 1 am). Typical Controlled Load Time of Use shoulder period is 9.30 am to 3.30 pm, off-peak is 11.30 pm to 6.30 am, and peak is 6.30 am to 9.30 am and 3.30 pm to 11.30 pm. Flat rate tariffs are charged at the same rate all day.

2. Running costs are a guide only. Calculations are based on AGL electricity and Origin Energy gas standing retail rates, which for electricity are generally aligned with the Default Market Offer (DMO). Methodology is available from the Government of South Australia's Energy Advisory Service - email energyadvice@sa.gov.au



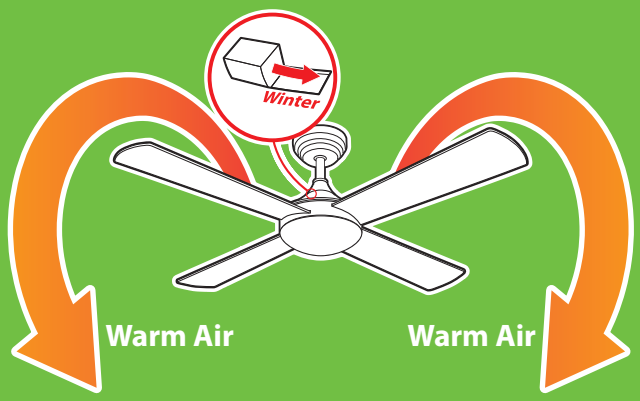
"Every 1°C higher in winter and lower in summer may increase the running costs of your heating or cooling appliance by up to 10%"

Tips to make your heating more effective

Fans can help with heating

Reversible ceiling fans can complement your heating by helping to disperse hot air around a room.

Warm air rises and collects in a layer just underneath the ceiling. If your ceiling fan has a reversing switch, use it to circulate this warm air throughout the room.



Reduce the amount of heating you need

Saving energy by reducing the amount of heating you need can be as easy as making some simple and practical changes.

- Dress appropriately for the weather by wearing warm clothing and keeping your feet warm. Wearing a jumper in winter will allow you to set your heater s thermostat to a lower temperature, saving energy.
- Set your heater s thermostat to 18 C – 21 C or as low as you feel comfortable with. Every degree lower may reduce the running costs by up to 10%.
- Adjust your heater s louvres towards the floor, as hot air rises. Keep any louvre blades dust free and clean filters regularly.

Make sure you're getting the best energy deal

Shop around and switch to save

Don't assume your existing energy provider is offering you the best deal.

It's worth investigating other market offers to see if there is a better energy contract to suit your needs. This can be done through the Australian Energy Regulator's 'Energy Made Easy' service at **energymadeeasy.gov.au** or on 1300 585 165. You can use this as a negotiating point with your existing supplier, or you can switch to save money.

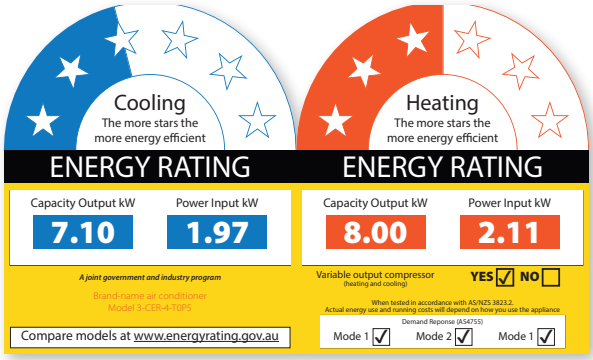
Customers with smart meters should also review offers with Time of Use (ToU) or demand tariffs that encourage shifting your energy use to access cheaper rate periods. The running costs table shows how your costs can vary on a ToU contract depending on the time of day that you use the appliance.

You could benefit from ToU pricing if you are home during the day, can use energy or set timers on appliances to operate during cheaper tariff periods, or have an energy storage device that can store solar power for use during higher tariff periods.

Energy rating labels

Some heaters will have an energy rating label like the ones pictured.

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.



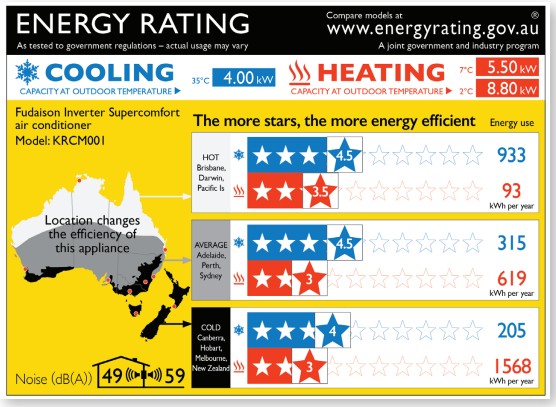
Zoned energy rating labels

From April 2020, energy rating labels for air conditioners have changed.

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

The labels help consumers make meaningful energy efficiency comparisons and enable retailers to promote air conditioners better suited to different regions.

You can find out more about energy rating labels at energyrating.gov.au



Heating your home safely

Heaters can be dangerous if they are not used safely.

Following a few simple heating safety tips can keep your home and the people in it safe.

- Don't leave heaters unattended as they can cause fires. Keep flammable materials at least one metre away from heaters.
- Never plug a heater into a power board, double adaptor or extension cord with other appliances, as these may overload and cause a fire.
- Regularly service and maintain your heater according to the manufacturer s instructions.
- Check that your heater s power cord and plug are in a good condition before using it.

Carbon monoxide safety

Carbon monoxide is a colourless, odourless and tasteless poisonous gas. It is produced when gas doesn't burn properly and is very hard to detect, so it is often called the silent killer.

If you are using a gas room heater, always check with a licensed gas fitter that the room has adequate ventilation to avoid the production and build up of carbon monoxide or other dangerous combustion gases.

It is important that you always have gas heaters installed and regularly serviced by a licensed gas fitter. Be sure to get a certificate of compliance for any installation work.

Never use outdoor gas heaters inside, including camping heaters, as they release dangerous combustion gases and are a high fire risk.

LPG cylinders should never be used inside. Where LPG appliances are used, the gas cylinder should be located outside with the gas supply piped inside by a licensed gas fitter.

More energy information

Energy Saving Advice

The Energy Advisory Service offers free independent information about saving energy in your home.

See below for contact details.

Staying connected to energy, water and communications

The ConnectEd program offers community education and financial counselling assistance. Home energy assessments are also available for eligible clients. ConnectEd is funded by the Government of South Australia and delivered by community organisations. For assistance, call the phone number for your local service.

- Adelaide Metro (inner north, west, and inner south) – (08) 8245 7100
- Adelaide CBD, outer north, outer south and southern country SA – 1800 615 677
- Northern country SA – 1300 067 777

Visit **connected.org.au** for more information.

Environmentally sustainable building, buying or renovating homes

Your Home 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)

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