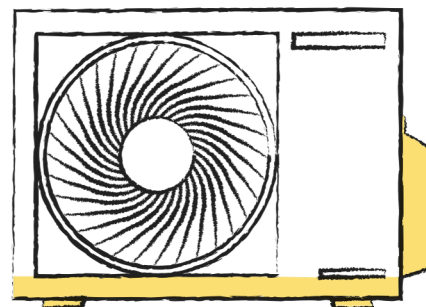




FACT SHEET

Space Heating

Snapshot

Emissions Saved	High
Lifetime	15 - 20 years
Average upfront cost (before rebates)	\$3,000 - \$10,000 installed for average sized home
Potential bill savings (with solar)*	\$13,900 over 15 years
Potential bill savings (without solar)*	\$12,000 over 15 years
Rebates available	Yes (NSW, ACT, VIC, SA)
Difficulty of installation	Moderate
Electrical upgrade required	No (generally)
Installers	Licensed air conditioner installer

Assumptions: Average space heating energy use from the Residential Baseline Study 2021, adjusted to performance of different heating types. 2025 energy and product prices. 15 year appliance lifetime. Excludes gas fixed/supply costs which would increase electrification savings. Energy prices for forward years are estimated with the historic real inflation rate of each energy type from the associated consumer price index category. COP for gas heater 80%, COP for heat pump 400% average.

Introduction

Space heating and cooling is one of the largest energy uses in the average Australian household, accounting for 37% of a home's energy use (excluding vehicles). This varies based on climate, with colder states like Tasmania and Victoria spending an even greater share of their energy bills on heating their homes. Space cooling in Australia typically requires significantly less energy than space heating, meaning warmer states spend less on heating and cooling. The good news is, the same efficient appliance can be used to both heat and cool your home. Alongside water heaters, space heaters are generally the biggest users of gas in a home, making it a key household appliance to electrify for health, cost and emissions savings.

Space Heating

While air conditioners are a common appliance to cool homes, they are underutilised in the heating department and this is where the main benefits are. Space heaters vary greatly in size, fuel source and technology but in general the most efficient way to heat your home is with a reverse-cycle air conditioner, these are also known as split system' or heat pumps and use the same type of technology as electric water heat pumps.

Why choose a reverse cycle air conditioner (heat pump)?



They use less energy - Heat pumps are 3 to 4 times more efficient than gas heaters, and 2 to 3 times more efficient than standard electric resistance heaters, such as oil-column heaters/fan heaters/radiant-electric panel heaters.



They're cheaper to run - Switching from inefficient heating systems that run on gas, oil, or traditional electric resistance can save households around \$1,000 per year. If timed with rooftop solar production (for instance pre-heating a home during the day), running costs can be as low as \$140 a year.



They're healthier in your home - As highlighted by many leading health organisations, gas heaters and stoves emit noxious gases such as carbon monoxide, nitrogen dioxide and formaldehyde, impacting the health of residents. These gasses are especially harmful if the heater is unflued.



They're better for our climate - Swapping to a heat pump can reduce your heating-related fossil fuel consumption if you are currently using a gas heater.



They're flexible - Most models include timers so you can set a reverse cycle air conditioner to come on during the day when there is excess solar being produced to either cool or heat your home.



Can be used for heating and cooling

What to consider

Reverse cycle air conditioners are either ductless split systems or ducted central systems.

Split System Heat Pump (ductless)

These are a lower cost and very efficient option. The term 'split' means the two coils are split, with one indoors and the other outdoors. They are connected together by a refrigerant line that passes through the wall. The outdoor unit is about the size of a suitcase. You might have multiple units in different rooms to create zones with multiple individual outdoor units. These systems are mounted on indoor walls.

If you want multiple indoor units but only one outdoor unit, the multi-head systems fits this bill. However they are less efficient than split systems and the outdoor unit is larger.

Ducted Central Heat Pump

This is a system that uses ducts (generally in the ceiling) to distribute cooled or warmed air.

The system has both an inside and outside unit. If your home already has existing ducts be sure to check with an installer to see whether these ducts are suitable for a heat pump.

Ducted central heat pumps are more expensive and less efficient to run than split systems.

FAQ



Does a heat pump reverse cycle air conditioner require ductwork? No. For homeowners with smaller homes, or for those with a need to heat and cool individual spaces within larger homes, mini-split or ductless heat pumps allow you to regulate the temperatures in individual rooms. Mini-split systems are perfect for retrofitting homes with non-ducted heating systems.

Does a heat pump reverse cycle air conditioner work in cold climates? Yes! A heat pump can keep your home warm even when the temperature dips down as low as -10°C. In fact, heat pumps heat roughly half the homes in Norway, Finland, and Sweden.

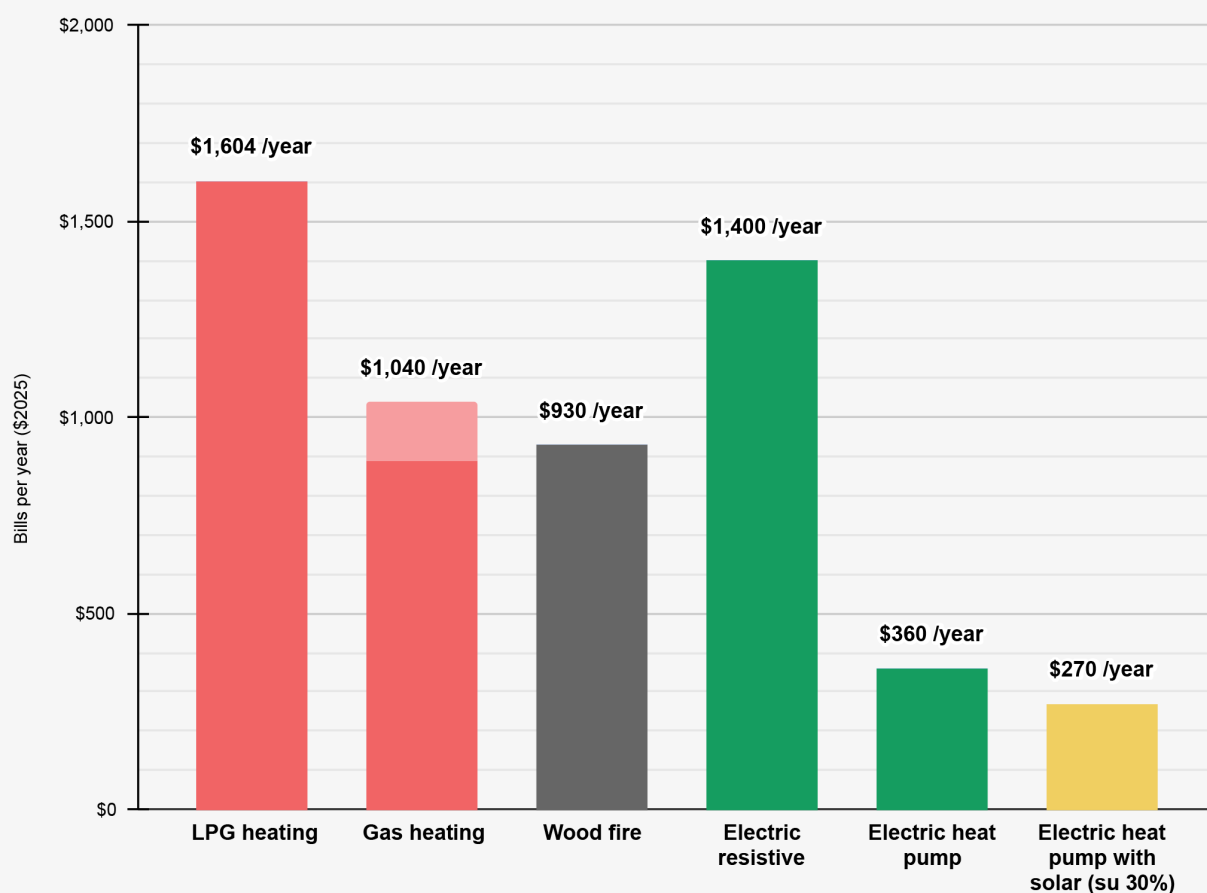
Do I need to insulate my home first? Getting off gas appliances is essential to reduce energy bills and household emissions and should be a key priority. Insulation will improve the efficiency of heating and cooling your home and may be a good idea if you live in one of Australia's coldest areas or a particularly leaky home. However, insulation doesn't need to be done before electrification and it isn't essential to experience the economic, health and environmental benefits of switching from traditional gas and electric resistance heaters to efficient electric heat pumps.

FAQ cont.

What about renters? Rewiring Australia is advocating for better renter's rights to ensure they can access the benefits of electrification such as minimum efficiency standards and mandatory energy disclosure. Write to your MP and demand the same! In the meantime, renters could choose to purchase a window unit or portable reverse cycle air conditioner themselves. Or make a case for a reverse cycle air conditioner to their landlord by presenting information such as, the government rebates available; the requirement that gas equipment needs to be professionally monitored every two years (depending on state); and the health impacts of gas appliances.

RUNNING COSTS: SPACE HEATERS

Yearly bill comparison (2025 prices), average Australian energy use and pricing



Sources: Rewiring Australia analysis. Residential Baseline Study 2021, heat pump COP 4.0, resistance 1.0, gas/LPG 0.8, wood fire 0.65. Electricity \$0.32/kWh, gas \$0.15/kWh, LPG \$0.29/kWh, Wood \$0.13/kWh. Solar \$814/kW financed at 5.5% over 30 years with replacement inverter. "su" is solar utilisation percentage.

About Rewiring Australia

Rewiring Australia is a non-profit, independent, non-partisan organisation dedicated to representing the people, households and communities in the energy system.

rewiringaustralia.org.au



Melville City Climate Action Network Inc.

is a grass-roots, non-profit, non-partisan, community organisation promoting actions to achieve reductions in greenhouse gas emissions.

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