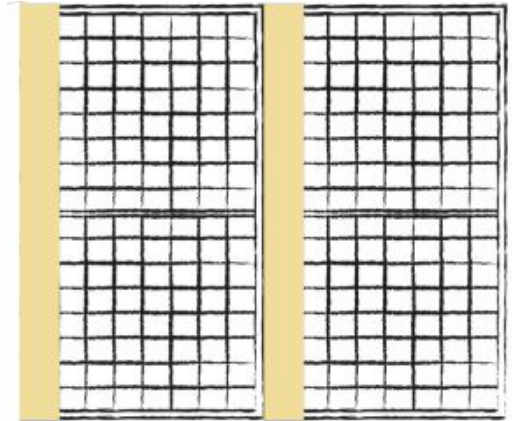




FACT SHEET

Rooftop Solar

Snapshot

Emissions Saved	Very high
Lifetime	20 – 40 years
Average upfront cost	\$5,000-10,000 for 6kW installed
Potential bill savings	\$42,900 over 15 years
Return on Investment (average)	3 - 5 years
Rebates available	Yes (Federal, VIC, ACT, NSW, SA)
Difficulty of installation	Moderate
Electrical upgrade required	Yes
Installers	Registered Solar Installer

Assumptions: 9kW installation at \$901/kW + a \$2,000 replacement inverter in year 15. 30 year solar lifetime. Finance rate 5.5% over a 30 year term. 50% self consumption of an electrified home's electricity needs including electric vehicles. Not 50% of what is generated, but 50% of what the home consumes. These savings may increase with more self consumption (e.g. a resistive water heater not heat pump, or increase in occupants above the average), and may decrease with less consumption (e.g. the home doesn't have an electric vehicle) though the solar system could also be sized down to more economically meet the needs of a lower consuming home.

Introduction

Australia truly is the lucky country having the world's cheapest source of energy delivered to homes with our rooftop solar. Our abundant solar energy, positive policy decisions and technological improvements have enabled over 3.5 million Aussie households to install solar, which together accounts for over 11% of our nation's electricity supply¹. Households can enjoy cheap and clean energy, and use this to power their efficient electric appliances and cars, unlocking a lifetime of savings and low emissions living. It's time that every Australian household can enjoy the solar revolution!

Solar panels

Rooftop solar systems utilise photovoltaic (PV) panels installed on your roof to convert sunlight into electricity

Why choose solar?



You'll save money - The cheapest form of delivered energy available in the world is Australia's rooftop solar. The day you start powering your home's energy needs from your rooftop solar is the day you will save money on your energy bills.



They're good for our climate - Thanks to this technology, you can power a lot of your energy needs using a clean energy source without the greenhouse gas emissions produced from fossil fuels. The more roofs with solar panels, the faster we can get to a cleaner, more sustainable energy future.



You can build your electric home - Once you've got energy flowing straight off your rooftop, you can use electricity for heating, cooling, cooking, hot water, and even charging an electric vehicle.



You can be more energy independent - By producing your own power on-site, you can have more control over your energy use. When you time your appliance use to when your solar is producing energy, this is the best way to maximise benefits.



Improve your property value - Rooftop solar installations can increase the value of a property. Studies have shown that homes equipped with solar panels tend to sell faster and at higher prices than those without, as they offer prospective buyers long-term energy savings and environmental benefits.



Help your community - The more solar there is, the more it benefits the whole community as increased local power generation reduces the costs of power transmission. It is also estimated that there are 39 jobs directly supported in Australia for every 1 megawatt of solar installed.

¹ <https://www.cleanenergycouncil.org.au/news/rooftop-solar-generates-over-10-per-cent-of-australias-electricity>

What to consider when buying solar panels?



Inverter type - Microinverters attach to the back of each panel, compared with string inverters which are all connected. Microinverters are generally more expensive but are more effective and good for shady roofs or complex installations.



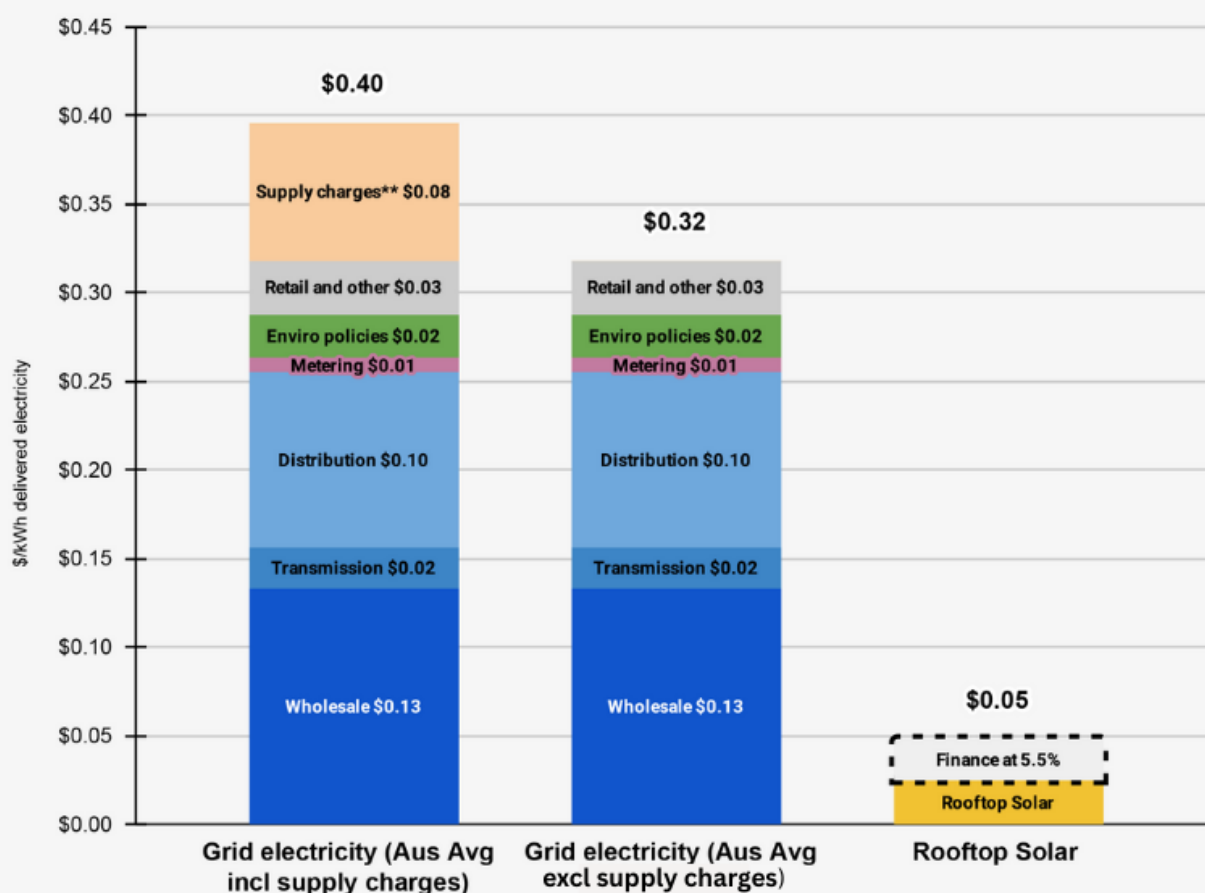
Quality - Invest in high-quality solar panels and components from reputable manufacturers to ensure reliability and longevity. Better quality panels usually have higher efficiency and longer warranties too.



Future energy use & system size - If you can, choose the biggest system you can afford and will fit on your roof. This is so you can accommodate any future electric needs (eg. electric vehicle), it costs less to install all at once and you can be covered for winter use.

COST COMPARISON: SOLAR PANELS

Comparison of grid electricity pricing and components compared to financed rooftop solar



Sources: Solar pricing based on capacity factor of 17.1%, 30 year operational lifetime, 0.5% degradation per year and one replacement inverter. Financed over 30 years at 5.5% interest. Note solar homes will usually remain connected to the grid, and as such continue to pay supply charges. Therefore the better comparison point is the volume rate.

FAQ

What about Feed In Tariffs?

Any excess solar you're not using is automatically fed back to the grid (unless you have a battery). The Feed In Tariff is what your energy retailer is prepared to pay you for the energy fed back, which has been falling for years as solar becomes more prevalent.

Real savings are made if you can use as much solar as you can when it's produced such as setting timers and using appliances and chargers during the daytime.

Will my solar work in a blackout?

No. Grid-connected solar PV systems are shut down during a grid outage for safety reasons. However, if you have a home battery backing up your PV system, you can charge the battery with your solar panels and use your battery for power.

What about strata properties?

Strata owners do have added challenges for installing solar power, however, many of these can be overcome. Some councils have support programs in place (eg NSW's Inner West council), and if you are in ACT or VIC be sure to check out the strata based rebate programs available to you. There are some helpful strata-specific resources available such as at [Wattblock](#) to get started.

What about renters?

Rewiring Australia is advocating for better renters rights so they too can access the benefits of solar, such as minimum rental standards and mandatory energy disclosure. Whether you're a renter or not, write to your MP and demand the same. In the meantime you could calculate a value proposition for your landlord and negotiate a slight rental increase for the benefit of bill reduction. Alternatively, explore community solar initiatives (eg. Haystacks solar farm) or shared solar programs.

What rebates are available?

The federal government provides Small-scale Technology Certificates (STCs), which will automatically be claimed when purchasing eligible solar panels. The amount depends on factors such as the size of your system. Some states offer additional rebates targeting particular demographics such as low income homes.



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

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.

melvillecitycan@gmail.com melvillecitycan.org



**Melville City
Climate Action Network Inc.**

ABN 79 625 494 837