Solar monster

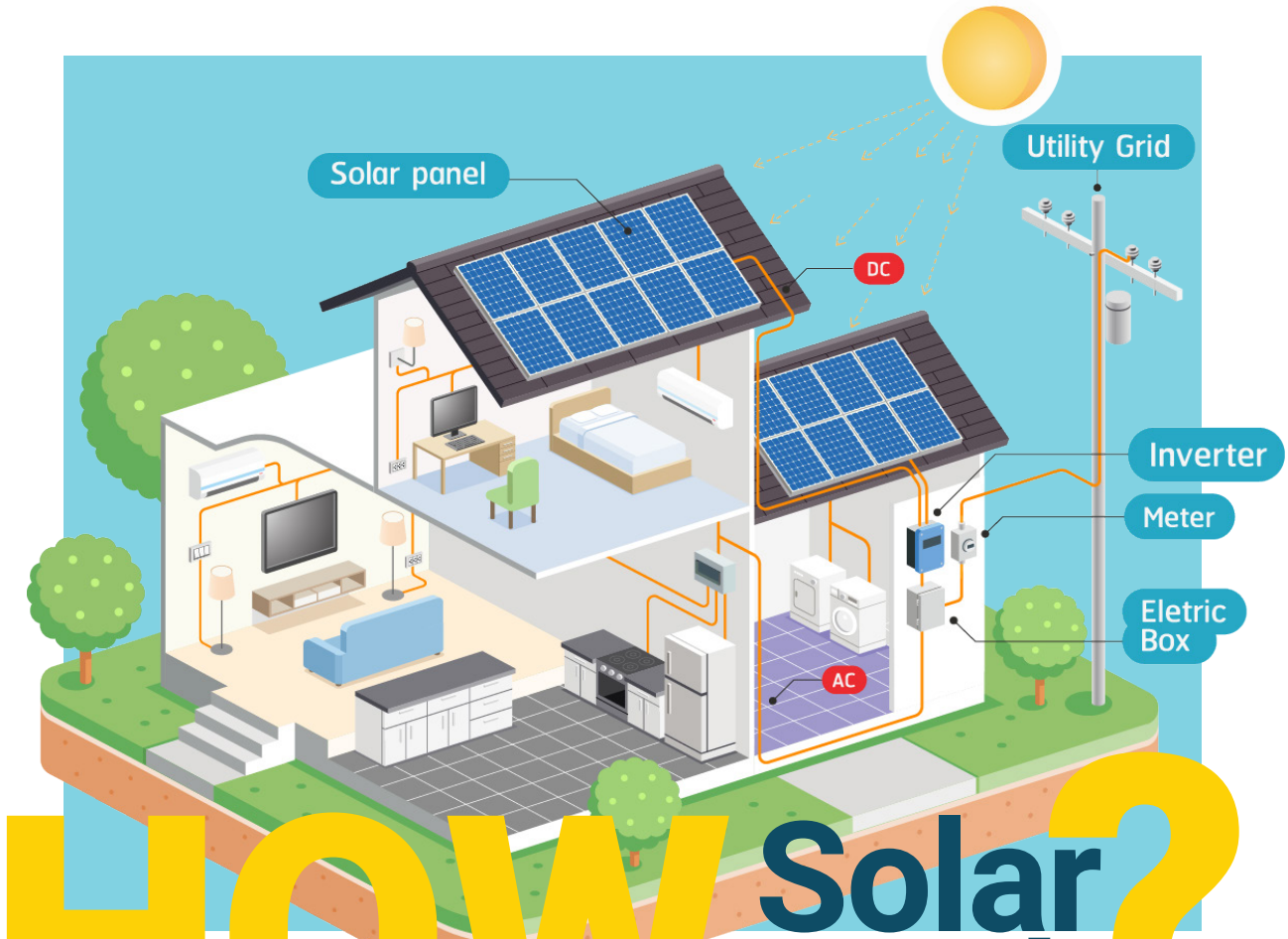
GENERATE YOUR OWN POWER

SOLAR EXPLAINED

1300 383 031

solarmonster.com.au

Contents



HOW Solar Works?

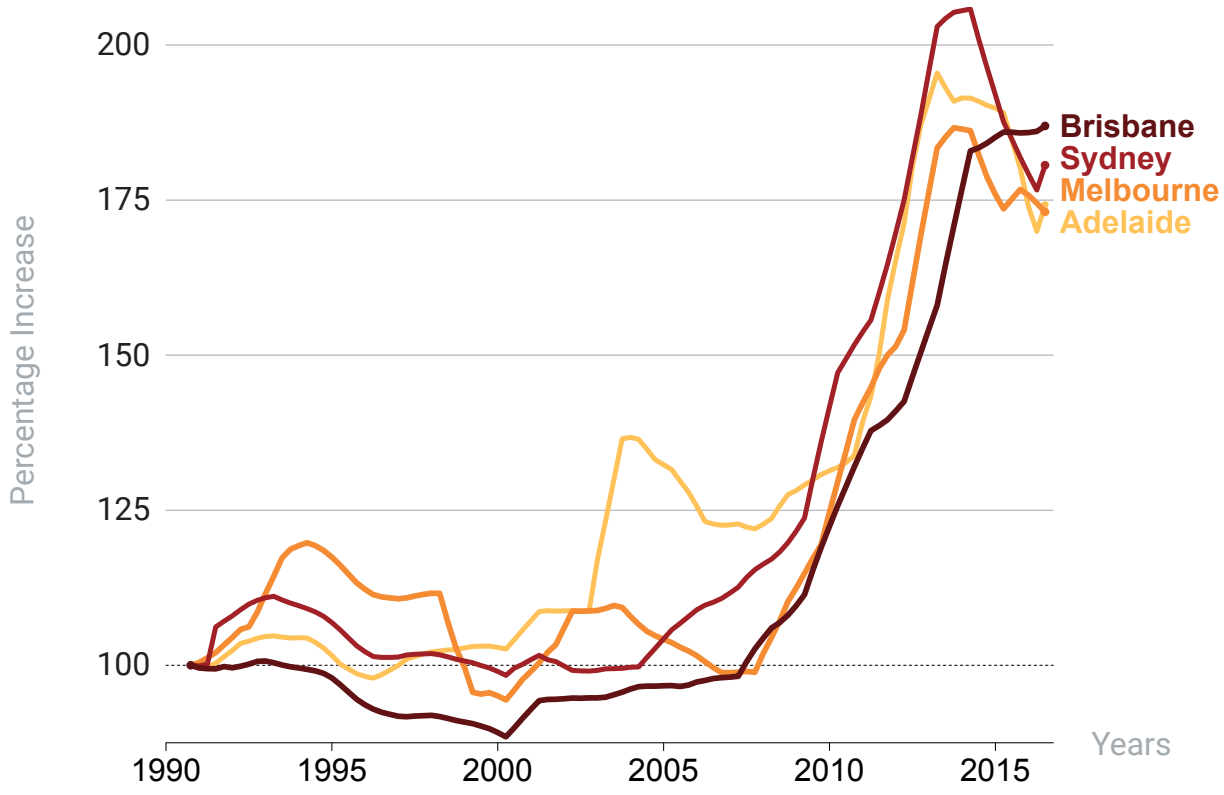
A solar system is made of two main components. The first is the panels which normally sit on your roof. What these panels do, in simple terms, is convert photons from the sun into direct current (DC) electricity.

The second is the inverter which is normally stored inside your garage or under a carport. The inverter converts the DC (Direct Current) to AC (Alternating Current) which is what your home is powered by.

The DC current flows from your panels to your inverter and is then converted into AC and flows into your home. Any excess energy that is not needed by your home can be stored in batteries. Or can be exported to the grid in return for what is called a feedin credit which is applied to your electricty bill. Solar does make sense, both financially and enviromentally.

Rising Power Prices

Retail electricity prices rose sharply from the late-2000s
Index of real retail electricity prices, rolling four-quarter average 100 = December 1990



Source: Grattan analysis of ABS (2017)

Notes: The retail electricity price index is calculated from the ABS CPI figures.
The CPI calculates electricitiy prices using retailers' standing offers.

Electricity prices have doubled in Australia over the last few years, and there is no sign of price increases stopping any time soon. The deregulation of electricity in many states of Australia was promised to drive down prices. This has not happened, and prices have actually sky rocketed. Competition has increased on a retailer level with high discounts and attractive offers, but the base price of electricity continues to increase year on year.

With these constant energy increases, the question not "Can I afford to go solar", but "Can I afford not to go solar"?

Solar Rebates

Currently there are several rebates available for Solar Systems in Australia with the announcements that there are more to come in the future. The main rebate that has been around since 2011 is the Small Scale Technologies Certificates. This varies based on the size of system you install and the zone that your property falls into. Additional incentives have recently been launched in VIC, QLD, & SA.

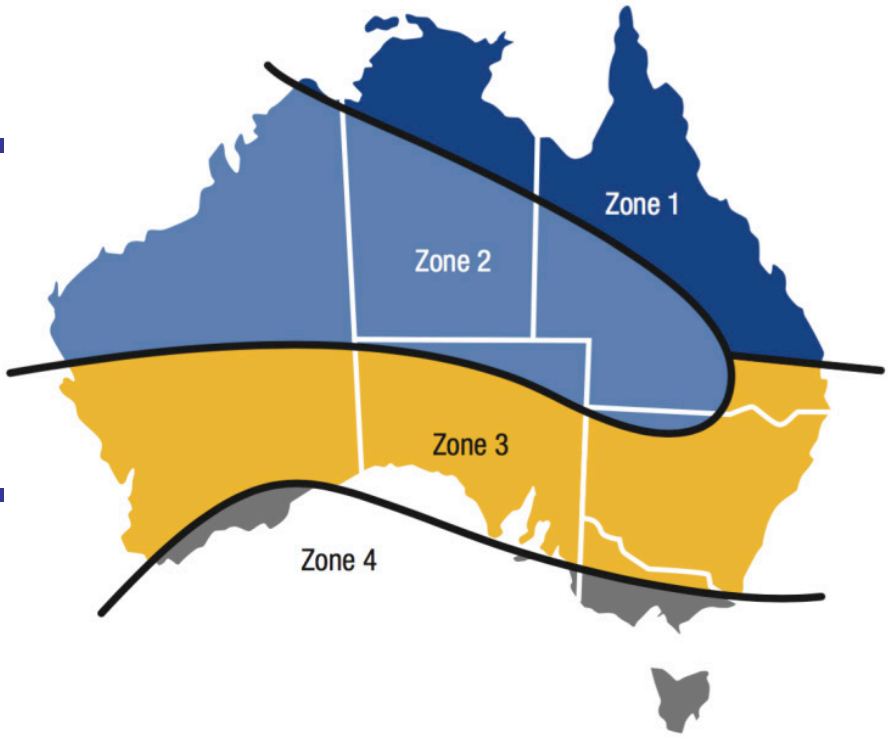
STC's
- Australia Wide

SA Home Battery Scheme
- Up to $6,000 *

VIC Solar Rebate
- Up to $2,225 *

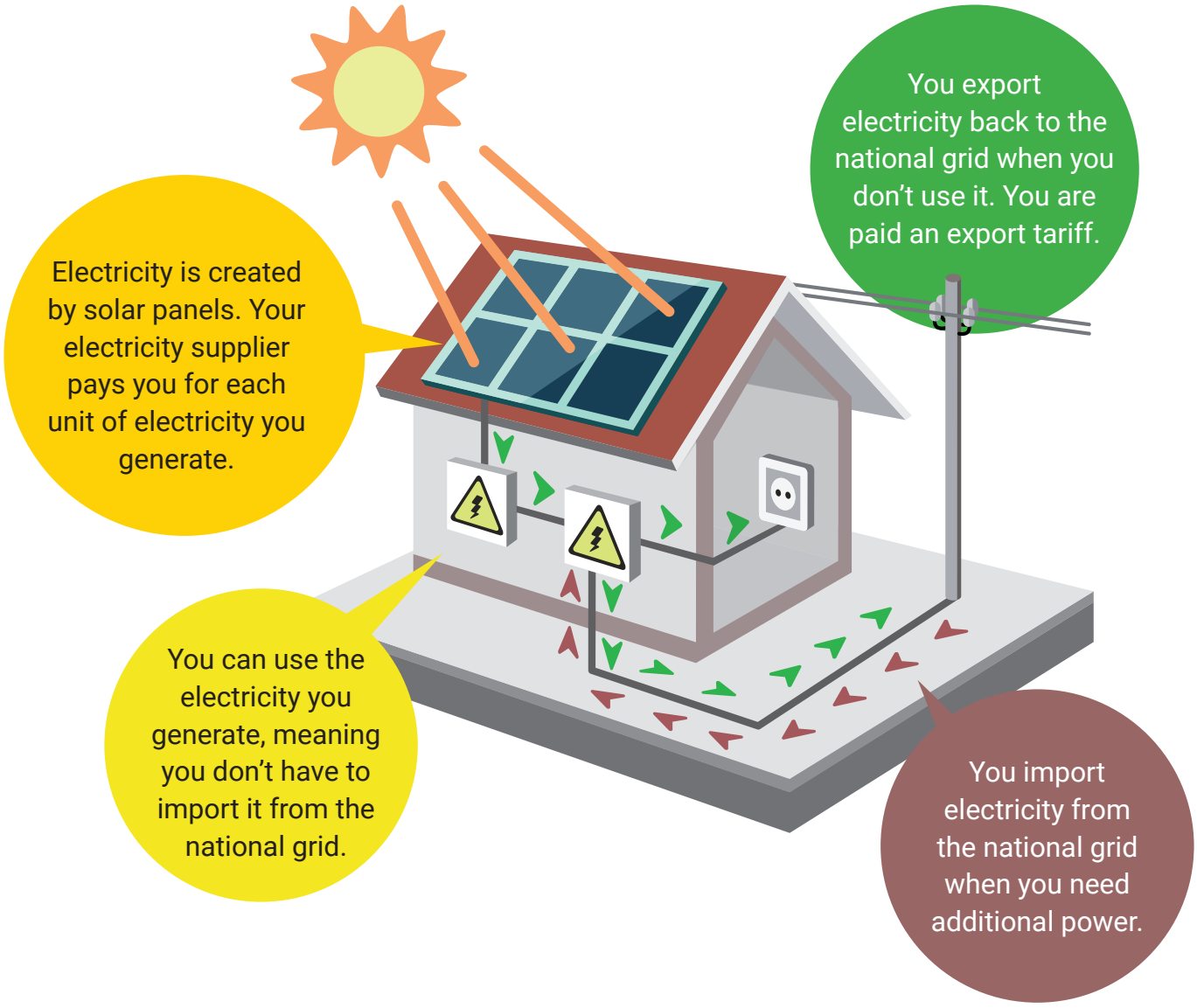
QLD Interest Free Loans
- Up to $4,500 *

Australia is divided into four zones based on how much renewable energy can be generated by a solar system. The map here indicates the zones.



What is a Solar Feed-in Tariffs

A feed in tariff (FiT) is a small credit rebate that households receive for any excess electricity produced by a solar system or other small-scale generators. Simply put, unless you have a solar battery, any solar power produced by solar panels must immediately be used or it will be feed back into the electricity grid for other properties to use. For each kilowatt hour (kWh) of electricity that a household's solar system exports to the electricity grid, that property will receive a feed-in tariff of a few cents, usually between 6 and 20 cents per kWh.



Understanding Power Usage

You may think you only use electricity when you are home, but unfortunately in most cases this is not true. Homes generally have a consistent daily base load which powers such things as your fridge, freezer, hot water heater and other appliances left on standby. Additionally, most people complete their heavy electrical chores on the weekend such as cleaning, using the washing machine, TV and air conditioning which account for a major part of your electricity consumption.

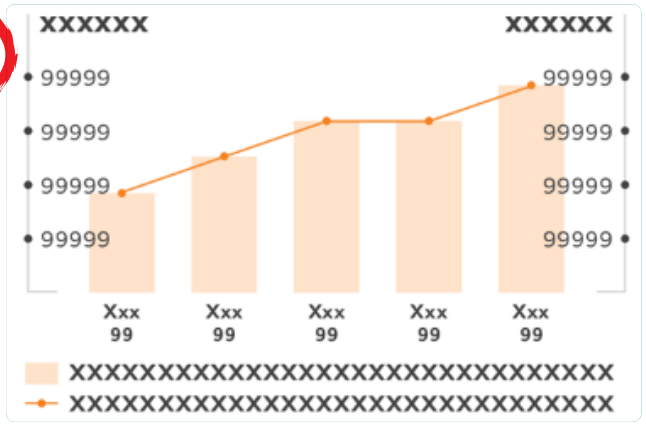
So if you don't think solar is right for you, because your not at home during the day, then think again. A considerable amount of power is used when your not at home, running appliances such as your fridge, hot water system and freazer. Not to mention all the power you use on the weekends running your air conditioner and washing machine. Over two million Australian homes have solar installed, so why dont you join them.

YOUR USAGE BREAKDOWN

Average cost per day	$1.23
Average daily usage	23.45 kWh
Same time last year	12.34 kWh

Your indicative greenhouse gas emissions

This bill	X.X tonnes
Same time last year	X.X tonnes
Saved with GreenPower	N/A



2-ton Air Conditioner
2160 kWh/m*

Fridge
360 kWh/m*

Hot Water System
570 kWh/m*

Pool Filter Motor
540 kWh/m*

*average use per month

Clean Energy Council Findings

Why is Quality so important when buying solar?

Below we've collected some reasons why installing a high quality system is so important. These findings are not our own, but from Choice Consumer Group, The Clean Energy Council & Electrical Safety Victoria. We hope this helps you understand why quality is so important when getting solar installed at your home or business.

Clean Energy Council

In an audit by The Clean Energy Council, an industry association representing Australia's clean energy sector, they report the quality of installation has declined. Their findings are below:

- Only 7% of systems were of a high quality
- 29% required attention or were substandard

www.cleanenergycouncil.org.au

Energy Safe Victoria

Independent safety and technical regulator Energy Safe Victoria also had similar findings in an audit they commissioned in which 1-in-3 systems were below basic standard, stating:

- 21% were non-compliant with standards
- 11% had serious safety concerns

www.esv.vic.gov.au

What was the average size system installed?

- Most systems installed were below 3.0kW's
- Larger systems have gained in popularity in recent years.
- The majority of systems installed generate less than 20kWh per day.
- 20kWh per day is often not enough to power your house.

How much did people pay for their solar system?

On average, people paid $8783 to buy and install their solar PV system.

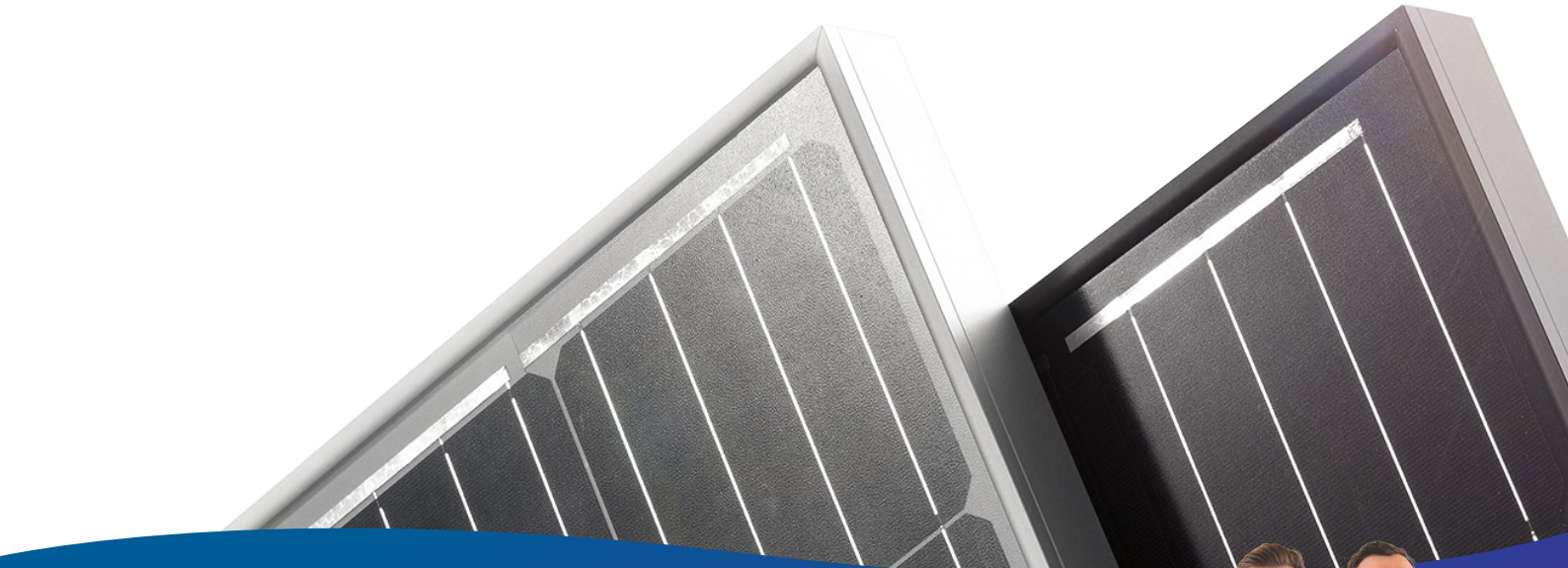
- 31% paid $5000 or less.
- 38% spent between $5001 and $10,000.
- 30% spent $10,001 or more.
- 15% of all owners surveyed said that their system had already paid for itself
- With an average payback period of three years and two months.

Mono vs Poly Panels

Solar panels are made up of a several solar cells sandwiched together in protective glass and a backing plate, the whole panel is then surrounded by a metal frame. The solar cells are mostly made of silicon, and are produced in two different forms to give monocrystalline and multicrystalline (or polycrystalline) panels. Both panel types perform well in the Australian climate with mono panels being know for slightly better efficiency and multi being know to before better in higher temperatures.

“It doesn’t really matter if you buy mono or multi, what is important that you buy good module brand that will last 25+ years on your roof.”

- Tom Hall *Solar Broker*



Hybrid Inverters

When looking at inverter just like panels there are a range of brands you can go for and they generally do vary in quality. Your inverter is generally the first thing that will fail on your solar system, so it is important to make sure you get at least a ten year warranty backed by reputable manufacture.

When looking to go solar it is important to think about where you will place your inverter. Inverters should not be stowed in direct sunlight as they do not perform well in high temperatures, they should be place in a garage or under a carport for protection.

If you are considering getting batteries in the near future but don't want to invest right now, you can go for a battery ready inverter, otherwise known as a hybrid inverter which allows you to plug batteries in a later date without having to replace the inverter unit. This is a fantastic tips to future proof your solar investment.

Solar Installer

When looking for an installer the most important thing is to make sure they are Clean Energy Accredited. This is important as theses installers have been trained in how to install a system safely and are eligible to claim the STC rebates.

Tin Roof

Tin roof feet are quite simple to install. The installer will remove a screw from your roof and replace it with a longer screw, fixing the aluminium L shaped bracket to the roof. It is pretty standard for the kits to come with rubber to separate the aluminium and the tin or colorbond.

Tiled Roof

Tiled roof feet are a little more difficult to install. The brackets are attached underneath the tiles and are screwed down onto the battens or trusses. In most applications, the installers will need to remove tiles to screw down the feet and then slot the tile back into place.

Slate Roof

Slate roof feet are the same feet as the tin roof feet. To attach them to the roof, the installers need to drill a hole into the slate using a special drill bit so that the slate tile does not crack. Like standard tile roofs, there will normally be an extra fee as it takes longer to install.

4 easy steps to get your solar installed

Step 01

We qualify if solar is right for you & makes financial sense.

Step 02

We design your solar system and organise quotes.

Step 03

Send system design & walk you through the facts and figures

Step 04

We organise the paperwork & finance application & connect you with the recommended installer

HOW DOES OUR FREE SERVICE WORK?

01

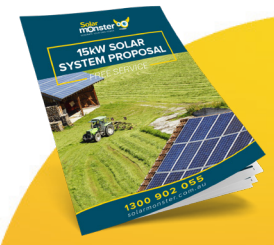
Compare Your Electricity Rates

Our Electricity Brokers will compare rates you're currently paying with our partners. Endeavouring to beat your rates and save you money. We will provide free quotes via email.

02

Check Electricity Tariff

Our Electricity Brokers will assess your tariffs from the national metering system & endeavor to find you any solutions if an electricity tariff change would be financially beneficial.



03

Solar Quotes

Our Electricity Brokers will calculate your energy usage and then provide a solar solution that could substantially reduce your electricity bill. We will also provide a full financial breakdown on your return on investment.

Meet Our Brokers

Cory Mcgown
Broker

Jack Cockburn
Broker

Tom Hall
Broker

Aidan Hodder
Broker

So why don't you let our specialist Solar Brokers organise a solar solution for your home or business. Solar does makes both economic & environmental cents!

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Any More Questions?
Call Us Now
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**Terms apply, we do not compare all solar companies only our partners. solarmonster.com.au/terms-and-conditions*