

The Easiest 9-Step Guide To Help You Go *Solar in Australia*



➤ The Easiest 9-Step Solar Panel Buyer's Guide for Australia

As an Australian resident, you've been hearing about the benefits of going solar from almost everyone you know.

It's tempting, right?

But here's the thing: solar power can cost a lot of money upfront, and you don't spend that kind of money every day.

Navigating this decision can be overwhelming, especially with a barrage of salespeople promoting various brands and solutions.

I've been there too.

That's why we made this super-simple 9-step solar guide. This Solar buyer guide has everything you need to know before you switch to solar power in Australia.

➤ Chapter 1: Is Going Solar Worth It?

To find this answer, let's check out some facts first.



Lots of Sunshine:

- Australia receives **58 million PJ** of solar radiation each year.
- That's over 10,000 times more than the nation's energy use.
- Going solar means harnessing this abundant and free resource.



More Solar Panels:

- In 2023, the total number of solar panel installations reached **3.414 million**.
- A 36% increase from 2.5 million in 2020.



Higher Electricity Bills:

- South Australians saw a **9.1% electricity bill** increase from 2021 to 2022.
- Going solar can save you money as prices rise.



Cheaper in the Future:

- Experts predict solar power will become one of the cheapest ways to generate electricity.
- Ongoing technological advancements make going solar a smart financial choice.



Sell Your Home Faster:

- Homes with solar panels sell 20% faster, according to the US National Renewable Energy Laboratory.
- Going solar can speed up your home's sales.



Eco-Friendly:

- Solar power is clean and environmentally friendly.
- Over 25 years, a 6 kW solar system can offset 357,731 kilograms of CO₂ (a major greenhouse gas), 457 kilograms of sulphur dioxide (contributor to acid rain), and 30 kilograms of asthma-triggering particulates.
- Australia's goal of **net-zero emissions by 2050** makes solar power even more essential.

In Summary: If you're considering solar, now is the perfect time to make the switch!

➤ Chapter 2: Is Solar Right for Your Home?

Here's a quick checklist to see if your home is a good candidate for solar:

- Do you own your home and have control over your roof space?
- Does a portion of your roof face north, west, or east (in the Southern Hemisphere), or south, west, or east (in the Northern Hemisphere)?
- Is this area mostly unshaded throughout the day for most of the year?
- Do you have enough unshaded space to accommodate at least 8 solar panels (approximately 12 square meters or 130 square feet)?



If you answered "yes" to these questions, your home likely has the potential for a productive solar system. However, some additional factors may influence installation feasibility and cost.

For instance, in the Southern Hemisphere, a north-facing roof optimizes solar production.

East or west-facing roofs can result in about a 15% to 20% decrease in daily solar output.

While not ideal, it's achievable, especially if you oversize the inverter.

➤ Chapter 3: Getting Started with Solar Energy

Before diving into the world of solar power, it's crucial to grasp what "Going Solar" truly means. This chapter of the solar buyer guide will cover the same.

The internet is a treasure trove of solar energy information, offering insights on solar buying guide specific to the state's energy savings, rebates, and more.

- Forbes' "[Ultimate Guide To Buying Solar Panels](#)" offers an informative overview of top solar brands and essential buying tips.
- For reviews of solar Solar Retailers., visit www.productreview.com.au.
- Additionally, the [Clean Energy Council](#) offers comprehensive free guides that cover all aspects of solar installation.
- Energy.gov.au is another invaluable resource for information on solar PV and batteries.

Furthermore, it's imperative to research the specific solar panel installation requirements of your local council.

➤ Chapter 4: Assessing Your Solar Energy Needs

Heard conflicting advice about your solar system?

Let's clear up the confusion.

Understand your needs, make an informed choice, and avoid sales pressure.

This chapter of the solar panel buyers guide simplifies it all.

➤ Step 1: Evaluating Your Energy Usage

Let's start with the basics.

To determine the right solar system for your needs, you need to know how much electricity your household consumes.

You'll find this information on your electricity bill, which usually outlines your average daily usage in kilowatt hours (kWh).

➤ Step 2: Checking Your Roof's Suitability

Now, look up at your roof. Is it suitable for solar panel installation?

Solar panels can last for decades, typically 30 to 35 years. If your roof is within five to ten years of needing replacement, it's a smart move to have a professional assess its condition.

Also, consider the available roof space on your property.

This space affects the size of the solar panel system installation. More space means you can install a bigger solar panel system.

Tip: Chat with your solar retailer about designing a system that maximizes your self-consumption.

➤ Step 3: Choosing the Right Solar System Components

Next, let's figure out what type of solar system you'll need. There are four main components to consider:

1. Solar Panels:

These are the workhorses of your solar system. They convert sunlight into electricity (DC).

There are different types, like

- **Monocrystalline Panels:**

Highly efficient single-crystal solar panels ideal for small roofs (Space-efficient).

- **Half-Cut Panels:**

Panels that minimize shading impact and perform well in less-than-ideal conditions (Energy loss reduction).

Recommended Brands

Trina, Jinko, SunPower, LG Solar, Canadian Solar.

Note: To learn more about solar panels and how they work, visit ***Solar Panel System 101: Everything You Need To Know***

2. Inverters:

Inverters convert the DC electricity generated by your panels into AC electricity for your home or the grid.

Two types to consider are String Inverters and Microinverters.

- **String Inverters:**

These convert DC energy from multiple solar panels connected in series to AC power.

- **Microinverters:**

Mounted on each solar panel, they convert the DC energy from each panel individually to AC power.

Recommended Brands

Solis, Growatt, Sofar, Fronius, Enphase Energy, SolarEdge.

Note: To learn more about solar panels and how they work, visit *Solar Panel System 101: Everything You Need To Know*

3. Racking (Mounting System):

Proper racking ensures secure and efficient panel installation on your roof.

Recommended Brands

Mibet, Goomax, IronRidge, Unirac, Renusol

4. Consumption Monitor:

These keep tabs on your energy production and usage in real time, helping you optimize your energy use

Recommended Brands

Enphase Enlighten, SolarEdge Monitoring.

Remember, the best brands may vary depending on your location and specific needs, so consult with our friendly sales staff for personalised recommendations



➤ Step 4: Do You Need a Solar Storage Battery?

A solar battery is useful to store excess energy generated by your solar panels for later use.

Think about whether a solar storage battery is necessary for your energy consumption.



Systems with batteries usually have a different inverter – and when adding a battery to an existing system it's not uncommon to replace the inverter.

You might need one if:

- You want to use **solar energy at night**.
- You live in a **remote area** without a central utility grid.
- You aim to use stored energy to **keep your rates low**.
- You want your solar system to work **during power outages**.
- You have **excess energy** and want to use it later.

Recommended Brands

**Tesla Powerwall, Sonnen, Redback,
Alphaess**

Chapter 4: Solar Panel Buying Guide

When you're getting ready to install solar panels, it's essential to figure out how many panels you need and why.

While your solar system provider can help, having a good grasp beforehand can make a big difference.

Solar panels come in various sizes, with a standard size of around 1.7m x 1.0m, but they can vary based on materials and manufacturers.

Surprisingly, the size doesn't always match the panel's energy output. The panel's power is measured in watts, showing how much energy it can generate.

Most homes in Australia opt for a 6.6 kW solar system, which typically fits their needs. However, some are going for larger 10-13 kW systems nowadays.

The key is to align your solar system with your daily energy consumption.

Suppose you use around 15 kWh of electricity on a typical day but occasionally need 20 kWh.

In that case, adding more panels may not be the most cost-effective solution.

However, given the falling prices of solar panels, investing in a larger system might make sense.

Just keep in mind that there are maximum output limits to avail feed-in tariffs (payment for supplying surplus electricity to the grid), which your solar provider can explain based on your electricity connection type.

Quality is critical, both in individual cells and during panel assembly. Subpar assembly can lead to problems like microcracks in crystalline cells, which worsen with temperature changes or mishandling. To ensure panel quality, many solar companies use a tier system.

Tier 1 companies are known for their quality and reliability, while Tiers 2 and 3 consist of smaller or newer manufacturers.

You can also refer to the Clean Energy Council's list to guarantee that the panels meet Australian Standards, ensuring their quality and eligibility for rebates.

When purchasing solar panels, it's essential to consider several factors.

This checklist will help you make an informed decision:

- Check if the solar panels meet Australian and international standards.
- Review the product and performance warranties provided by the manufacturer.
- Update your home insurance policy to cover the solar panel system.

Chapter 5: How To Find A Good Solar Installer

No matter how much research you do, if you don't choose a good solar retailer, your entire investment can end up being wasted.

Take Wayne Minett, for example, an Australian resident who invested **\$12,000 in solar panels**.

Just two years later, he faced a string of problems with his system. It had been troublesome from the beginning, and when it eventually stopped working, he struggled to get help, especially since the company that installed it had gone out of business.

I'm sure you wouldn't want to find yourself in a similar situation. So, make sure you check off all the points mentioned in this checklist.

- Start by ensuring your installer is SAA Accredited Installer.
- Opt for a retailer with the capacity to offer competitive prices and top-notch customer service.
- Don't forget to ask for references and scrutinize their history, especially in residential installations.
- Independent sources like ProductReview.com.au can provide insights into customer satisfaction.
- Ensure the retailer can explain their approach to protecting your home during installation. Always verify their electrical licenses as a sign of expertise.
- Investigate multiple review websites, with a focus on 1-star reviews, which reveal a company's true character.
- Consistent ratings across platforms indicate reliability.
- Understand product and performance warranties. Product warranties cover the panels themselves, while performance warranties ensure a minimum power output over time.

And don't forget that regular professional inspections and maintenance are crucial for system safety and optimal performance.

Chapter 6: Finances and Rebates

When you decide to go solar, the first financial choice you'll face is whether to lease or own the solar panels.

- **Ownership:** If you choose to own the solar panels, you'll enjoy better returns and more flexibility. This option involves a larger initial investment, but it pays off over time with greater savings and control.

Buying a solar power system with cash can be a smart move. It provides a tax-free and reliable return, which often outperforms interest rates from banks or government bonds.

However, not everyone has the cash readily available for such an investment.

That's where solar financing comes in.

Many solar retailers offer financing options, including "no-interest" deals. While these may sound appealing, it's essential to be cautious. "No-interest" deals often hide costs that are ultimately paid by you.

Here's a tip: When you see a deal that claims, 'no interest,' consider shopping around for a low-interest finance provider instead. These deals can often provide a better overall package without hidden fees.

Let's learn more about Federal Government Incentives:

- **Small-Scale Technology Certificates (STCs):**

The Small-scale Renewable Energy Scheme (SRES) in Australia provides financial incentives for eligible small-scale renewable energy systems.

These incentives are in the form of Small-scale Technology Certificates (STCs), which can be created and sold to help offset the upfront cost of installing these systems.

The number of STCs that a small-scale renewable energy system is eligible for depends on several factors:

1. Geographical Location: Australia is divided into different zones based on its climate. The number of STCs is determined by the zone in which the system is installed. Zones are categorized as Zone 1 (least sun), Zone 2, and Zone 3 (most sun). The more sun a location receives, the higher the number of STCs.

2. Installation Date: The number of STCs available may decrease over time as the government seeks to gradually phase out this incentive scheme. The earlier the system is installed, the more STCs it is likely to be eligible for.

3. Amount of Electricity Generated: The number of STCs is also influenced by the amount of electricity the small-scale renewable energy system is expected to generate over a specified period, usually in megawatt hours (MWh).

To calculate the number of STCs for a specific small-scale renewable energy system, you can use the [Small Generation Unit STC Calculator](#) provided by the Clean Energy Regulator in Australia. This online calculator takes into account the system's details, such as its location, installation date, and expected electricity generation, to estimate the number of STCs that can be created. You can access the calculator on the Clean Energy Regulator's website or through their online portal.

Keep in mind that the specifics of the [SRES program](#), including the calculation method and incentive rates, may change over time, so it's essential to refer to the latest information and guidelines provided by the Clean Energy Regulator or relevant government authorities for the most up-to-date and accurate calculations.

Chapter 7: Grid Connection Requirements

When connecting your solar system, your electricity distributor assesses if the local grid can handle it, with technical requirements varying based on system size and grid characteristics.

So, a [grid connection application](#) must be submitted to your electricity distributor.

This application allows them to assess whether the local electricity network can support your new solar system effectively.

You can also visit the [Clean Energy Council website](#) to access the required documents and guidelines for your solar panel installation.

Dealing with permits can be a hassle, so opt for a solar retailer that manages the permit process for you.

Chapter 8: Solar Installation

Finally, the day arrives for the solar technicians to work their magic on your roof. Here's what you need to know:

- **Identify Your Lead Technician:** Make sure to know who your designated lead technician is. This person will be your main point of contact for any questions or concerns.
- **Verify Clean Energy Council Accreditation:** Before installation begins, check the technician's Clean Energy Council accreditation using their digital ID card. It should include their photo, accreditation number, expiry date, and the types of accreditations they hold.
- **Installation Timeframe:** Typically, installations take 1–3 days, but Sunboost often completes them in just 1 day. In rare cases, a highly skilled provider might take up to 5 days.
- **Post-Installation Instructions:** After installation, your solar technician will provide you with a manual and guide you on operating your new system. Get ready to enjoy energy savings, especially once your retailer installs the smart meter.

Chapter 9: Start Saving

After the installation of your solar system, it will be linked to your utility grid through an interconnection, initiating electricity generation. This process generally involves three key steps:

Inspections: Local authorities may inspect your installation for safety and compliance.

Retailer Notification: Your retailer is informed of the project's completion and adjusts your meter accordingly.

Grid Connection Confirmation: Your retailer confirms your connection, allowing you to start using solar power.

A reputable solar provider will handle these steps seamlessly, making the process hassle-free for you.

Conclusion: Time To Begin The Solar Hunt

You've done it!

You've followed our easy 9-step guide to getting solar energy.

Now it's time to put your knowledge to use.

If you have any questions or need help, we're here for you. Just ask!

And if you're ready to make the switch to solar, don't hesitate to get a quote from Sunboost, Australia's solar leader.

Call Sunboost today on

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