



## Frequently asked questions

### **Costs, financial benefits and incentives:**

#### **How much does a solar electric system cost?**

The cost of your solar investment will vary greatly depending on the size of the system, your location and available incentives. To find out what a Sunrise Solar system will do to your electric bill, it is best that you call 1300 917 926 for a free professional consultation. Be very weary of TV advertisements or web offers – every families usage is different and you don't want to purchase a lemon just because it appears to be low cost!

#### **What incentives are available?**

In Victoria you are eligible for STC's. STCs, or Small-scale Technology Certificates, are a commodity that you can use for trade. You can obtain these certificates when you purchase a renewable energy system.

Currently, when you install solar power, you can claim STCs which are taken up as part of your out of pocket expenses in the quote.

The amount of electricity that is generated or displaced by your system will determine the number of STCs assigned to you

For more information talk to Sunrise Solar on **1300 917 926**

#### **Can my electric bill really be \$0?**

Some solar systems produce more electricity than is used each month, which over the year will contribute to a reduction of up to 70%. Also seasons will affect how much energy your system can produce for example in the winter in Victoria we get less sunlight hours which means some of your usage will still need to come off the grid however in the summer you will produce more than you use. Remember though there is still a minimal connection fee to remain connected to the electrical grid. (We can assist you in answering these questions during our consultation and remember to have a recent energy bill available!)

#### **What incentives are available to me?**

#### **Do I get paid for my extra energy production?**

Currently in Victoria any energy you feed back onto the grid (is governed by a Feed-In Tariff or FIT) which allows you to feed any excess energy you don't use back onto the grid. In Victoria it is legislated to be a minimum of 11.3 cents per KW/H.

#### **I don't plan on being in my home for 25 years. Why would I add solar?**

These days we change homes and businesses on a regular basis however this is life and should not impact your solar decision. A solar system will save you money today and even pay for itself in as little as five to seven years. Even if you move before your solar investment is completely paid off, market feedback shows the cost will likely be returned in added value to your home.

And with Solar Power it may provide you with an advantage when it comes to selling the property over one without. Who doesn't want a home with a guaranteed low electric bill?

## System design and performance

### **What is the difference between system power output and system energy production?**

The AC power output of a solar array, measured in watts (W) or kilowatts (kW), is typically given on inverter output displays or remote monitoring sites. It is an instantaneous measurement, determined by the rated DC power output of the solar array, inverter efficiency and system losses, and is proportional to solar irradiance on the array.

The AC energy production of a solar array, measured in kilowatt-hours (kWh), is measured over periods of months and years to compare with sizing and long-term performance expectations. Solar kWh energy production is also typically given on inverter output displays or remote monitoring sites and can be compared with a household.

Note that for grid-connected PV (Photo Voltaic Solar Panel) systems, power generated by the solar PV system will first offset any electrical loads in the house, reducing the amount of kilowatt-hours purchased from the utility.

### **How many solar panels do I need to offset my electricity consumption?**

The number of solar panels required will depend on how much electricity you consume, what percentage of this electricity is offset, and the amount of sunlight at your site. A great resource for determining system size, annual production, and providing a rough estimate of system cost and savings for your given location to talk with one of our Solar Energy Professionals. We will take into consideration: Your roof position, amount of sunlight across the year in your suburb, how much energy you consume each month and take a look at the activities in your home for example dishwashers, clothes washing etc. why – because if you can cycle them during sunlight its better than running them at night when you are on the grid or running the house from your batteries (if fitted).

### **Why do my solar panels rarely produce their rated power output? Is there a problem with my PV system?**

Solar panels will typically operate at 75-85% of their DC power rating, even in weather conditions that might be considered “ideal”. The power rating of a solar panel is a DC rating measured under factory conditions (cell temperature of 25°C and “perfect sun” conditions of 1000 W/m<sup>2</sup>). The power output reading seen on an inverter is an AC rating; factors such as DC to AC conversion losses, wiring losses, temperature losses, losses due to shading and dust build-up, and losses due to non-optimal tilt and orientation of the array will affect the instantaneous power output and cumulative energy production of the solar array.

Important to understand that there are many brands of Solar Panels, Inverters and Batteries on the market and their outputs and specifications vary a lot. This is why it is critical that you work with solar providers who are CEC certified and can provide you with Professional Guidance. Bearing in mind in some instances Solar Energy may not be right for you!

## Installation and maintenance

### **I'm interested in installing solar on my home. What's the first step?**

The first thing to do it to locate your most recent power bill and if possible find them for a full 12 months. In addition take a look around your home and note the KW/Year consumption on major appliances such as your fridges, washing machine, dish washer etc. These days they have a star rating label and just under the stars is the information you need. Also if you have a pool and solar

heating make a note as to when they run (if possible) as this will factor in the final solution. The main thing is don't get overwhelmed as we can assist you gather this during our free consultation.

### **Can I install solar panels myself?**

The short answer is NO. The process requires both licensed electrical and roofing skills to ensure the solar power system is safe and optimally designed for 25+ years of production.

### **How does a solar system affect my roof integrity?**

With proper design and installation following industry best practices, your roof should maintain all its pre-solar integrity. Sunrise Solar audits and trains all our Authorized Installers on these best practices so that you can rest easy knowing that your roof will be okay. Be sure to ask any installer about any guarantees they offer on their installation quality.

### **Is any maintenance needed for my solar PV system? How often should solar panels be cleaned?**

With limited maintenance, your solar system will operate at peak performance for many years. Cleaning intervals will vary depending on site-specific factors such as annual rainfall, roof tilt (some arrays mounted at steep tilt angles in locations with hard rains will somewhat self-clean), and proximity of factors causing dust or debris on the array (such as trees or a frequently-travelled dirt road). It is best to consult your solar installer for a recommended cleaning schedule. Sunrise Solar recommends annual servicing to inspect electrical and mechanical connections for cleanliness, tightness, possible damage, and to ensure that the PV system is operating properly. Please see our [Cleaning and Maintenance guide](#) for more information.

### **How do solar systems fair in extreme weather conditions?**

Brands vary and this is why you need to make sure you have been given the right advice. Tolerance to wind, rain and hail varies and the installation will play a part in this. In locations with high wind and snow/hail loads, your installer must be accredited and work with a licensed engineer to properly design the solar panel mounting system.

## **Warranty**

### **Does the solar panel warranty transfer with the sale of the home or property?**

Yes. The solar panel warranty is linked to the serial number of the solar panel itself, not the original purchaser, so there is no need to transfer the warranty when buying or selling a home. However, in order for the solar panel warranty to be valid, the solar panels must be installed by a Sunrise Solar installation specialist. When buying or selling a home or property. If you are purchasing an existing home with Solar Power installed, Sunrise Solar has a service available to verify that the system was installed properly.

### **I just purchased a system with Sunrise Solar - How do I register the solar panel warranty?**

We will register all the equipment supplied with the manufacturers for you and place a reference sticker with our 1300 number on each piece of equipment on the ground. We do supply you with a detailed warranty folder which includes serial numbers for your solar panel, inverter and battery (if fitted) for use in the unlikely event of a future warranty claim. In addition because warranty records can be lost, we keep a copy electronically on the cloud against your name and address and in the event of a future warranty claim a call to our 1300 number will allow us to retrieve all the records for you.

### **Where can I find a copy of the warranty?**

Current solar panel warranties are provided to you on the day of commissioning and an electronic copy is available by calling our 1300 number and requesting a copy.

### **I'm concerned that there is a problem with my solar panels. What should I do?**

If you suspect that there's a problem with your solar system, the best first step is to contact Sunrise Solar. We are the most qualified to troubleshoot the Solar System and contact the manufacturer of any equipment that may be malfunctioning. You can contact Sunrise Solar on **1300 917 926** or email to [www.sunriesolar.net.au/support](http://www.sunriesolar.net.au/support).

## **Off-grid and hybrid applications**

### **Will my system still generate power during a blackout?**

If you included a battery in your solar design or have added one to an existing system then it will automatically recognise the mains have failed and continue providing energy during a grid black out.

Again this is providing it has been designed and set up correctly. From experience we cannot emphasise the importance of making sure you use a Professional Supplier and Installation company such as Sunrise Solar to provide you with the best solution and service.

We are always happy to answer questions:

[www.sunriesolar.net.au](http://www.sunriesolar.net.au)

[enquiries@sunriesolar.net.au](mailto:enquiries@sunriesolar.net.au)

1300 917 926