

FREQUENTLY ASKED QUESTIONS ABOUT

SOLAR POWER



What is the difference between a solar hot water system and a solar power system?

With solar hot water, heat is captured directly from the sun through collectors installed on the roof and is transferred to the fluid circulating inside. Water is then stored in an insulated tank for future use.

Solar power (PV) converts light from the sun into electricity. The amount generated depends on the number of panels and size of the inverter. Any excess power can be sold back into the grid or stored in a battery, while additional electricity can be bought from the grid when the sun is not shining.

Should I get both?

By getting both solar hot water and solar power you can take advantage of both technologies, especially when roof space is limited.

How does a solar power system work?

Solar power systems use photovoltaic (PV) cells to produce electricity. When sunlight hits a solar panel, direct current (DC) electricity is produced. This is converted into 240V alternating current (AC) using an inverter. This electricity can be used immediately within the home or fed into a battery or the National Electricity Grid (grid).

What is the National Electricity Grid?

The National Electricity Grid is the network of wires that delivers electricity from generators to homes and businesses around Australia. When you install a solar power system you become a generator of clean renewable energy.

What is an inverter?

An inverter is an electronic device that converts the DC power generated by the solar panels into AC power at the correct voltage for supply to the grid. It also provides equipment protection and safety features.

What are the benefits of using a solar power system?

Electricity generated by a solar power system is used to offset or replace the power that would normally be purchased from your electricity supplier — thereby reducing your power bills and saving money. This solar-generated energy also avoids the harmful pollution caused by generating electricity from the burning of fossil fuels.

How about batteries?

Rechargeable lithium-ion batteries provide energy storage for solar self-consumption, load shifting, and backup power. They charge during the day using electricity generated from solar panels or from the grid when utility rates are low. The stored electricity can then be used to power your home in the evening when the sun is not shining or when electricity rates are higher.

Solahart's experienced dealers and accredited installers are perfectly positioned to provide expert advice on Battery Storage systems and recommend the right configuration for your situation. Whether you're looking to combine a battery with a new or existing Solahart Solar Power system, by booking a free Solahart In-Home Solar Assessment, we'll show you the best way to reduce your energy costs and lead a more sustainable life.

How much can I save on my bills?

The savings on offer are very attractive and will go on for years. The amount you save will depend on your household's current electricity usage, the size of the solar system being installed, orientation and inclination of the solar panels and the feed-in tariff offered by your electricity supplier. Your local Solahart consultant will assess these factors and give you an estimate of your savings.

Will I still need mains electricity?

Yes, because the inverter will only produce power when it is connected to the grid supply.

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Is the position on the roof important?

Solar power systems work best on an unshaded north facing roof. It is also possible to install a solar power system on an east or west facing roof, however this will reduce the performance of the system.

Can I increase the size of my system in the future?

If you have sufficient roof space and additional capacity in the inverter you could increase the size of your system. If room permits, you could add a second system to your roof.

What happens at night or on cloudy days?

Solar power systems only produce electricity when they are exposed to sunlight; they do not produce electricity after dark. At night you will use electricity from the electricity grid or battery, if one is available. The performance of the solar power system is affected by cloud. When there is not enough light to produce electricity, you will use electricity from the grid, or from a battery.

What happens during a blackout?

In the event of a blackout, your solar power system will stop producing electricity. This safety measure is mandatory and has been put in place to protect anyone working on the blacked-out grid system. As soon as the grid is back online, your solar system will restart automatically. If you have a battery with back-up capabilities you will be able to provide power to some appliances.

What sort of maintenance is required?

The solar panels selected by Solahart are manufactured to high quality standards and will require minimal maintenance for many years, other than keeping their surface clean.

How reliable are solar power systems?

Solar panel technology has improved significantly over the past few years. Many manufacturers that were selling panels of questionable quality are no longer in business.

Solahart only uses PV components of the highest quality — including the Solahart Silhouette panel which is manufactured in Korea.

What is the payback period?

Payback periods may vary depending on the applicable feed-in tariff, householder electricity usage profile and size and cost of the PV system installed. Your Solahart dealer will be able to provide an estimate of payback period for your system.

What warranty does Solahart offer?

Solahart offers Australian Warranties on all products. These include a 25-year product warranty on Solahart Silhouette panels, a conditional 12-year warranty on Solahart SunCell panels, and up to 12 years warranty on inverters used on Solahart systems. For full warranty details refer to the Owner's Guide and Installation Instructions.

What are the current government incentives to switch to solar?

What are Small-scale Technology Certificates (STCs)?

STCs are part of the government's commitment to renewable energy. STCs are created when you install and commission qualifying solar hot water, solar/wind power systems or residential solar power systems.

Each STC represents 1 MWh (Megawatt hour) of energy produced. The number of STCs you are eligible for varies depending on the size of the system you install and your location.

STCs have a market value (which may vary over time) and are tradable; they can be sold, or used to get a discount or cash. Solahart offers an up front discount on the price of a solar power system in return for the STCs.

Why do STCs vary across the country?

The number of STCs created for a system will depend on the amount of renewable energy the system generates. In areas with higher solar radiation there is greater opportunity to generate electrical power and so the number of STCs is greater.

Are there any other financial incentives?

Individual electricity providers may offer feed-in tariffs for the electricity your solar power system generates and feeds back into the grid.

What is a feed-in tariff?

A feed-in tariff is the rate paid by the electrical utility for each kilowatt-hour of electricity your solar power system feeds into the grid.