Consumer's guide to buying a solar power system.

So you're interested in switching on to solar power, Congratulations, you'll save cash and reduce greenhouse gas emissions!

If it sounds too good to be true, it probably is

Shopping for a solar power system can be an exciting time for many people, but as with any substantial investment, you'll need to be careful who you deal with. Like in any industry, the solar power sector has its share of unscrupulous parties who have little interest in the technology, environmental benefits and your needs. They are only chasing your money - and they'll be ruthless in doing so.

Basically, the old saying "if a deal sounds too good to be true, it most likely is" applies very much to purchasing a solar power system.

Avoid becoming a solar horror story

We've been in the solar power industry for some years and during that time, we've seen and heard of countless horror stories from customers regarding some vendors; everything from leaking roofs after installations have been performed, little or no after sales service, people not receiving product as advertised and hidden costs.

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decided to publish some of the common tricks, traps, cons and scams so you can avoid them.

Am I chasing your business? Of course, But as a Local supplier and Installer I am truly passionate about solar energy, Customer service, Quality product and value for money. I believe in adhering to the highest ethical standards

"Free" or very cheap solar power systems

This definitely falls in the "if it sounds too good to be true, it probably is" category. The offer of a free system should be treated with a great deal of suspicion. In these arrangements, the system will be offered for a low price after rebates, on the provision that the rebate money is signed over to the supplier.

The catch usually is the supplier will only install the solar panels and inverter, but will not connect the system into the mains power supply - a crucial aspect. It is then the responsibility of the homeowner to find someone suitably qualified to make the connection, arrange the appropriate forms themselves with their electricity retailer and then submit a completed installation report - all very expensive, time consuming and often frustrating for someone not familiar with how the program works.

Beware of fast talking sales people

Like shopping for a new car, beware of over- exuberance on a sales person's part. In some instances, this may be just genuine passion bubbling over, but in others, the sales person won't understand what they are selling; instead focusing on hype to get you to sign on the dotted line. If a question hasn't been answered properly or has been deflected, pursue a satisfactory response.

High pressure tactics

Every company uses terms like "deal ending soon", "hurry before stocks run out" - it's just the accepted language of marketing. However, some companies upon visiting your home will say things like the offer they are touting is ending the same day!

Ethical sales people will not place you under this type of pressure given the size of the investment, particularly if this is an initial enquiry and they've established that you're not overly familiar with solar power concepts. Demand time to think things over and research. Better still, if you come under this sort of pressure, see it as an indication of what the company is like and avoid them altogether.

Compare apples to apples

Package deals are a great way to save cash, but not all packages are created equal. For example, a company might use top quality solar panels, but skimp on the inverter, wire and frame quality in the hope that the panel brand name will dazzle you and you'll ignore the other components.

When comparing packages, do so on a component by component basis - and ask questions about why X brand is better than Y brand where there are differences.

Grey market/counterfeit products

In extreme cases, counterfeit or cheaper "no-name" products will be used. This can not only prove more costly as the equipment won't be eligible for rebates, but the equipment may not perform as well as established brands and present fire/electrocution hazards through shoddy workmanship. Look for proper certifications. The 'CE Mark' from Europe alone is worthless in Australia for solar panels as it's a self-certification. In the case of solar panels, the safety standard IEC61730 apply, the panel must be classified as Class A modules as well as complying with either IEC61215 or IEC61646, depending on the module technology.

Low quality components

The IEC standards mentioned above were recently enhanced to ensure even less leeway in performance and quality. However, Australia delayed the certification change until June 1, 2009. The result is poorer quality panels not meeting standards in Europe were being dumped in large quantities in Australia and offered at very low prices as a part of full systems. Some of these panels may still be on offer.

Additionally, while most panels will perform as rated in perfect conditions, poor quality panel performance will drop off dramatically in marginal conditions. "No name" panels may also use poor quality sealants that will do the job for the first couple of years, but then after that degrade to the point where moisture enters the panel - and there is no easy fix for that situation.

An item often not closely scrutinised in a solar power system package is the inverter. An inverter is the device than converts DC electricity from the panels into AC electricity suitable for use in your home. Sometimes a package might have top brand solar panels, but may skimp on the inverter quality in order to maintain an attractive price point. A low quality inverter will be inefficient and may have a shorter lifespan. Being an expensive item to replace, be sure a good quality inverter is included in your solar power system.

A good place for consumers to start when offered a package is to ask for the brand name for each component and then to research the brand history on the Internet.

Certification of components and pre-certification installation

In order to claim rebates, all systems must contain certified components - that is, components certified in Australia. Some solar companies have been known to jump the gun; installing components that are yet to be certified, but supposedly will be "soon". This means the customer has a system that cannot be switched on until such time the certification comes through - a risky business.

System upgrades

It's important to use quality, well known components for issues aside from quality too - the ability to upgrade in the future as it can be difficult to mix and match solar panels. No-name solar panel brands may not be around when you wish to upgrade your system.

Warranty issues

Many solar panel and related component manufacturers have been established in China in the last couple of years. With the exception of very few such as Astronergy. Suntech and Solarfun, the products have not been thoroughly tested for Australia's conditions. While the warranty the new companies may offer can be the same duration as the more recognised brands; the warranty will be of little value if the company disappears.

Buy-back guarantees

Some companies offer a buy back guarantee if the system does not perform adequately - it's very different to a warranty that will replace the defective components or fix any installation issue - and often an inferior one.

For example, under a buy back guarantee, if a system should fail after a few years and a consumer asks for the money back, the buyback price is unlikely to include the cost of the rebate. This means that if the system should be removed from the building, then the home owner is in breach of rebate conditions and may have to hand any rebate back to the Government. Few people will want a few thousand dollars back and then have to pay even more back to the government - and the companies offering these sorts of buy back guarantees know that.

Inflated performance claims

Performance guidelines for solar power systems may be exaggerated. For example, a system of a specific size

may provide 50% of the average household's needs in Queensland, but it certainly won't in Hobart. A good company will perform a series of complex calculations and let you know exactly how much electricity you can expect to generate from your own roof before even thinking about presenting you with a contract. It's also important to note that a 1kW system will not produce that level of power. Performance is impacted by issues such as heat and through the normal operation of the inverter when the DC power from the solar panels is converted to AC power suitable for use in your home. However, some inverters are better than others in terms of conversion efficiency, just the same as some panels are better than others in relation to heat tolerance.

Shade tolerance claims

No solar panel is truly shade tolerant. It only takes shade covering a small area of a panel to reduce its performance dramatically. It simply does not pay to install panels on an area of roof where they will be in the shade during peak sun hours. Don't let anyone convince you otherwise as you'll just be wasting your money.

Installation timelines

Solar fever is sweeping the nation, so many providers are backlogged - so you can expect a wait of up to a few months for your system to be installed - but this is something you should be made aware of by the provider. If this detail is not mentioned anywhere, ensure you get it in writing; otherwise you may be waiting for 6 months or more. Details should also include what the supplier will do if the installation isn't completed by the appointed time.

Demand for high deposits

It's not uncommon to be asked for a deposit when ordering a solar power system. 10% is the industry norm, with the balance payable after installation. However, we've become aware of some companies demanding an 80% deposit and then telling consumers it will take 6 - 8 months for their system to be installed! So much can happen in 8 months - prices can move downwards making the price paid today not such a good deal when the system is finally installed, rebate legislation can change and new technology may become available. But probably the issue of most concern is: will the company still be around in 8 months?

What if currency exchange rates experience a similar situation to 2009 when the Australian dollar weakened dramatically and suddenly components cost 30% more. Will they be able to absorb that hike?

If the company becomes insolvent, what happens to your deposit? This scenario also begs the question - what type of cash flow issues do these companies already have that they need to demand so much money up front? Whatever the scenario, the demand for a high deposit coupled with a long lead up time until installation can be a very risky business for the consumer.

Don't let your house be a classroom

Even with any rebates or incentives, you're still investing a sizeable sum from your own pocket and your house is being modified. You should ensure that the right person is executing the installation.

In order to qualify for Solar Rebates, your solar power system has to be installed by a BCSE accredited installer. The emphasis here is on the physical installation, not just the sign off. Does the installer have full BCSE accreditation or is the work done by an electrician and later checked by a more qualified supervisor? If your installer is just learning, he or she will have a provisional number - starting with P. This means you are one of the early installations and your roof is his or her classroom. Ask for the installer's accreditation number and ask where he/she is normally located - you'll want someone local in case there's issues that need addressing.

In All cases South Coast Solar solutions uses fully accredited tradesmen for your installation. We guarantee the person who climbs onto your roof to perform the installation will be the same man who signs off on the paperwork!