



Solar panel systems

Sometimes homeowners expect to quickly pay off the cost of installing a solar photovoltaic (PV) system. While Western Australia has a great climate for residential solar PV systems, other factors affect the value of your system.

Residential solar PV systems can be grid-connected or stand-alone. The main components of a solar PV system are:

- solar panels, which convert sunlight into electricity; and
- an inverter, which converts the electrical power generated by the panels into a form suitable for your household appliances and feeding into the supply grid.

An optional Battery Energy Storage System (BESS) allows you to store the excess energy produced by solar panels. This can then be used at a later time to maximise electricity savings.

Who's who in the solar PV market

The residential solar PV market involves solar retailers, designers and installers. Sometimes one individual fills these roles, which is typically the case with small retail businesses run by a qualified designer/installer. Sometimes larger retail businesses subcontract out the solar PV system designs and/or installations to other parties.

Manufacturers of solar PV system components are generally based overseas.

Solar installers must be licensed electrical contractors and only licensed electricians may perform the necessary electrical work. When the solar installation is complete the electrical contractor must submit a Notice of Completion to your network operator (most likely Western Power or Horizon Power) or, for remote installations that are not grid-connected, to the Building and Energy Division of the Department of Mines, Industry Regulation and Safety (the department). The electrical contractor must also give you an Electrical Safety Certificate. These legal documents state the installation is complete, has been tested and is safe. Officers from the department inspect installations for compliance.

Do your research

We recommend doing the following before agreeing to buy a solar PV system:

- get more than one quote for the total cost;
- make sure your installer is accredited (see the list at www.cleanenergycouncil.org.au);
- if a retailer's words are influencing your decision, get this included in the contract;
- make sure the contract names the manufacturer(s) of your system components;
- understand the contract's terms and conditions;
- check whether you need to change your home insurance to cover the system; and
- read online reviews and feedback about the retailer.

Find out what local council approval is needed. Increasingly, local councils have staff on hand to help people make the best decisions on solar. Some councils may have a Heritage Protection Area which requires Development Approval.

If you live in a strata scheme, you will probably need to get approval from the strata company for external installations.

If renting or leasing, an agreement between the landlord and tenant before installation will help if disputes arise later.

When buying a house with solar panels already installed, seek warranty documentation and other paperwork from the seller to ensure the system was properly approved in the first place.

It's best to have a clear start and completion date in the contract and to get a receipt for any deposit paid. You can find out more in the Clean Energy Council (CEC) publication [Guide to installing solar for households](#).

Are they reputable?

The cheapest quote may not be the best one. A reputable business is more likely to help you if something goes wrong with your system. Your ability to claim against certain warranties and guarantees will be limited if the business shuts down.

By reading reviews in online forums, you may get a sense of whether past customers are happy with the solar panel systems provided by different businesses. Check for comments about whether the system is working well, if there have been any problems, and, if so, what the business did to fix the issues.

Be careful of interstate, online and mail-order solar retailers that never visit you or may be difficult to contact if there is a problem. A comprehensive, on-site solar and load analysis and in-person questioning can help you get an appropriate system.

Clean Energy Council accreditation

The CEC runs an accreditation program for designers and installers of renewable energy systems. A minimum level of training, assessment and professional development is required to be accredited. The CEC also maintains a list of 'Approved Solar Retailers' who:

- provide a five-year whole system warranty;
- use ethical sales practices;
- only use CEC accredited installers; and
- comply with the CEC code of conduct.

Solar Panel Validation (SPV) Initiative

Some businesses have installed substandard panels in residential systems. The Clean Energy Regulator's [SPV Initiative](#) makes it easy for installers to confirm your panels are backed by a manufacturer warranty, meet Australian Standards and are eligible for Commonwealth incentives. Participating retailers will be able to give you evidence your panels have been verified as genuine.

Be aware

Your home will first use the power the solar PV system can supply in that moment. If grid-connected, your system will send excess electricity into the grid. Your home will use power from the supply grid when your solar PV system cannot provide enough.

A good designer will consider your household's hourly electricity usage patterns. They will consider things such as how the angle of the panels works with the direction of the sun and try to match your patterns of being at home with when electricity is being generated. They should also consider any shading of your panels as this can affect the output of the whole system a lot.

You can also set certain appliances, such as pool pumps and dishwashers, to turn on when your solar PV system is likely to be generating electricity.

Extra costs to look out for include:

- an application to connect to the grid;
- meter change or reconfiguration;
- upgrades to your switchboard or cabling;
- battery storage;
- removal of trees or other shading; and
- site preparation needs (for example, condition of roof or ground).

Feed-in tariffs

A feed-in tariff is the payment you get for electricity you export to the supply grid from your solar PV system.

Feed-in tariffs are usually only available for solar systems up to a maximum size and vary based on where you live and your electricity retailer.

Feed-in tariffs are usually much lower than the rate you pay to buy the same amount of electricity. It might be cheaper overall to buy a solar PV system that will closely meet your daytime electricity needs instead of paying extra for a larger system to try and make money. Of course, this equation will change if the price of battery storage lowers or the feed-in tariff increases.

You can contact Energy Policy WA on (08) 6551 4600 or info@energy.wa.gov.au for more information on feed-in tariffs.

Warranties and guarantees

Solar PV panels generally have a performance warranty that can last up to 25 years, and panel material warranties and workmanship guarantees are generally for five to 10 years. The inverter and solar panels need to 'talk' to each other or the system will not function to its best capability. So if one part of the system fails, the other part may also need to be replaced, even though it might still be functional and have a long time before its warranty expires.

Under the Australian Consumer Law (ACL), a business' goods and services also come with a range of consumer guarantees which cannot be changed. Retailers must address failures to meet these guarantees, ensuring products are of acceptable quality and fit for purpose. Installers must use an acceptable level of care and skill and complete work within a reasonable time. You have the right to rely on the expertise of the retailer to ensure your system performs as promised. However, these guarantees do not last indefinitely.

Important information about contracts

Generally we recommend not paying a deposit of more than 10 per cent, but if the value of the contract is \$7,500 or greater, the *Home Building Contracts Act 1991* requires the contract to be in writing, the deposit to be a maximum of 6.5 per cent and any progress payments to only be for work actually performed or materials already supplied. You also have the right to a detailed invoice or receipt.

Under the ACL, any term or condition of a standard form contract a court finds 'unfair' will be void. If you find terms within a contract you do not understand, ask questions or seek independent advice.

Retailers who approach or call you at home without an invitation must provide a 10 business day cooling-off period on their agreements (contracts). They must not take any money or begin installation before this cooling-off period expires. There is more information about [unfair contract terms](#) and [unsolicited selling](#) on our website.

The Australian Competition and Consumer Commission's website also has information about [solar power agreements](#).

If something goes wrong

Your contract will generally be with the retailer, so they are responsible for resolving any issues. They must not require you to liaise with the manufacturer or installer to get help – that's the retailer's responsibility

Company gone out of business

If the solar retailer goes out of business you may need to approach the manufacturer or installer directly to make a claim or try to seek assistance from the company's external administrators. You can find out if a company has become insolvent via the [Australian Securities and Investments Commission](#) (ASIC) website or by phoning 1300 300 630.

Consumer Protection may also have information about the appointment of external administrators for insolvent companies.

If the manufacturer goes out of business it could be difficult, expensive or impossible to get a replacement part if ever needed.

Electrical safety

If you have a concern about the safety and technical compliance of your solar PV system, you can contact Building and Energy on 1300 489 099 or be.info@dmirs.wa.gov.au.

Complaints

You can contact Consumer Protection for advice on warranties, terms and conditions, the quality of the work provided or any overselling of benefits. If you have an issue with your solar PV system you cannot resolve with the retailer or manufacturer, you can [lodge a complaint](#) online.

The CEC deals with complaints involving a breach of the Accreditation Rules, Accreditation Code of Conduct or relevant Australian Standards. You can register a complaint via www.cleanenergycouncil.org.au/consumers.

Disclaimer – The information contained in this fact sheet is provided as general information and a guide only. It should not be relied upon as legal advice or as an accurate statement of the relevant legislation provisions. If you are uncertain as to your legal obligations, you should obtain independent legal advice.

Consumer Protection | Department of Mines, Industry Regulation and Safety

1300 304 054

8.30 am – 4.30 pm Mon, Tue, Wed and Fri
9.00 am – 4.30 pm Thurs
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Regional Offices

Goldfields/Esperance	(08) 9021 9494
Great Southern	(08) 9842 8366
Kimberley	(08) 9191 8400
Mid-West	(08) 9920 9800
North-West	(08) 9185 0900
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National Relay Service: 13 36 77

Translating and Interpreting Service (TIS): 13 14 50

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