

Going solar?

The process of installing a photovoltaic (PV) system

Why install a PV system?

Installing a PV system is a method of generating your own electricity by harnessing solar energy via panels placed on your roof. Installing a PV system is a big investment, but it has a number of benefits. You will:

- Produce clean, renewable energy;
- Reduce your power bills; and
- Reduce greenhouse gas emissions.

Offsetting the initial investment in a PV system

You can offset your investment by selling your **Small-Scale Technology Certificates (STCs)** to Power and Water. An STC is obtained for every 1 megawatt-hour (1000 kilowatt-hours) of electricity produced by small generation units unless the Solar Credits multiplier applies. STCs are sold on an open market so the price can vary. Power and Water's STC price is determined by reference to the spot price and current market conditions. Power and Water will pay the market price at the time you apply to sell us your STCs. Under the Federal Government's Solar Credits Scheme, the number of STCs for a home PV system is subject to a multiplier. Please note that your installer may also offer to purchase your STCs at the time of installation.

How much can you save on your electricity bill?

Your savings will depend on the size of the system, location and season. Keep in mind that shade and the system's position can impact its performance. Your Power and Water invoice will display the total electricity consumed and a credit for the electricity you have supplied to the grid.

As a guide, an average Territory home uses 9,000kWh per year. The most common PV system installed is 1.5kW, which can produce between 1,650 – 2,000kWh a year. Over the year you can save up to 20 per cent. Your PV system's output will vary from season to season.

How much can you earn?

Domestic customers

Flat buyback rate: 19.77 cents per kWh

Commercial customers

Standard flat rate: 23.00 cents per kWh

Commercial Time of Use customers

Peak (6am – 6pm): 29.43 cents per kWh

Off-peak (6pm – 6am): 16.57 cents per kWh

Rates are subject to change. Buyback rates are based on gross production. Rates are current as of 1 July 2011.

The Commercial 'Time of Use' buyback rate can only be used in conjunction with the Commercial 'Time of Use Consumption' tariff.

The Domestic 'Time of Use' tariff is not applicable. A customised rate will be negotiated for PV solar systems greater than 30 kVA and for customers consuming greater or equal to 750,000 kWh.

What are the PV fees?

The PV fees cover the cost of your special metering requirements and a new connection. Your fees may vary depending on your metering point setup and if additional inspections are required, ie the call out of a lines crew to attend your property.

- Single phase meter \$500.59
- Three phase meter \$644.14

Additional cost will be added to your next bill. To review additional fees and charges please view the pricing section of our website at powerwater.com.au.

PV fees must be paid when you submit your **Network Connection Agreement (Power Networks – Photovoltaic Inverter Network Connection Agreement)** and your **Power Purchase Agreement**.

First steps

We recommend a site inspection to confirm that your house is suitable for installation. The inspection will also provide an estimate of expected output and identify any additional work required to be undertaken as part of the installation, including any upgrade required to the meter panel or switchboard. You should speak to one or more accredited solar installers to arrange a site inspection and quote. A list of installers can be found at yellowpages.com.au

The installer will help you to lodge the application to connect to the power grid and the two agreements that need to be in place:

- **Network Connection Agreement**
(Power Networks – Photovoltaic Inverter Network Connection Agreement)
- **Power Purchase Agreement**

Please submit your two agreements at the beginning of the process. The equipment, including the inverter, must comply with current **Power and Water Requirements for Grid Connection of Photovoltaic Systems via Inverters** and **ESAA Australian Guidelines for Grid Connection of Energy Systems via Inverters**.

The system must be approved by a certified electrician.

Going solar?

Frequently asked questions

How long does it take?

After Power and Water receives the certificate of compliance from the installer it should take about six weeks, it may take up to eight weeks in remote communities. This depends on the installation being completed and the metering and connection point inspected by a Power and Water meter technician.

What is a Network Connection Agreement?

The **Network Connection Agreement** highlights the terms and conditions for the safe connection of your system to the local electricity network. An agreement must be in place for your solar power system to be connected to the network and feed power back into the electricity grid. This agreement enables Power and Water to ensure that your system meets all standards for safety purposes.

What is a Power Purchase Agreement?

The **Power Purchase Agreement** is an agreement between you, for the purchase of electricity generated by your system, and Power and Water to enable correct metering and billing standards to apply.

Is this revenue subject to tax?

Buyback revenue is not taxable for domestic customers so you won't be charged tax on the credit you earn from your PV system. Commercial customer's buyback revenue is taxable supply. Commercial customers receiving revenue from the electricity they produce must pay an additional amount equal to the GST rate applying to the taxable supply. This is general advice and you should seek independent tax advice re your situation.

Related fact sheets to help you go solar:

- PV application checklist
- Questions to ask your PV installer

How long is the agreement for?

The agreement will remain in force while you continue to live at the premises and remain a Power and Water Retail customer. Power and Water can terminate the agreement for safety reasons or you can terminate it when you leave the premises.

Will the solar system always be connected to the network grid?

The system may be disconnected at any time due to safety reasons. Details are in the **Requirements for Grid Connection of Photovoltaic Systems via Inverters**.

Why does the system lose power during power outages?

Your PV system has a safety switch, which is a device fitted to protect you, your family or business when an electrical fault occurs. The PV system will restart when mains power is restored.

Do new property owners need to negotiate new agreements for an existing system?

Yes. If a property is sold the existing agreements will become null and void. It is the responsibility of the new owners to contact Power and Water and set up a **Network Connection Agreement** and **Power Purchase Agreement**.

Why does the system installation need to comply with the NT Building Act?

When a PV system is installed on your roof, modifications are completed to your roof's structure. These modifications must comply with the standards listed in the **NT Building Act** ensuring the continued safety of your building. See the **Department of Lands and Planning's website** for more information.