

Grid Reversible Solar Electricity



How do solar electricity panels work ?

- Photovoltaic systems use cells, consisting of one or two layers of semi-conducting material, to convert solar radiation into electricity. The semi-conducting material is generally silicon, which is the second most abundant element on earth after oxygen.
- light shines on the cell creating an electric field across the layers
- this causes electrons to flow creating electricity
- on its own each cell only creates a tiny bit of electricity, but connected together to form panels, which are linked together to form a system, they create useful amounts
- panels are mounted directly on the roof if there is a suitable roof face and pitch, or on a frame
- an inverter converts the direct current (DC) to alternating current (AC – or mains equivalent) electricity which is suitable for running appliances
- grid connected systems can export electricity they don't use to the grid, and import it from the grid when there is not enough sunlight
- off-grid systems (RAPS) store excess electricity in a bank of batteries
- off-grid systems can be used in conjunction with other sources of power such as wind or hydro turbines.

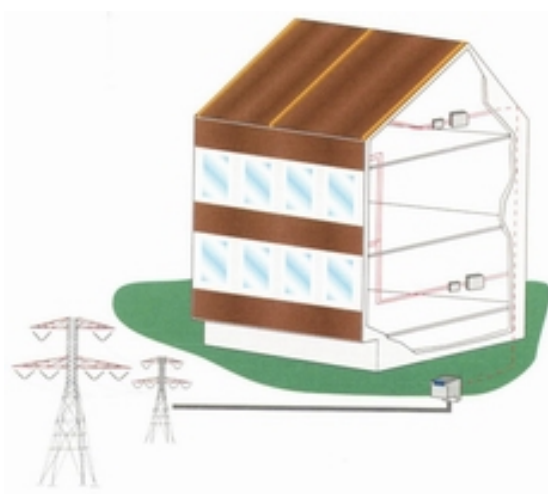
Your own power station

Grid-connected solar power systems can be likened to having your own solar power station, that silently generates green electricity for your own use, or any excess can be sold to the electricity supplier, via the grid. It is therefore not essential that the solar power system is sized to exactly match what your daily power usage is. If you generate more power than what you use, the balance is sold to the electricity supplier, and you can buy back any extra power that you may need, at any time, to cover any shortfalls. (eg. night time).

During most of the day, some of the power is consumed by lighting and appliances within the building and any excess power is fed into the grid for credit.

During the night, and periods of low Solar gain, the grid provides most or all of the power.

If you have sufficient panels to match your demand, then your annual electricity bill could be reduced to \$zero, AND your Greenhouse Gas Emissions reduced accordingly.



For more information on solar electricity, please call

1300 552 976

website: www.skylineenergy.com.au

email: info@skylineenergy.com.au

GRID CONNECT SYSTEMS:

These are some of the "standard - sized systems we offer, but we can tailor any size system for you. Prices and details quoted:

- Include premium quality panels and hi-efficiency inverter
- Are subject to site inspection, and may vary from location to location
- Do not include metering which is supplied by your electricity provider
- Are correct at the time of issue – please call for latest pricing
- Include GST.
- Do not guarantee suitability of the power supply to your premises – check with your electricity supplier
- Combine with solar or heat-pump hot water and ask for a better deal! (applies to existing customers too)

System Size	Solar Panels		Inverter		Price before Rebates	STC Rebate @ \$26/STC	Nett Investment After Rebate
	qty	size	Model	max AC			
3.04kW	16	190W	TL4600	4,400W	\$12,247	107 x \$26	\$9,455
3.8kW	20	190W	TL4600	4,400W	\$ 14,481	121 x \$26	\$11,338
4.18kW	22	190W	TL4600	4,400W	\$15,638	128 x \$26	\$12,320
4.56kW	24	190W	TL4600	4,400W	\$16,747	134 x \$26	\$13,254
4.94kW	26	190W	TL5400	5,060W	\$18,352	141 x \$26	\$14,683

PAYBACK:

Electricity costs are rumoured to rise substantially. As this occurs, the time it takes to payback the initial cost of your investment, will be reduced substantially. With attractive Premium Feed-In Tariffs available in some states, Solar Electricity may be considered a very good investment.



ECOLOGICAL:

Generating electricity with photovoltaics emits no pollution. With advances in panel production, it takes only approx 2.5yrs to recoup the energy used to manufacture the panel.
"A photovoltaic module will collect over its operating life approx. 10 times the energy used in its production"



SIZING A SYSTEM:

Sizing a grid-reversible system is simply a matter of choosing a system that suits your usage, budget, and investment strategy, without fear of not having enough or too much electricity. Any shortfall comes from the power grid, any excess generated goes back to the grid for credit.

If you are eligible for a Premium Feed-In Tarif, you can actually make a significant profit from an adequately sized system, returns of up to 25% p.a. – It's even worth borrowing the funds, because even after paying interest, you may still be better off.

Free energy from the Sun
Collect it – use it - *sell it!*

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