- Offset part or all of your power bills to future-proof your home
- Warranties are with CSR Bradford (70 years old) for peace of mind
- CSR has global purchasing power, National company, local staff
- 25 year limited performance warranty on panels
- 10 year inverter warranty, with dual input for future panel expansion
- 5 year workmanship warranty
- Bradford buys direct from the manufacturer, so you get national pricing without the middle-man costs!
- High quality inverters and solar panels for your long-term investment
- Local specialist renewable energy electricians do the install
- Independent MPP tracking (optimised performance from subarrays)
- Home Efficiency Group is a locally owned & managed company

Home Efficiency Group is proud to be an agent for:









Specialists at Grid-Connect Solar Power Systems

HOME EFFICIENCY GROUP



www.homeefficiencygroup.com.au

1300 96 80 60

Home Efficiency Group can provide you with a free onsite assessment of your roof space to evaluate its suitability for solar panels, and an estimate of the electricity that you will generate. We will assess your roof pitch, shadows that are cast on your roof, roof orientation and meter box, among other things.

Is it a good time to invest in a solar power system? Government "rebates" (which are actually called STC's, more like a renewable energy currency) still apply, the price of panels has dipped recently and the efficiency of the panels has increased. Tasmania currently (as at Aug 2013) has the best feed-in tariffs in Australia... Yes – it is a good time to invest!

SOME OF OUR OTHER SERVICES:

Condensation Control | Ducted Air Circulation | Insulation | Roof Heat Recovery | Roof Ventilation

Please contact us to arrange a free, no-obligation onsite assessment: 1300 96 80 60 or info@homeefficiencygroup.com.au See our retail outlet at 275 Wellington St, South Launceston or our showroom at 309 Liverpool St, Hobart.

How many solar panels do I need?

The aim of solar panels is to create enough solar power throughout the year to offset your annual Aurora Energy bills, either partially or wholly. The more solar panels on your roof, the more electricity is generated when the sun shines on them. Solar Power that is not consumed is sold into the electricity grid, and your account is given a credit. The amount you are PAID per unit of electricity generated is equivalent to the amount you BUY your unit of electricity for (currently 27.885c/kWH). This credit can then be used to offset power consumption at night time and during high energy consumption times of the year,

To determine approximately how many panels you require to offset your power bills this, there are four main considerations:

- 1) What is the total amount of your annual electricity bill?
- 2) How much suitable space do you have on your roof?
- 3) Which direction are your roof surfaces facing?
- 4) How much shadow does your roof experience?

What is the total amount of your annual electricity bill?

Add up the total of all of your Aurora Energy bills over a 12 month period. Once you have this, compare this figure to the "Solar Dollar" figures in either the

OPTION A or OPTION B sections in the table, below. The options will depend on the amount of shadow and the aspect of your roof.

How much suitable space do you have on your roof?

CNPV 250W solar panels are approx 1m wide and 1.6m long. In general, the more northerly-facing and shadow-free your roof space is, the greater the electricity generation potential. As houses situations vary, we have put in a conservative lower figure (based on Clean Energy Council guidelines) and an optimal figure. Things to be mindful of at your home include shadows caused by: trees, other houses, hills, flag poles, telegraph poles, chimney's, satellite dishes, antenna's and other parts of your roof etc. Shadow can greatly reduce the efficiency of the whole solar panel system, even if it is only covering some of the panels.

Which direction are your roof surfaces facing?

OPTION A: East-West facing, or moderate

A northerly aspect to a roof is optimal for harvesting the sun's rays. A purely easterly or westerly facing roof decreases the efficiency of the system by approximately 15%, with north-west or north-east experiencing an approximate 7.5% drop in efficiency due to poorer sunlight access. For non-optimal roof orientations, apply the more conservative solar dollar figures in OPTION A.

OPTION B: North facing, minimal or no

May 2013 Pricing for Polycrystalline CNPV Panels

shadow scenario shadow scenario Payback **Installed Base Payback** No of Cost, incl Govt Aurora Power-One Solar Dollars Period Investment Solar Dollars Period Investment Solar Power System Size panels **Incentives** Inverter Size(s) Generated** (Yrs) Return Generated. (Yrs). Return. 1.5 kW CNPV Panels \$ 2000W 414 7.4 13.6% \$ 16.3% 2.0 kW CNPV Panels 8 \$ 3,520 2000W \$ 552 6.4 15.7% \$ 662 5.3 18.8% \$ 2.5 kW CNPV Panels \$ 689 10 4,400 2500W 6.4 15.7% 827 5.3 18.8% \$ 993 \$ 4,950 827 3.0 kW CNPV Panels 12 3000W 6.0 16.7% 5.0 20.1% \$ \$ 3.5 kW CNPV Panels 14 5,968 3600W 965 6.2 16.2% 1,158 5.2 19.4% \$ \$ 1,103 4.0 kW CNPV Panels 16 6,600 4200W 6.0 16.7% 1,324 5.0 20.1% \$ \$ 4.5 kW CNPV Panels 18 7,425 5000W 1,241 6.0 16.7% 1.489 5.0 20.1% \$ 1,379 17.3% 5.0 kW CNPV Panels 20 \$ 7,975 5000W 1,655 5.8 48 20.7% 8,773 5.5 kW CNPV Panels 22 \$ 6000W \$ 1,517 5.8 17.3% 1.820 4.8 20.7% 6.0 kW CNPV Panels 24 \$ 9,570 \$ 1,655 17.3% \$ 1,986 6000W 5.8 4.8 20.7% 26 \$ \$ 1,793 5.8 17.3% 2.151 4.8 6.5 kW CNPV Panels 10.368 5000W & 2000W \$ 20.7% 7.0 kW CNPV Panels 28 \$ 11,165 6000W & 2000W \$ 1,930 5.8 17.3% \$ 2,317 4.8 20.7% \$ \$ 7.5 kW CNPV Panels 30 11,963 6000W & 2000W 2,068 5.8 17.3% 2,482 4.8 20.7% \$ \$ \$ 8.0 kW CNPV Panels 32 12,760 6000W & 2000W 2,206 5.8 17.3% 2,648 4.8 20.7% 34 \$ 13,558 \$ 2,344 5.8 17.3% \$ 2,813 4.8 8.5 kW CNPV Panels 6000W & 2500W 20.7% 9.0 kW CNPV Panels 36 \$ 14,355 6000W & 3000W \$ 2,482 5.8 17.3% \$ 2,978 4.8 20.7% \$ \$ 9.5 kW CNPV Panels 38 15,153 6000W & 3600W 2,620 5.8 17.3% \$ 3,144 4.8 20.7% \$ 15,950 2,758 10.0 kW CNPV Panels 40 6000W & 4200W 5.8 17.3% 3,309 48 20.7%

a house not having a direct north-facing roof and a degree of shadow on the roof. OPTION B is where there is a north-facing roof with no (or minimal) shadow, equivalent to 4 hours of Peak Daylight per day on average.

The Solar Dollar figures are calculated by kW x Avg Peak Sunlight Hours x Grid Feed-in Tariff of \$0.2828 for 2/3 of the time, with 1/3 of the time feeding back into the grid at 8c per KWH. Prices based on CNPV 250W Polycrystalline

Collecting Suitable Information for a Quotation

Want a formal quotation on your home for a grid-connect solar power system? Please call us on 1300 96 80 60 to arrange a free onsite quotation. Alternatively, if you would like one remotely, then simply email info@homeefficiencygroup.com.au with (a) a picture of your meter box, (b) a picture of the northerly-facing roofs of your home, (c) your National Meter

Identifier number, or NMI, located near the top of your Aurora Energy statement (it starts with 8000 typically) and (d) your Drivers License number (required by Aurora Energy in their paperwork), along with your address and contact details. This document does not constitute a quotation.

^{*} Prices factor in STC's (Small Scale Technology Certificates), and do not include regional travel, tilt frames (for low pitch or flat roofs), meter box upgrades (if required), split array or multi-storey fees. Prices subject to change and an onsite inspection and quote presentation. E&OE.

^{**} The conservative figures in the OPTION A column are based on Clean Energy Council of Australia figures (equivalent to 3.5 hours of Peak Sunlight per day on average for solar zone 4 - Hobart). They are conservative figures based on