Inferior Solar Panels Invade Australia

by Energy Matters

MEDIA RELEASE 9 JULY, 2013: Inferior solar panels are being sold to unsuspecting Australians, with the cost in lost energy production calculated for the first time at $3,261* per household.

It is estimated 397,545 Australian homes have inferior 'Tier 3' solar panels installed, which are generally considered lower-grade due to the way they are manufactured. Three tiers of solar panel manufacturers were defined in an independent report by Pike Research in 2011[2].

Energy Matters' Nick Brass explains why so many people have installed these 'Tier 3' solar systems.

"Unfortunately, people don't realize they've purchased a second rate system. Unlike many consumer electronics that have brands famous for quality, the solar market in Australia is dominated by unknown brands - even though premium Tier 1 panels Exist, Tier 2 panels can also be solid performers, but performance can vary wildly between the various brands[2]."

"We've determined almost 40% of systems sold in Australia contain 'Tier 3' produced panels*. Some companies are focusing on selling low quality systems so they can promote a dirt cheap price. The fact is, not all solar power systems are created equally," says Mr. Brass.

"We also fear there may be other issues in the not too distant future with these Tier 3 panels – and what will people do if these inferior quality modules fail and the company has gone out of business; something that is happening all too often these days. Who will honour the warranty?"

Mr Brass states market data shows Tier 3 panels performing at approximately 90% or less compared with Tier 1 systems after only 1 to 3 years from installation.

"This means a Tier 3 system owner will miss out on 8,946 kilowatt hours of electricity over a 25 year lifespan. This is assuming the under-performing Tier 3 panels actually last the distance and don't suffer from accelerated degradation."

Mr Brass says while Tier 1 and Tier 2 panel based systems may be slightly more expensive initially, they will last the distance and will generate increased levels of electricity - more than making up for the initial difference.

Mr Brass also warns only to deal with reputable installers. This follows a disturbing report from Australia's Clean Energy Regulator** that found one in five installations from the past five years were substandard.

"It could take years for the customer to realize they aren't getting the maximum efficiency from their system due to a poor quality install. Always ask a solar installer how they will guarantee their installation. For example, will they offer a power monitor to ensure the system is performing optimally, or will they come out and audit the job 6 months after installation?"

According to Energy Matters' calculations; the loss of energy production nationally over 25 years due to substandard installations combined with the 25-year performance loss of Tier 3 systems installed in 2012 comes to a staggering 3,045 GWh*.

"Convert that to dollars and it's $1.11 billion of lost income/savings to Australian households for every year where this trend continues," says Mr. Brass.

"Aside from only using top-quality components, Energy Matters only utilises the best installers; as that translates to the best possible outcome for our customers. In fact, if a system we sell does not deliver the savings we promise, we will not only address the issue, but also compensate the customer."

* See appendix; available on request.

[2] 3 Tiers Of Solar Panel Quality: In addition to cost, when choosing the best solar panel, it is important to consider both how it is manufactured and what materials are used.

Tier 1, 2 and 3 solar panels were defined by Pike Research, 12.04.2011, in the document: 'Solar Demand Dynamics, Cost Structures, Policy Factors, and Competitive Differentiators for Suppliers: Market Analysis and Forecasts.

[3] Sourced from PVOutput.org – PVOutput.org is a free service for sharing, comparing and monitoring live solar photovoltaic (PV) and energy consumption data.