Smart Electricity Meters And Solar Power

How does solar power smart metering work?

There are two methods of metering a grid connection, 'gross' and 'net'.

With gross metering, all the energy produced by your solar system feeds directly into the grid. In NSW this was the initial Solar Bonus Scheme [SBS], where you were paid either sixty or twenty cents for each generated kWh.

The net metering option powers your home first, reducing or replacing your grid consumption. Then, if you're producing more than you're consuming, the excess will feed back into the grid and be recorded as 'export' on your bi-directional meter. This is how you will connect in NSW after the SBS finished.

In order to accurately record the energy you return to the grid your current meter will be replaced with a ‘Smart Meter’. A meter programmed to record energy flow in both directions. This records the energy you use from the grid (imported) and the energy you put into the grid (exported).

The Smart Bi-Directional Meter

Electricity distributor Essential Energy has in the past installed the ‘A11’ model for single-phase connections and the ‘Q4’ model for three-phase connections. Both meters record the energy you consume and export. It is important to request a poly-phase meter if you have a single phase inverter connected to a three phase supply, for correct import / export. See our NET METERING page.

Your energy use may be classified according to the time period it’s used in, known as a Time Of Use tariff [three periods are Peak, Shoulder and Off-Peak].

By using information recorded within your inverter and the bi-directional electricity meter you’ll can work out how much energy your home uses during the sunny hours of the day. Easier still is to install an electricity monitoring system, which will add accuracy, clarity and meaning to your energy costs.

In-Home Electricity Monitoring Systems

An easy solution to assist you in reducing electricity use under the roof, whilst maximising the gain of your Solar generated power on the roof, is to install an electricity monitoring system. Furthermore this system will alert you to any issue with the inverter.

With wireless transmission of data regarding your imported / exported electricity from your power box, to an LCD monitor inside your home, you will have easy access to your 24/7 energy generation, consumption and costs.