

FACT SHEET

Benchmark feed-in tariff range for 2012/13

Based on Solar feed-in tariffs - Setting a fair and reasonable value for electricity generated by small-scale solar PV units in NSW - Final Report and subsequent analysis 27 June 2012

Under section 43ECA of the *Electricity Supply Act 1995* (NSW), the Minister has referred to IPART the determination of the benchmark range for feed-in tariffs paid by retailers for solar PV exports.

The terms of reference require us to set the 2012/13 benchmark in a manner consistent with the methodology and approach in our March 2012 report – *Solar feed-in tariffs – Setting a fair and reasonable value for electricity generated by small-scale solar PV units in NSW.*

This Fact Sheet sets out our updated analysis and provides some key messages for customers thinking about installing solar PV units.

What is the benchmark feed-in tariff range for 2012/13?

We have updated our analysis consistent with the methodology in our March 2012 report, and determined a benchmark range of **7.7 to 12.9 c/kWh** for 2012/13. This is higher than the benchmark range in 2011/12, mainly due to the start of the carbon pricing mechanism which increases the wholesale cost of electricity. The benchmark range in 2011/12 was 5.2 to 10.3 c/kWh.

The benchmark range is intended to provide a guide for customers as to the value of the electricity that their PV units export to the grid in 2012/13. However, retailers are not required to offer feed-in tariffs within this range. They are able to set their own feed-in tariffs.

The benchmark range of 7.7 to 12.9 c/kWh in 2012/13 is lower than the retail price of electricity (ie, lower than a '1-for-1' tariff). This is because electricity retailers still incur certain costs when their PV customers export electricity to the grid. For example, retailers are still required to pay network costs on that energy. These network costs represent around half the current retail price.

How did we update the benchmark feed-in tariff range?

In our March 2012 report we estimated a benchmark range of 5.2 to 10.3 c/kWh in 2011/12. This was based on the:

- wholesale market value of the electricity exported, and
- direct financial gain that retailers make from PV exports (reflecting the benefits to retailers after deducting unavoidable costs).

The benchmark range estimated in our March 2012 report reflected our methodology that included:

- ▼ basing the value of PV exports to retailers on both our estimate of the direct financial gain to retailers and the wholesale market value method
- not including a value for potential reductions in network costs, as PV exports are unlikely to provide system-wide benefits that materially reduce these costs, and
- not including a value for other potential benefits, including reductions in electricity losses and changes to the pool price and load shape.

We have updated our analysis to estimate the benchmark range in 2012/13. The wholesale market value is now in the range 7.7 to 9.9 c/kWh.¹ The direct financial gain to Standard Retailers for regulated customers is now in the range 10.3 to 12.9 c/kWh. This is significantly higher than the 8.3 to 10.3 c/kWh range in 2011/12. This reflects the introduction of the carbon pricing mechanism which increases the cost of wholesale electricity, inflation and the structure of regulated retail prices in 2012/13.

Table 1Final finding on the range for the fair and reasonable value of PV exports
(c/kWh, \$2012/13)

Method used	2012/13
Wholesale market value	7.7 – 9.9
Direct financial gain to Standard Retailers	10.3 – 12.9
Recommended range	7.7 – 12.9

Note: We have applied a 1.6% inflation rate to the 7.5 to 9.8 c/kWh estimate of the wholesale market value specified in our March 2012 report.

Including both approaches in our fair and reasonable benchmark feed-in tariff range for 2012/13 (consistent with our March 2012 methodology) results in a recommended range of 7.7 to 12.9 c/kWh.

For more details of our analysis and methodology, please refer to our March 2012 report.

¹ We have updated our March 2012 estimate of the wholesale market value in 2012/13 for inflation. This figure was previously expressed in \$2011/12.

Key messages for new solar PV customers

IPART released a Fact Sheet in March 2012 which summarises the characteristics of PV units in NSW (for example, how PV units interact with the electricity grid and how much electricity a household is likely to export to the grid).

Our Fact Sheet also contains some key message for customers thinking of installing a PV unit. These key messages are summarised below.

New PV customers in NSW should have net metering arrangements

As new PV customers **will not** be eligible for government-subsidised feed-in tariffs, net metering arrangements are likely to provide these PV customers with higher ongoing financial benefits than gross metering. Under net metering, PV customers are billed only for their **net** electricity consumption (ie, their total consumption minus the electricity they generated and consumed in their premises **at the time of generation**). Therefore, for each kWh they generate and consume in a billing period, they save the retail price they would normally pay per kWh (currently around 24 to 34 cents).

The most significant source of ongoing financial benefit for new PV customers is savings on retail electricity bills

PV customers can receive ongoing financial benefits from installing a PV unit. They can save on their electricity bills, and may earn revenue from unsubsidised feed-in tariffs for electricity that is exported to the grid.

The larger of these 2 ongoing financial benefits is likely to be savings on electricity bills. This is because:

- ▼ The rate of saving per kWh on electricity bills is higher than the revenue earned per kWh from an unsubsidised feed-in tariff.
- Most PV customers tend to consume the majority of the electricity they generate in their home, meaning the higher rate of saving on electricity bills will apply to a greater number of kWh than for the feed-in tariff. One of the key findings in our March 2012 report was that on average, customers export around 32% to 50% of the electricity that is generated by their PV units, with most customers that have 1 to 2 kW systems being at the lower end of this range.

As a result of these factors, the ongoing financial benefit of PV units will be more if customers consume most of their electricity during the day when they are generating electricity – or in other words, if they have a low export ratio. Table 2 below shows that the financial benefit to this customer increases as their export ratio decreases.

Export ratio	Annual bill savings (\$)	Annual feed-in tariff income (\$)	Total financial benefit (\$)
100%	0	188	188
75%	127	141	268
50%	254	94	348
40%	305	75	380
35%	330	66	396
30%	356	56	412
25%	381	47	428
20%	407	38	444
15%	432	28	460
10%	457	19	476
5%	483	9	492
0%	508	0	508

Table 2 Estimated annual financial benefit for a PV customer with a 1.5 kW unit

Note 1: Assumes annual generation of 1,882kWh, retail tariff 27 c/kWh, unsubsidised feed-in tariff 10 c/kWh. **Note 2:** The export ratio is the proportion of electricity produced by a PV unit that is exported to the grid. **Source:** IPART.

New PV customers should consider their own electricity consumption patterns as well as the potential generation from the PV unit

It is difficult to calculate an individual customer's likely financial benefits from a PV unit, as there are many variables. However, in considering whether to install a unit and if so, the size of the unit, customers should think about:

- their profile of energy consumption during the day, not simply their total daily energy consumption, and
- the potential generation from their PV unit.

This information will help them work out whether they are likely to use most of the electricity they generate in their premises or export most to the grid.

Customers should shop around to get the best deal

Customers are able to see what feed-in tariffs electricity retailers are currently offering in their area through IPART's *myenergyoffers* website.² If you want to take up an offer with a different retailer, you will also need to change your electricity supply arrangements. For some customers this may mean moving off the regulated tariff and onto a market contract. When shopping around it is important to consider all aspects of a retailer's offer (for example, what price you will **pay** for electricity, any feed-in tariff being offered and any other terms and conditions such as late payment fees).

² http://www.myenergyoffers.nsw.gov.au/.