

FACT SHEET

Final Report on solar feed-in tariffs in 2014/15

Based on Solar feed-in tariffs – The subsidy-free value of electricity from small-scale solar PV units from 1 July 2014 – Final Report 16 June 2014

Households and small businesses with solar photovoltaic units in NSW (PV customers) can earn feed-in tariffs for the electricity they export to the grid. Those who are part of the NSW Solar Bonus Scheme currently receive a subsidised feed-in tariff of either 20 or 60 cents per kilowatt hour (c/kWh). Those who are not part of this scheme can receive unsubsidised feed-in tariffs in the competitive retail electricity market.

The NSW Government has asked the Independent Pricing and Regulatory Tribunal (IPART) to set a benchmark range for these unsubsidised solar feed-in tariffs. The benchmark range provides guidance on the likely value of the electricity exported by PV customers, to assist customers in deciding whether to install a PV unit, and comparing market offers from retailers.

This fact sheet explains our final decision on the benchmark range for 2014/15. It also provides information to help customers who have recently installed a PV unit, or are considering installing one, to understand the financial benefits they may receive (see Attachment A).

Benchmark range for 2014/15

We have made a final determination that in 2014/15 the benchmark range for unsubsidised solar feed-in tariffs is **4.9 to 9.3 cents per kilowatt hour (c/kWh)**. This is marginally lower than our draft decision in April 2014 because we have updated our analysis including using the latest wholesale market prices.

Table 1 Final determination on solar feed-in tariffs 2014/15 (\$nominal, c/kWh)

	2013/14	2014/15 (Draft decision)	2014/15 (Final decision)
Benchmark range	6.6 – 11.2	5.0 - 9.6	4.9 – 9.3

Source: IPART and Frontier Economics.

The benchmark range reflects the forecast wholesale market value of PV electricity in the coming year. This value is lower than in 2013/14 because the forecast wholesale market price of electricity is lower. This is largely because wholesale market prices currently reflect the market's expectation that the carbon pricing mechanism will be repealed in 2014/15, reducing the cost of electricity.

Our benchmark range is not binding on retailers. Like other components of energy retailers' competitive offers, solar feed-in tariffs are not regulated by IPART. It is up to retailers to decide whether to offer them, and the rate per kilowatt hour (kWh) to offer.

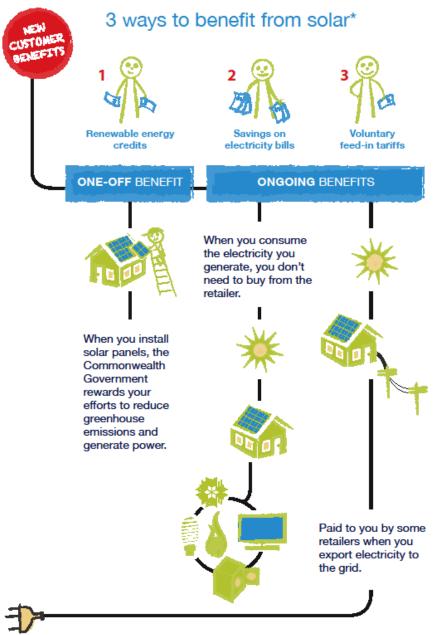
In general, most of the electricity generated by a PV unit is used to meet the customer's own energy needs at the time of generation, and the net amount exported is relatively small.¹ In addition, the customer still imports electricity to meet their needs when the PV unit is not generating (eg, at night). This means that in most cases, the primary financial benefit of having a PV unit is reduced electricity bills, and the most important financial consideration in selecting a market offer is likely to be the retail price of electricity. See Box 1 for more information on the financial benefits of PV units.

We emphasise that feed-in tariffs should be considered as a part of an overall electricity market offer and that a market offer with the highest feed-in tariff is not necessarily the best overall deal for PV customers. We recommend customers shop around to find the best deal on their electricity. The Commonwealth Government website, Energy Made Easy, is a good place to start (www.energymadeeasy.gov.au).

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Assuming they have net metering arrangements.

Box 1 Benefits of solar PV



* These are the potential financial advantages available to consumers installing solar PV systems. There are also environmental benefits from using solar energy.

www.ipart.nsw.gov.au page 3

A Information for new PV customers

One of the reasons customers consider installing a PV unit is the potential financial benefit it can deliver. However, the size of this benefit is difficult to predict, as it depends on many factors, and varies for different customers. The sections below explain the key factors to help new PV customers assess their likely financial benefit.

What are the main sources of ongoing financial benefit for new PV customers?

For new PV customers, a PV unit offers 2 sources of ongoing financial benefit – the savings they can make on their retail electricity bills, and the revenue they can potentially earn from unsubsidised feed-in tariffs (see Box 1).

Savings on retail electricity bills

As noted above, for the vast majority of customers, saving on electricity bills is the most significant source of financial benefit. It arises because the electricity a customer's PV unit generates will be used to meet their own needs at the time it is generated.² Thus, for each kWh that is used at the time of generation, they will save the retail electricity price per kWh that they would otherwise pay for electricity imported from the grid. Currently, retail electricity prices in NSW are around 30 c/kWh.³

Potential revenue from unsubsidised feed-in tariffs

For most PV customers who are not part of the Solar Bonus Scheme, revenue from feed-in tariffs represents a smaller and less certain source of financial benefit. When the electricity a customer's PV unit generates is not needed in their premises at the time it is generated, it will be exported to the grid. For each kWh exported, they can potentially earn an unsubsidised feed-in tariff – provided their retailer offers such a tariff.

Currently, most retailers in NSW offer unsubsidised feed-in tariffs. However, the rate of these tariffs per kWh is much lower than the retail price of electricity. This is because for each kWh of exported electricity, retailers save on buying this electricity from the wholesale market, but cannot avoid paying certain other costs (such as network and green scheme costs) which are significant.

Assuming they have net metering arrangements.

³ The rates on Time of Use tariffs vary significantly.

What should new PV customers consider when assessing their own likely financial benefit?

In considering the likely financial benefits of a PV unit, PV customers should think about:

- ▼ how much electricity they use, and how their electricity usage varies over a typical day
- ▼ what size unit is appropriate given their circumstances
- ▼ whether the location and orientation of their PV unit is most appropriate.

To illustrate the relationship between a PV customer's financial benefit and the proportion of the energy that they export, Table A.1 below shows the estimated annual financial benefit for a typical customer with a 1.5 kW PV unit, who generates a total of around 1,900 kWh a year, pays 30 c/kWh for the electricity they import from the grid, and receives an unsubsidised feed-in tariff of 6 c/kWh for the electricity they export.

Table A.1 shows that for this customer, the financial benefit is highest when they use all the electricity they generate at the time of generation and export nothing, and this benefit decreases as their export ratio increases.

Table A.1 Estimated annual financial benefit for a PV customer with a 1.5 kW unit

Export ratio	Annual bill savings (\$)	Annual feed-in tariff income (\$)	Total financial benefit (\$)
100%	0	113	113
75%	141	85	226
50%	282	56	339
40%	339	45	384
35%	367	40	407
30%	395	34	429
25%	423	28	452
20%	452	23	474
15%	480	17	497
10%	508	11	519
5%	536	6	542
0%	565	0	565

Note 1: Assumes annual generation of 1,882kWh, retail tariff 30 c/kWh, unsubsidised feed-in tariff 6 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.

What should PV customers consider when assessing retailers' market offers?

Like all customers, PV customers need to assess a retailer's whole market offering – not just the solar feed-in tariff component – and compare it to other available offers.

As discussed above, for most PV customers, revenue from unsubsidised feed-in tariffs is not likely to be a major source of financial benefit for new PV customers. In addition, all PV customers will continue to receive electricity bills – at least for the electricity they use when the sun is not shining on their panels and their PV unit cannot generate.⁴ Therefore, it may well be that an offer that includes a lower feed-in tariff and a lower usage price provides a better deal than one with a higher feed-in tariff and a higher usage price.

The Australian Government website, Energy Made Easy⁵ can help customers make this assessment.

Only those few customers who install very large PV units (eg, over 5kW) and have very low consumption (eg, less than 2,000 kWh per annum) have the potential to earn enough income from unsubsidised feed-in tariffs to offset their total electricity bill.

⁵ www.energymadeeasy.gov.au.