

## FACT SHEET

# Determination on solar feed-in tariffs in 2013/14

Based on *Solar feed-in tariffs – The subsidy-free value of electricity from small-scale solar PV units from 1 July 2013*  
28 June 2013

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. Some receive a Government subsidised feed-in tariff of either 20 or 60 cents per kilowatt hour (c/kWh) under the NSW Solar Bonus Scheme. Others, who are not part of this scheme, can receive unsubsidised feed-in tariffs from retailers in the competitive 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. In performing this task, we must take account of the terms of reference provided by the Government. Among other things, we are required to ensure our decision does not lead to an increase in retail electricity prices, and supports competition in the retail electricity market.<sup>1</sup>

This fact sheet explains the benchmark range and what it means for customers, and sets out our determination for 2013/14. 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.

### The benchmark range for 2013/14

The benchmark range relates to PV customers who are **not** part of the Solar Bonus Scheme that was closed to new participants in 2011 (non-SBS customers). For these customers, the primary financial benefit of installing a PV unit is likely to be reduced electricity bills, as the electricity they generate is first used to meet their own household needs **at the time it is generated**, before any 'excess' electricity is exported.<sup>2</sup>

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<sup>1</sup> Our terms of reference also ask IPART to set a retailer contribution towards the costs of the Solar Bonus Scheme. More information on the retailer contribution can be found in our [final report](#).

<sup>2</sup> Assuming they have net metering arrangements.



However, non-SBS customers may also receive payment for this exported energy, as some retailers offer unsubsidised solar feed-in tariffs as part of their competitive market offerings. Like some other components of retailers' competitive offers (for example 'green premiums'), these feed-in tariffs are not regulated by IPART. It is up to retailers to decide if they offer them, and the rate per kWh they offer. The benchmark range we determine is intended to provide guidance on the likely value of the electricity exported by PV customers, to inform retailers in making their decisions, and customers in assessing retailers' competitive offers.

We have determined a benchmark range of **6.6 to 11.2 c/kWh** in 2013/14. The lower bound of this range (6.6 c/kWh) reflects our lowest estimate of the financial gain retailers are likely to make from PV customers' exports in 2013/14, while the upper bound (11.2 c/kWh) reflects our highest estimate of this gain. The range is quite wide because the size of a retailer's gain depends on its prices and costs in supplying electricity, and these vary considerably across retailers and supply areas. In addition, many of the factors that will influence these costs in the coming year are uncertain.

We recognise that some customers will think this benchmark range is too low, and others will be disappointed that we have not made it mandatory for retailers to offer an unsubsidised feed-in tariffs for PV customers outside the Solar Bonus Scheme. The reasoning behind our decision is explained in our [report](#).

Box 1 summarises some commonly raised questions in relation to how we set the voluntary benchmark feed-in tariff.

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## **Box 1 Common questions in relation to the voluntary benchmark feed-in tariff**

### **Why isn't it mandatory for retailers to pay feed-in tariffs to non-SBS customers?**

We are required to ensure that the benchmark range operates to support a competitive electricity market in NSW. A competitive market is likely to provide the best deal possible for non-SBS customers, having regard to their electricity usage and exports. Some, but not all retailers, voluntarily offer unsubsidised feed-in tariffs to non-SBS customers. Therefore non-SBS customers have access to these feed-in tariffs.

The value of electricity exported by PV customers differs between different retailers and customers. If a mandatory feed-in tariff for non-SBS customers was set too high retailers would be required to subsidise their customers. This would make it unattractive for retailers to serve these customers. If a mandatory feed-in tariff for non-SBS customers was set too low, customers would not receive the full value of their exported energy. Therefore, a mandatory feed-in tariff is unlikely to be in the best interests of non-SBS customers.

Customers can choose whether or not to install a PV unit. We prefer not to regulate the prices of optional services since we consider that it is in customers' best interests for that to be set by the competitive market. This is the approach we take for the green premium which customers on regulated prices pay when they choose to take a proportion of the energy they use from renewable or green sources.

### **Why can't non-SBS customers get a '1 for 1' feed-in tariff for their exports to the grid?**

Retailers would lose money if they were required to offer a feed-in tariff that is equal to the retail price. Retailers would then receive the retail price for the electricity they sell that is generated by PV customers, but they would incur substantial cost in doing so. Once the PV energy passes through the customer's meter to the grid and on to other customers, retailers will incur immediate costs for use of the network and for green schemes. The value of electricity generated by PV units is considerably less than the retail price. A 1 for 1 feed-in tariff would require the retailers to subsidise non-SBS customers with PV units. The cost of a subsidy would need to be recovered either through higher electricity prices or the NSW budget.

### **Why aren't feed-in tariffs set to encourage green energy?**

Whether or not solar feed-in tariffs should be used to create an incentive for further investment in small-scale solar generation is a policy decision, and thus is a matter for the NSW Government, not IPART. However, we note that the Commonwealth Government's Renewable Energy Target Scheme already provides an incentive. An additional incentive in NSW feed-in tariffs would require either price increases for all customers or draw on the NSW budget to provide the subsidy.

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## 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.

#### Savings on retail electricity bills

As noted above, for the vast majority of customers these savings are the most significant source of financial benefit. They arise because the electricity a customer's PV unit generates will be used to meet their own needs at the time it is generated.<sup>3</sup> 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, average retail electricity prices in NSW are around 30 c/kWh.<sup>4</sup>

#### Potential revenue from unsubsidised feed-in tariffs

For most non-SBS customers, this revenue 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, not all retailers in NSW offer unsubsidised feed-in tariffs, but most of the larger retailers do. However, the rate of these tariffs per kWh is much lower than the retail price of electricity. As explained above, the benchmark range for unsubsidised feed-in tariffs in 2013/14 is 6.6 to 11.2 c/kWh. Past experience suggests retailers' actual feed-in tariffs are likely to be at or below the bottom end of this range.

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<sup>3</sup> Assuming they have net metering arrangements.

<sup>4</sup> 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 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 7 c/kWh for the electricity they generate. Table 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 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	132	132
75%	141	99	240
50%	282	66	348
40%	339	53	391
35%	367	46	413
30%	395	40	435
25%	423	33	456
20%	452	26	478
15%	480	20	500
10%	508	13	521
5%	536	7	543
0%	565	0	565

**Note 1:** Assumes annual generation of 1,882kWh, retail tariff 30 c/kWh, unsubsidised feed-in tariff 7 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.<sup>5</sup> 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. From 1 July 2013, the Energy Made Easy website<sup>6</sup> can help customers make this assessment.

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<sup>5</sup> 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.

<sup>6</sup> **From 1 July 2013** the independent free price comparator website is [www.energymadeeasy.gov.au](http://www.energymadeeasy.gov.au).  
**Until 30 June 2013** the price comparator website is [www.myenergyoffers.nsw.gov.au](http://www.myenergyoffers.nsw.gov.au).