Total Environment Centre
for the future

What price solar?

Government tariffs and retailer export prices

New data compiled by the Total Environment Centre reveals the prices electricity retailers pay solar owners for the surplus power they export into the grid from rooftop solar systems.[1]

To date this information has been difficult to obtain and compare for the public, and solar offers are often not clear and transparent. The TEC data also includes current government mandated feed-in tariffs.

Government-mandated feed-in tariffs for solar power have been eliminated in some jurisdictions. The data also shows that:

- The full economic value of solar power is not being reflected in the export price being paid to owners.
- There is little effective competition among retailers for the 'solar dollar.'

Solar power exported from households has real economic value to electricity networks, retailers, and consumers. It avoids transmission costs and line losses and expensive network augmentation costs to cope with increasing peak demand. In peak periods, retailers are currently paying much less for exported household solar energy than they do for coal or gas-fired electricity. Of course, solar energy also helps Australia to reduce its greenhouse emissions.

Low or non-existent retailer export prices for many new home systems will mean that:

- Owners may undersize systems so they don't export any surplus energy to the grid during the day, leaving them exposed to high tariffs and mostly 'dirty' grid power during the late afternoon and evening peaks.
- Owners are likely to begin installing small battery storage systems for peak shaving and backup in large numbers.

In both cases, customers will disengage from the centralised grid infrastructure, accelerating the 'energy market death spiral.'[2] If instead, owners were paid a fair price for their solar energy they would more likely continue to interact with the grid. This has a payoff for non-solar households, who also avoid extra charges for the new network infrastructure and gain the environmental benefits.

Everyone is better off with optimally sized solar systems: retailers, households, and the planet.

To protect existing solar customers and help grow the solar sector in Australia, TEC recommends that:

- The Renewable Energy Target, including the Small-scale Renewable Energy Scheme (SRES), be retained and expanded.
- Governments introduce mandatory minimum retailer export prices that reflect the true value of solar energy to the electricity market.
- Regulations are strengthened to prevent networks and retailers from introducing tariffs and charges that discriminate against solar customers.
- Lower network tariffs should be available where renewable energy is generated and consumed in the same local area — for instance, for community solar projects.[3]

But wait, there's less

As well as paying solar customers as little as they can, the growth of solar in Australia is also being held back by:

- Retailers introducing higher fixed daily charges or higher time of use tariffs for solar customers.
- Networks only allowing solar customers to connect to the grid but not export to it.
- Governments reducing the minimum export price where the carbon price has been abolished in Queensland and South Australia.

Even some solar-friendly retailers are making the switch difficult, by only offering generous export prices to customers who buy their solar systems.

Government mandated tariffs

ACT	No minimum retailer export price
NSW	No minimum retailer export price
NT	Minimum retailer export price: 27.13c
QLD	No minimum retailer export price for SE Qld. Retailer export price for regional customers: 6.53c
SA	Minimum retailer export price: 6.0c
TAS	Minimum retailer export price: 5.551c
VIC	Minimum retailer export price: 8c
WA	Retailer export price: required to be fair and reasonable

Notes:

1 All data applies to new customers from 1 July 2014 only. Legacy arrangements for existing customers vary in each state and territory.

2 Governments no longer pay feed-in tariffs directly to solar owners. Instead, where offered they involve setting a minimum price retailers must pay for exported solar energy.

Electricity retailer export prices

Retailer	Area	c/kWh	Offer
ActewAGL	ACT	7.5	ACT12540SR
AGL Energy	NSW	8	AGD11912MR
AGL Energy	SA	+2	AGL11999SR
Click Energy	NSW	10	CLI12352MR
Click Energy	QLD SE	6-12	QCA search
Click Energy	VIC	+2	CLI15118MR
Diamond Energy	SA	+2	DIA10037MR
Horizon Energy	WA	10-50	Horizon Buyback Prices
Lumo Energy	NSW	5.5	LUM13265MR
Lumo Energy	QLD SE	6	QCA search
Origin Energy	ACT	6	OR212206SR
Origin Energy	NSW	6	OR212168SR
Origin Energy	QLD SE	6	QCA search
Powerdirect	NSW	7.7	POW12527MR
Powerdirect	SA	+2	POW12668MR
Red Energy	NSW	5	RED13024MR
Synergy	WA	8.8529	SWIS Buyback Prices

Note: These are offers that are additional to any jurisdictional required minimum. Where there is no jurisdictional minimum (eg ACT), these prices are shown as c/kWh (eg 7.5c). Where there is a legal minimum (eg Vic, 8c), the retailers offer is shown as the additional amount offered (eg +2c, meaning a total payment to the customer of 10c). The value to retailers of exported solar energy is usually shown as a credit on bills, reducing the amount payable for other energy imported from the grid when solar output is insufficient to meet household needs (eg at night).

And the rest?

Retailers not in the table above pay no more than they are required to for energy exported from solar households. Some of these companies say that it is uneconomic for them to pay more than state governments require them to. However, where there is no government mandated minimum price, such as in NSW and southeast Queensland, if they are not in the table above and they have offers in those states, they pay nothing at all.

Footnotes

1 That is, the energy generated that is surplus to instantaneous onsite demand. The term 'retailer export prices' is used to distinguish these prices from government mandated payments to solar owners or feed-in tariffs.

2 The 'death spiral' describes a trend of decreasing energy demand, combined with a shift to decentralised forms of energy in conjunction with increasing investment in energy network infrastructure. See e.g. Mike Sandiford, Has the Death Spiral for Australia's electricity market begun? The Conversation, 29 June 2014.

3 This is known as virtual net metering (VNM). TEC and the Institute for Sustainable Futures at UTS are currently working on a project that is expected to result in a request to change the National Electricity Rules to introduce VNM tariffs.

Information current at 30 July 2014. Data compiled by Jack Gilding, Backroad Connections. For more information and to notify price changes please contact Mark Byrne, markb@tec.org.au or 02 9211 5022.

Methodology: We used the Australian Energy Regulator's Energy Made Easy website, where retailers enter their own data for NSW, SA, ACT and Tas and similar state websites for SE Qld and Vic. We used state owned retailers' websites for WA, NT and regional Qld. In all cases we selected offers available to all solar owners (new and existing) based on a profile of single tariff offers for an average 3-person household, and not purchasing GreenPower.

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