

# A Fair Price for Rooftop Solar

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**A fair price for rooftop solar will mean a cheaper and more secure electricity system that will benefit all Tasmanians.**

Every Tasmanian household and small business should be able to take charge of their power bills and receive a fair return for their contribution to Tasmania's energy system.

Currently, Aurora Energy takes excess electricity generated by Tasmanian rooftop solar owners for 8.9c/kWh,<sup>1</sup> then sells it to nearby houses for three times as much.<sup>2</sup>

It is government-sanctioned sunlight robbery.

The low price paid for rooftop solar power isn't just ripping off households and small businesses, its stifling solar installation jobs and preventing Tasmanians from reducing greenhouse gas emissions and securing our collective electricity supply.

Only 13% of suitable Tasmanian homes have rooftop solar.<sup>3</sup>

With a fair price for rooftop solar, more Tasmanians households would choose solar - cutting power bills, stimulating local jobs and contributing to a clean, energy future.

## WHY ARE PRICES UNFAIR?

Electricity prices are designed to cover the costs of building large power plants that send electricity hundreds of kilometres to passive consumers.

Our electricity system is changing and the rules need to change with it.

When Tasmanian rooftop solar owners sell excess electricity back into the grid they receive 8.9c/kWh<sup>1</sup>. Aurora sells this same electricity to a neighbour for 25.9c/kWh<sup>2</sup>.

A power bill includes the cost of generating the electricity, transmitting it along the large high voltage lines, and distributing it along smaller poles and wires down the street. Currently the price of exported solar is based on the cost of Hydro generating electricity. But rooftop solar systems don't use any transmission lines, and they only use a small distance along the distribution lines as surplus electricity passes to nearby neighbours. They also produce a lot of other benefits for the community and environment.

MAIN COMPONENTS OF ELECTRICITY BILL		
Residential light and power - Tariff 31 (per kWh) ▶ 25.9c		
Generation	 Hydro: generation of electricity ▶ 8.4c	
Transmission	 Tasnetworks: Long distance transport to towns and cities ▶ 2.8c	
Distribution	 Tasnetworks: Poles and wires to homes ▶ 8c	
Retail	 Aurora: costs of selling electricity ▶ 3c	
Other	 Environmental and regulatory costs ▶ 3.7c	

## HOW TO WORK OUT A FAIR PRICE

Rooftop solar is a much cheaper way to generate and trade electricity. It has no fuel costs, it doesn't waste energy travelling long distances, and doesn't require a large expensive grid.

A fair price for solar will help create a cheaper, healthier and more secure electricity system that will benefit all Tasmanians.

The Office of the Tasmanian Economic Regulator (OTTER) will continue setting the solar feed-in-tariff. The Greens will, however, legislate to require OTTER to take into account all the benefits of rooftop solar in calculating a fair price to be paid to solar owners.

This would see the price set between 10c-18c.<sup>5</sup> The rooftop solar feed-in-tariff in Victoria more than doubled after similar changes were introduced last year, and are now higher than any other state.<sup>6</sup>

### Wholesale electricity price

The current price paid for excess rooftop solar is based on the regulated wholesale price of electricity. It doesn't account for the cost of gas-fired electricity from Bell Bay and Victorian imports.

It's currently 8.4c, but is projected to drop as low as 5c, with prices paid to solar owners again dropping below 6c in the next few years if nothing changes.<sup>4</sup>

### Avoided transmission costs

Aurora passes on the cost of using the transmission network, despite rooftop solar not using it. Rooftop solar's contribution to reducing demand on Tasmania's transmission network should be recognised, with savings passed on to solar owners.

### Reduced distribution costs

Exported solar electricity is usually sold to neighbours, making significantly less use of the 'poles and wires'. Also a significant proportion of the cost of the distribution network is the transformers which convert higher voltages down to 230V. Solar inverters have this capability built in and export power at 230V. These reduced costs should be passed on to rooftop solar exporters.

### Reduced CO<sup>2</sup> emissions

Each kilowatt hour of rooftop solar that displaces imported coal-fired electricity creates a reduction in CO<sup>2</sup> emission worth 3.1c (with a carbon price of \$31 per tonne). If the pricing of carbon reflected the need to keep global warming below 1.5°C, this value would be even higher.

### Health benefits

Every kilowatt hour of rooftop solar that displaces coal-fired electricity contributes 1.3c in reduced health costs nationally. While health impacts of coal-fired electricity are felt on the mainland, Tasmania has an obligation to reduce them.

### Direct jobs

The over 80% drop in the tariff for rooftop solar crippled the installation industry. The number of Tasmanians employed in the industry fell from 270 FTEs in 2012/13 to only 100 last year.<sup>3</sup> Incentivising solar installations in Tasmania will create at least 200 additional FTEs.<sup>7</sup>

### Energy security

Rooftop solar means Tasmania's electricity system is less dependent on rainfall, and immunised against single points of failure such as Basslink.

### Increased revenue for Hydro

Reduced local demand for electricity will allow Hydro to store more water. This can be exported to the mainland when electricity prices are high in the national network. Those profits will give Hydro a better ability to maintain our public network, and reduce the prices of people's power bills.

## INITIATIVE COST

Initiative Investment (\$m)	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year
Fair Price for Solar	0.00	10	10	10
<b>Total</b>	<b>0.00</b>	<b>10</b>	<b>10</b>	<b>10</b>

## REFERENCES

- [1. Office of the Tasmanian Economic Regulator. "Feed-in Tariffs".](#)
- [2. Aurora Energy. "Standard electricity rates and charges". July 2017.](#)
- [3. Australian Bureau of Statistics. 4631.0 – Employment in Renewable Energy Activities, Australia, 2015-16. 17 March 2017.](#)
- [4. AEMC. 2017 Residential electricity price trends in Tasmania.](#)
- [5. Jack Gilding, RenewEconomy. 'A fair price for rooftop solar? Try 10-18c/kWh](#)
- [6. Giles Parkinson, RenewEconomy. 'Victoria solar feed-in rate more than doubles'.](#)
- [7. Tasmanian Renewable Energy Alliance. 'Why is solar power undervalued in Tasmania'.](#)

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