



Franklin Electorate office 7 Franklin Wharf, Hobart TAS 7000

Phone: (03) 6212 2228 tasmps.greens.org.au

Office of the Tasmanian Economic Regulator Via email: office@economicregulator.tas.gov.au

14 March 2016

# SUBMISSION ON THE DRAFT INVESTIGATION REPORT REGULATED FEED-IN TARIFF RATE FOR STANDARD FEED-IN TARIFF CUSTOMERS

#### Introduction

The Tasmanian Greens welcome the opportunity to comment on the Office of the Tasmanian Economic Regulator's Regulated Feed-in Tariff Rate for Standard Feed-in Tariff Customers: Draft Investigation Report.

The current energy crisis has placed Tasmania at a crossroads. We can respond through policies that will lead to an increase in our dependence on fossil fuels and imported dirty electricity from Victoria's coalfields. Alternatively, we can respond by setting policy conditions that favour the generation of renewable energy, and that will bring long-term economic, environmental and employment benefits, as well as securing our power supply.

Rooftop solar has already demonstrated its capacity to play an important role in realising this future. However, the existing Feed-in Tariff (FiT) is neither fair nor reasonable to Tasmanian solar owners. The current FiT has already strongly reduced the incentive for investing in solar, and will ultimately disadvantage all Tasmanian electricity users.

Recognising this, the 2016 *Tasmanian Greens Energy Strategy* calls for the establishment of a FiT that would encourage 50,000 Tasmanian homes and businesses to have rooftop solar by 2020.<sup>1</sup>

<sup>1</sup> See <a href="https://tasmps.greens.org.au/energystrategy">https://tasmps.greens.org.au/energystrategy</a>, Action 2.3.

In this submission the Tasmanian Greens call for:

- a methodology for determining the Feed-in Tariff that captures all the benefits attributable to Tasmania growing its solar industry, not just the direct avoided costs to retailers; and
- a fair and reasonable Feed-in Tariff rate for the 2016-17 financial year that reflects the true economic, social and environmental benefits of rooftop solar's contribution to clean and secure electricity generation in Tasmania.

## The Urgent Need to Reconsider the Role of Rooftop Solar

The damage to the Basslink cable and the extreme drought conditions have exposed Tasmania's dependence on coal-fired electricity from the mainland, and the vulnerability of our electricity supply.

Since the energy crisis commenced, the wholesale price of electricity in Tasmania has soared. The severe depletion of Hydro water reserves have resulted in the installation of 200MW of diesel generation, at an estimated generation cost to Tasmanians of approximately \$300/MWh. This contrasts starkly with the \$60/MWh currently paid to rooftop solar owners for the clean electricity they generate.

While it has been stated that Hydro will bear the full cost of the energy crisis, as a government-owned business Hydro's financial costs will ultimately be passed on to all Tasmanians in the form of an ongoing debt and reduced dividends. These are dividends that might otherwise be used to fund health, education and other public services.

The lack of alternative power generation in the state to supplement Hydro has resulted in Tasmania's Major Industrial users needing to cut their demand by more than 110MW to meet the Basslink shortfall. With the possibility of further reductions discussed, the full extent of the impact of power cuts on the state's largest employers is not yet known.

In the longer-term, Tasmania faces challenges in maintaining its status as a clean green state. From 1990-2013 our carbon emissions from the energy sector increased by nearly 28%. This excludes emissions from dirty electricity imported via Basslink, with imports meeting up to 40% of Tasmania's total demand prior to the Basslink fault.

The Paris Agreement ushers in an era where we will see rapid investment in renewable energy and divestment away from fossil fuels. There will be massive opportunities in jobs, investment, energy security and lower energy bills.

2

<sup>&</sup>lt;sup>2</sup> Tasmanian Greenhouse Gas Accounts: State Greenhouse Gas Inventory 2012-13, Tasmanian Climate Change Office, July 2015

We need appropriate price signals to be in place to make sure Tasmania is not left behind in renewable investment. Returning the solar industry to the level it was at before the solar feed-in tariff dropped would create approximately 200 high skilled jobs that would be located throughout the state.

### **Move to Decentralised Energy Generation**

The national regulation and structure of the electricity market is driven by the interests of large energy corporations, which dictate the terms for generating and selling electricity.

Past investments have been concentrated in the centralised generation of electricity, which has been transmitted through a grid system of poles and wires. Continuing this model has come at the expense of pushing market innovations that would secure our electricity supply, ease prices and reduce carbon emissions.

The result is an energy system that is reactive, unresponsive to community needs, vulnerable, market reliant, highly politicised, and decoupled from wider social goals. It leaves the majority of Tasmanians caught in a trap of rising power prices and an unsustainable reliance on fossil fuels.

The Tasmanian Greens believe we should be moving towards decentralised electricity generation system, where energy is produced as close to where it will be used as possible. Increased decentralisation would:

- enable all Tasmanians to become renewable energy producers if they want to;
- save energy system costs and make the price of electricity cheaper;
- encourage energy efficiency and behavioural change;
- increase the security and reliability of the electricity supply; and
- increase the use of renewable energy in the community.

We need a fundamental change in Tasmania's energy policy, regulation and the electricity market so that we can move towards decentralising the energy system.

## The Importance of Rooftop Solar

Rooftop solar is a vital step along the pathway to decentralisation of electricity supply. There is no reason why every Tasmanian couldn't become renewable energy producers if they want to. This would enable people to reduce their bills and contribute to an overall reduction in fossil fuels.

Installing residential and commercial solar systems encourages residents and businesses to become more energy conscious, as people look for ways to make the most of their installed solar capacity.

The money people and businesses invest into rooftop solar is an investment in electricity generation we all benefit from. Increasing the amount of rooftop solar units makes our energy system more secure and power supply more reliable. It reduces distribution and transmission costs and offers an effective means to dramatically reduce cost to supply electricity to rural areas.

Battery storage systems are plummeting in cost. Together with rooftop solar generation, these can make a substantial contribution to the state's power needs. Policies that encourage Tasmanians with battery storage systems to integrate them into the grid could contribute to evening out peak demand. This would benefit us all by deferring some costly infrastructure investments, and increasing the reliability of supply.

Ultimately, all Tasmanians will have to pay at some level to secure a renewable, clean power supply for the state. Therefore all Tasmanians should have the chance to take advantage of the opportunities this will afford. The adoption of a fair feed-in tariff that reflects the wider benefit of distributed solar for Tasmania, not just the costs avoided by retailers, will go a long way to providing such an opportunity.

## Calculating a Fair and Reasonable Feed-in Tariff

Consistent with the National Electricity Objective to "promote efficient investment in, and efficient operation and use of, electricity services for the long term interests of consumers" we urge the Economic Regulator to take into account the **following benefits** in the calculation of a fair and reasonable Feed-in-Tariff:

- 1. All <u>transmission costs that are avoided</u> through the purchase of excess electricity generated by solar PV systems close to the point of consumption.
- 2. All <u>avoided distribution costs</u> commensurate with the reduced use of the distribution network by embedded generation.
- 3. <u>Reduced overall network loss factors</u> attributed to distributed photovoltaics.
- 4. <u>Increased security of supply</u>, with the FiT reflecting a long term strategy to develop sufficient solar photovoltaic generation capacity to assist in rebuilding Hydro storage levels, and guaranteeing security of supply in the face of the trend of lower rainfall and increased evaporation.
- 5. <u>Reduced emissions in our electricity sector</u>, including the benefits from its contribution to Tasmania's clean energy brand.
- 6. The capacity of solar photovoltaics to <u>support private investment in a renewable</u> <u>energy supply</u> for Tasmania, as the capital cost of solar is met by the owner, which avoids the capital costs of new generation infrastructure.
- 7. <u>The deferral of investment in the grid network</u>, including future reduced peak demand when solar PV is coupled with distributed battery storage.

- 8. <u>Reduced demand on Hydro water storages</u>, maximising Hydro Tasmania's income through enabling it to capitalise on favourable arbitrage trading opportunities with Victoria.
- 9. The <u>investment and employment opportunities</u> for Tasmania associated with a growing solar industry.
- 10. <u>Reduced negative health and environmental impacts</u> of fossil fuel-generated energy, including interstate impacts attributable to imported dirty electricity.
- 11. <u>Improved energy efficiency</u> associated with the motivation of solar photovoltaic owners to understand and manage their energy consumption.

In the calculation of these associated benefits, we urge that the real cost of generating electricity in Tasmania is used. This should include consideration of the expense of alternative forms of generation that are being used to supplement Hydro storages in times of low inflows, including diesel generation (at present with an estimated total cost of nearly 30c/kWh).

We hope the final methodology will acknowledge that paying 30c/kWh for dirty diesel energy, while only valuing the contribution of ordinary Tasmanians with solar photovoltaics to securing our energy supply at 6c/kWh, is entirely inconsistent with community expectations and the long-term interests of the state

It is also true that, to be effective, Feed-in-Tariffs need to offer people who invest in rooftop solar certainty into the future. There would have to be a commitment from government to set a tariff for a *minimum* level for a period of time (at least three years) so that people could make decisions about how to invest their finances accordingly. It could be possible to increase the tariff within this period, but not decrease it.

Thousands of solar photovoltaic owners have to pay to use the electricity they produce to heat their hot water (TA41) and homes (TA42) due to a meter software glitch. Noting that TasNetworks has indicated that they do not intend to fix this software glitch, it is requested the Office of the Tasmanian Economic Regulator indicate if this issue is being taken into account in calculating a fair and reasonable feed-in tariff.

#### **Period between Reviews**

The Tasmanian Greens consider the current Feed-in-Tariff determination process of setting a methodology for the next three years is too long a timeframe.

The unfolding energy crisis has demonstrated that the pressures on our electricity system can change over a short period of time. The urgency of responding to the challenges of climate change will continue to increase rapidly, as will community expectations in terms of government's shifting to renewable energy.

We feel the methodology ought to be reviewed more regularly to ensure it is consistent with the targets of the day, including that the Feed-in-Tariff be adequate to enable solar photovoltaics to contribute to meeting those targets.

Technological advances are expected to dramatically alter our energy system, with gridconnected battery storages and the integration of electric vehicle charging allowing distributed generation to be fed into the grid when it is most needed, rather than just when the sun is shining.

Too long a period between reviewing the methodology might hamper an appropriate consideration of new technologies that are rapidly developing. That delay would mean solar PV owners would be under-paid for the contribution they make to the electricity system. It may also result in underinvestment in new technology consistent with the out of date price signal.

# **Concluding Remarks**

Tasmania needs a fair and consistent Feed-in-Tariff that encourages long-term investment in rooftop solar generation.

To be effective, Feed-in-Tariffs need to be fairly priced and offer people who invest in rooftop solar certainty into the future.

Feed-in-Tariffs operate to correct market failures by recognising avoided market costs and the social benefits of generating renewable power. We encourage you to consider a method for determining the Feed-in-Tariff that captures all the economic, social and environmental benefits for Tasmania growing its solar industry, and not just the direct costs avoided by retailers.

Sincerely

**Rosalie Woodruff MP** 

**Greens Energy Spokesperson** 

E: Rosalie.Woodruff@parliament.tas.gov.au