

There is a really good opportunity for Tasmania to become 100% fossil fuel free.

- Household PV contributes to Tasmania becoming the first Australian state to reach 100% renewable electricity (and one of the few in the world). This is a big attraction for people looking for a place to live where the electricity supply is relatively clean and less expensive.
- Renewable energy allows us to use only clean, healthy options for household power and in addition provides us with the opportunity to make huge reductions to our fossil fuel imports, reliably known to be almost \$1 billion per annum.
- The opportunity exists for Tasmania to reduce reliance on present cost of oil and diesel products to the state by encouraging EV vehicles. Manufacturers overseas are now preparing small and large trucks and buses as well as cars. Renewable energy can provide an alternative fuel and protect Tasmania from future oil shocks, shortages or dislocations of transport arrangements.

In Tasmania we need to have a fair go for those who already have renewable energy systems in place, including many small businesses and community organisations, and to encourage others to install renewable energy products.

Increased local generation reduces the energy we import from Victoria and increases the amount we can export over Basslink. This should be the basis of the wholesale prices used to calculate a fair FiT.

- Each kWh of solar PV that displaces imported coal fired electricity from Victoria creates a reduction in CO2 emissions that is worth a minimum of 2.4c to 3.1c using current carbon pricing estimates. The Victorian single rate FiT for 2018-2019 is 9.9c and this includes an allowance of 2.5c/kWh for the “avoided social cost of carbon”. A similar allowance should be applied to the Tasmanian FiT since any increased solar generation in Tasmania reduces imports of mainly coal fired Victorian electricity.
- Renewable energy also reduces the need for gas which is becoming more and more expensive. Households changing to renewable energy will save money and simultaneously help reduce carbon emissions.
- At present customers pay for a service that is not provided — use of the transmission network for the proportion of their energy that comes from distributed generation. In addition a large proportion of the cost of the distribution network uses transformers which are not required for private solar installations. Solar installations are used close to the point of export and make less use of the network.
- Much of the energy generated by households and businesses is exported to the grid and used by other consumers and this replaces energy which otherwise would have to be provided through Hydro Tasmania's budget. Renewable energy contributes to the diversity of supply and makes Tasmania's electricity more resilient to failure of the grid, and to drought.
- Additionally our local solar industry employs approximately 400 fulltime equivalent people located throughout the state. There is an opportunity with more encouragement for more jobs and this will flow on to jobs in emerging technologies. Businesses are attracted to renewable technologies because of the low and predictable running costs after the initial capital investment.

More can be done.

- Locally generated solar electricity stored in batteries can provide additional value at times when the local distribution network is close to capacity. This is the basis of the very successful TasNetworks trial on Bruny Island. Customers with batteries are paid a premium of around \$1/kWh to feed energy back into the grid when demand is high via an arrangement known as network support payments. This arrangement should be available to customers in other locations where the local distribution network is sometimes at close to capacity. This would provide an additional incentive for customers to install solar PV with batteries. With sufficient battery capacity in those locations, expensive network upgrades can be delayed or avoided, reducing network costs for all customers in future.
- The state government provides concessions to assist low income customers with the cost of electricity. More could be done to assist those who live rental accommodation by creating an agency which assists renters to negotiate with landlords over the provision of renewable energy systems.
- Low income households also require support to install solar hot water or PV energy systems through low cost loans or an extension of existing grant schemes.
- In some locations high voltage levels in the distribution network result in customers not being allowed to install solar, or being restricted in the amount of energy they are allowed to feed back into the network. TasNetworks is currently trialling methods to cost effectively control distribution voltages. These measures should be supported and extended.