Tasmanian Renewable Energy Alliance

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A submission in response to the draft Tasmanian Renewable Energy Action Plan

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Summary

TREA congratulates the Tasmanian Government on the initiative of producing a Tasmanian Renewable Energy Action Plan. We are particularly pleased that both the Action Plan and the proposed accelerated net zero emissions target involve public consultation phases.

We agree with the statement (p.6) on the importance of community support and welcome the commitment to best practice stakeholder engagement.

In summary we believe the key areas which the final version of the Action Plan should address in more detail are:

- an explicit acknowledgement that moving to net zero carbon emissions requires actions of all sectors of the economy and is not just about renewable electricity generation
- background data on Tasmania's greenhouse gas emissions by sector and by comparison with the rest of Australia
- proposed trajectories and targets to reach net zero emissions in each sector of the economy
- discussion and recommendations on the challenges in increasing renewable energy in each sector of the economy including details of possible technologies and policy mechanisms.

About TREA

The Tasmanian Renewable Energy Alliance represents solar sales and installation companies in Tasmania, as well as other developers of small scale renewable energy project. We provide services to members and a united voice for the renewable energy industry in dealing with government and regulatory agencies. Our broader aims also include promoting the development and use of renewable energy in Tasmania.

Confusion on scope: Energy or electricity?

Discussion of energy policy in Tasmania often confuses energy with electricity. Unfortunately this confusion is repeated in the draft plan. All of the following statements actually apply to electricity generation, not total energy use.

> "While Tasmania is already on track to be 100 per cent self-sufficient in renewable energy by 2022…" p.11
>
> "Tasmania is well on target to achieve the government's goal of becoming 100 per cent self-sufficient in renewable energy generation by 2022." p.21
>
> "By 2022 Tasmania will have become one of the few jurisdictions in the world to be 100 per cent self-sufficient in renewables." p.21

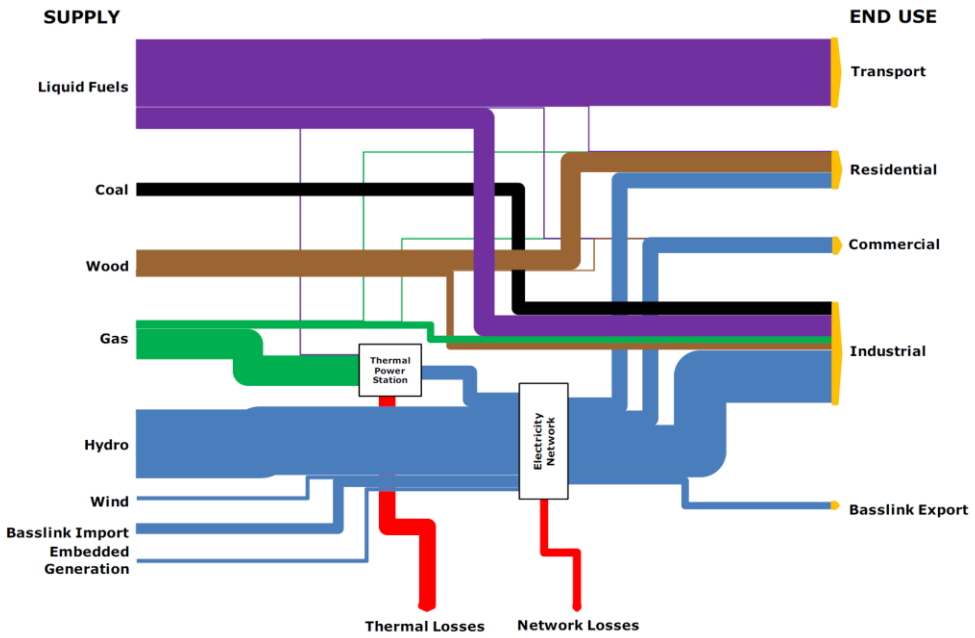
While the document title suggests its scope is renewable energy policy, in fact it mainly addresses issues around increasing generation of electricity and associated opportunities for green hydrogen.

Need for an information base

The draft Plan contains no details about Tasmania's current energy use or emissions profile, either by sector or by comparison to the rest of Australia. Public debate about renewable energy policy for Tasmania should be informed by a solid base of factual information.

It is unfortunate that the Energy in Tasmania Performance Report produced by the Office of the Tasmanian Economic Regulator no longer includes data on total energy use and sources. The most recent version from the 2014-2015 Performance Report clearly shows that energy from fossil fuels (liquid fuels, coal and gas) is a greater proportion of total energy use than renewable sources (wind and hydro).

Figure 1.2 Tasmanian Energy Flow Diagram



from Energy in Tasmania Performance Report 2014-2015, page 2

200% target

The draft Plan suggests that a 200% renewable electricity target for 2040 will be legislated in 2020. While TREA actively supports ambitious plans to replace existing fossil fuel use with renewable sources, we have concerns about a legislated target for electricity that exceeds the demand. The Plan is based on the assumption that Project Marinus will go ahead and that electricity exports to the mainland, together with green hydrogen production will provide a market for this electricity.

The business case for Marinus is still under development and national policy changes would be required if the cost is to be borne by mainland consumers rather than Tasmanian electricity consumers or taxpayers. While electrification of transport and replacement of gas may increase demand for electricity, there is also significant potential for reduced demand if any of the major industrial consumers close down.

We do not believe that a legislated target should go ahead in the absence of demonstrated demand for additional electricity.

Consultation on an accelerated target for net zero emissions

TREA welcomes the commitment in the draft Plan to conduct public consultation on an accelerated target date for net zero emissions (p.10). As discussed above, effective consultation should be informed by factual information about Tasmania's current energy use and emissions profile at a sector level.

Exploration of policy mechanisms

Mechanisms to increase the supply of renewable electricity

The draft Plan does not discuss what mechanisms would be best used to encourage a transition to total reliance on renewable sources. The general implication is that building of Marinus and a legislated target will encourage private sector investment in renewable electricity generation.

This may work for the electricity sector although even for this, it is by no means certain. Current private investments in new wind farms (Granville Harbour and Cattle Hill) has been facilitated by contracts signed with government business enterprises (GBEs). The Hydro Tasmania 2019 Annual Report states under the section on Community Service Obligations (p.101) that:

> *"On 5 September 2017 Hydro Tasmania was directed to enter a power purchase agreement with Westcoast Wind to facilitate the construction of the Granville Harbour Wind Farm."*

The Aurora Energy 2019 Annual Report includes a provision of a $32.8m "Write down of onerous contract" (p.53) which is further described on p.77 as follows:

> *"(vi)* ***Provision for an onerous contract****: Aurora Energy has a ten year contract for the purchase of energy related products that was considered onerous at 30 June 2019 due to a reduction in forward market prices. A provision has been raised for the difference between the contract purchase cost and the expected economic value of the purchases to Aurora Energy. The provision has been estimated using the weighted average of probable future market prices and discounted to present value using Aurora Energy's internal pre-tax cost of capital."*

Although it is not made explicit in the Aurora report, this relates to the purchase of large-scale generation certificates (LGCs) from the Cattle Hill wind farm.

The fact that these arrangements are reported as obligations or onerous contracts indicates that they were not entered into on a totally commercial basis, and there is some risk of costs being borne by the businesses (and ultimately by the GBE owners – the people of Tasmania).

These arrangements may ultimately be of net benefit to Tasmanians. In a competitive wholesale electricity market, facilitating increased supply via new generation should drive down prices. This is less certain in

Tasmania where the dominant position of Hydro Tasmania as the largest generator allows it to strongly influence wholesale prices.

It is also possible that in the longer term, these arrangements may not be onerous. If wholesale electricity prices or LGC prices rise, the arrangements entered into by Hydro Tasmania and Aurora may prove to be sound financial arrangements. A rise in LGC prices is unlikely without an extended and increased Renewable Energy Target.

Other jurisdictions (notably the ACT – see Mazengarb 2020) have used reverse auctions as a way of increasing the supply of renewable electricity in a way which is more transparent and ensures that new supply is obtained in the most cost effective way.

Mechanisms in the transport sector

The transport section (p.13) is mainly about electric vehicles with some focus on hydrogen for heavy vehicles. There is nothing about increasing public transport, active transport or planning and other social changes (eg working from home) to reduce the need for transport.

Mechanisms in other sectors

There is no discussion of mechanisms for increasing the use of renewable energy in sectors other than electricity and transport, except for the possible use of renewable hydrogen.

Tasmania has a significant mining industry. Recent developments in minerals processing, including the use of hydrogen in both aluminium and steel production highlight the opportunities for the development of renewable energy strategies in this sector.

Electricity pricing

Action 2.2 in the draft Plan (p.15) addresses the issue of energy pricing. While the total cost of electricity is always a major concern to consumers, in developing a renewable energy strategy it is important to also address the structure of electricity pricing.

The roll-out of advanced meters in Tasmania is proceeding well, but more action is required to ensure that the potential benefits of a smarter grid (for both consumers and the network) are realised.

Customer installation of distributed energy resources (DER) – in particular batteries in conjunction with solar PV – can provide benefits for both customers and the network. Customers can reduce costs by maximising self-consumption and reducing purchased of peak period electricity. The network can benefit from reduced peak load and greater utilisation of the network at off-peak times.

Increased uptake of DER can be facilitated by both tariff structures and customer education. The Bruny Island battery trial successfully demonstrated the ability of DER to provide both network support and an additional revenue stream for consumers. A wider adoption of this technology could be facilitated by extending the network support payments currently available to Bruny Island residents to the rest of Tasmania. The implementation of virtual power plants (VPPs) allows these benefits to be aggregated and made easier for consumers to access. This is an initiative that is being actively implemented in other states. The Tasmanian Government could play a facilitating role by encouraging VPP operators to offer services in Tasmania and ensuring that regulatory arrangements facilitate the implementation of VPPs.

The state government already has some commendable initiatives in relation to the encouragement of electric vehicles (EVs). We believe there is an opportunity to further encourage the take-up of EVs through electricity pricing and charging control arrangements:

- Smarter charging tariffs and control arrangements can ensure that EV charging does not create additional peak demand pressures but provides an additional managed load at time when the network is underutilised.

- The considerable amount of distributed storage that may exist in future in EVs connected to the grid could be used for the benefit of the network (while ensuring that consumers share the financial benefit and can still have confidence that their vehicles will be charged according to their needs).

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