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Response to the Draft Tasmanian Renewable Energy Action Plan

UPC\AC Renewables Australia ("UPC") is an Australian entity, established in early 2017, that is headquartered in Tasmania. We have a development portfolio of several GWs of renewable energy within the National Electricity Market. UPC is part of the global UPC Renewables Group that was established in the early 1990s. The UPC Renewables Group has developed, owned and operated over 4500MW of large scale wind and solar farms in 10 countries across Europe, North America and Australia-Asia, with an investment value of over \$5Billion USD. We have always been a pioneering renewable energy developer, developing the first commercial wind farms in Italy and Indonesia as an example. Our mission is to meet our world's growing energy needs with clean electricity and improve the lives of local people and communities. As a developer, owner and operator, UPC is vested in the community for the long term.

UPC is developing a Tasmanian Renewable Energy portfolio and are very interested in the draft Tasmanian Renewable Energy Action Plan. We are currently developing the Robbins Island and Jim's Plain Renewable Energy Parks in the states North-west and have secured further sites in the states North-east for similar wind farm developments. We are also interested in progressing the roll of hydrogen in Tasmania and have submitted a feasibility study for the Tasmanian hydrogen EOI. We hope to help play a major role in terms of the Tasmanian Government achieving its objectives. Attached are our observations and suggestions of how the Tasmanian Government can ensure a positive and actionable plan.

If we can assist further please don't hesitate to contact me (0407 368 174, Michael.connarty@upcac.com) for further assistance or discussions.

Yours sincerely

Dr Michael Connarty

Manager, Strategy and Stakeholder Engagement

Priority 1: Transforming Tasmania into a global renewable energy powerhouse

Actions

Introduce a Tasmanian Renewable Energy Target to double Tasmania's renewable energy production to meet 200 per cent of our current electricity needs

UPC fully supports this ambitious plan to grow the renewable energy opportunities in Tasmania. We see that this can lead to increased activities in regional Tasmania but can be a catalyst in attracting new industries that want to use renewable energy in their processes.

At present the current market is too small to achieve this goal and would require access to a new market either through developing Marinus Link or attracting new large scale demand, such as Hydrogen, in Tasmania.

The key risks to developing new projects is to secure revenue certainty to help finance projects and also grid connection.

In terms of securing revenue certainty, there are a number of mechanism that could be implemented such as auction processes or underwriting schemes. The value of such a mechanism is the government will control development timing and align it to its energy target. Further, through such a process with the Government, or a Government Business Enterprise (GBE) like Hydro Tasmania as a counterparty, the high credit worthiness would allow an optimum funding arrangement for new renewable energy projects which will lower the cost to consumers. Ideally, such a mechanism would be allocated to Hydro Tasmania to managed based on a broad MW or GWh target required by the Government (as well as other key criteria government would like to deliver - support local jobs).

Such mechanisms have been able to deliver on government objectives where it has been implemented over the world. The International Renewable Energy Agency (IRENA) notes more than 60 countries using renewable energy auctions by 2015¹² and the Victorian and ACT governments have successfully run auctions. The other value of an auction process backed by the Tasmanian

¹ https://www.irena.org/publications/2015/Jun/Renewable-Energy-Auctions-A-Guide-to-Design

² https://www.gov.uk/government/publications/contracts-for-difference/contract-for-difference

Government is there is the possibility to promote local jobs and skills development³ as part of arrangements to provide a bankable offtake for energy.

For mechanisms like auctions, the nature of such mechanisms is that developers will compete to win the auction and therefore get a long term secure revenue source to help finance their projects. Having Hydro Tasmania run and operate this means they can optimise their energy generation portfolio and better manage the outcomes. It would also allow Hydro Tasmania to deal directly with new load coming to the state, with the confidence the energy required can be sourced through such a mechanism. Also given the flexibility of the hydro system, it means Hydro Tasmania are well placed to manage timing risk and also the size of projects and maximise the value opportunity through Basslink and eventually Marinus Link.

Practically, Government could look to drive the development of Marinus Link such that it is operational pre 2030. This would ensure that the 2030 target is not constrained by the lack of demand or any limit related to the current system technical limitation. For example, while UPC are developing the Robbins Island and Jim's Plain Renewable Energy Parks which have the potential to generate in the order of 3,500 GWh if Marinus Link is developed (i.e. at least the first link of 750 MW) or a large load comes to Tasmania, the actual development will be limited to 500 MW or around 2,200 GWh. It is unlikely that the 5,000 GWh needed for the 150 percent 2030 target will be reached without Marinus Link or additional load. The sooner Marinus Link is committed, and an operational date is well before 2030 (i.e. 2027 at the latest), the more likely the Government can reach the 2030 target. The Government should work with the Commonwealth to finalise an underwriting arrangement/funding ASAP such that delivering Marinus Link can occur around 2027.

Continue to progress Project Marinus and Battery of the Nation

It is critical for the overall delivery of the targets that Marinus Link is built and operational to 1500 MW and the reality is the sooner this occurs the better. Without Marinus Link, the ability of the Tasmania system to absorb such a large energy increase would rely on new load growth. Ultimately though, load growth of such a scale is difficult to attract and coordinate versus having a flexible interconnector able to manage and access a larger markets or bring power into Tasmania if required. Marinus Link can therefore provide a better integration path for large load opportunities in Tasmania like hydrogen rather than competing for them. If Marinus Link is built and large hydrogen load is developed, it provides greater opportunity to develop more renewables in Tasmania.

While Battery of the Nation can help absorb more renewables as well as deliver more capacity for new load, its likely to be more beneficial to use the capacity to deliver capacity products at a premium

³ https://localjobsfirst.vic.gov.au/

into the Victorian market as it transition away from coal. The real value of Battery of the Nation can only be realised with Marinus Link, again underlying the importance of Marinus Link.

Implementation of the Tasmanian Renewable Hydrogen Action Plan

UPC again support this initiative and see that large scale renewable hydrogen should be a competitive advantage for Tasmania. Key role for the Government is to create the environment to attract large scale producers and transportation companies to come to Tasmania to facilitate this outcome. This may include the potential to get Hydro Tasmania to manage the offtake for a very high certainty of renewable energy supply as this would create a competitive advantage to other locations in Australia and across the world.

Undertake community consultation on an ambitious net zero emissions target

Given the State has already meet this target, there is a basis to focus on a more aggressive target or start to progress sectoral targets to improve overall carbon emissions reductions. As Tasmania has already meet its net zero emissions target making it sooner (i.e. 2030 or 2040) may be of value but provides little incentive to improve on the current situation.

There are excellent opportunities to progress more carbon emissions reduction in sectors currently lagging the energy and forestry sectors. These sectors like transport, industrial or agricultural sectors have good opportunities aligned to this Tasmanian Renewable Action Plan. For example, development of targets for hydrogen fueled heavy vehicle fleet or electrification of the Tasmanian car fleet or replacement of gas with hydrogen for industrial uses, production of green ammonia/UREA for local use, are ways Tasmania can continue to lead the pack in terms of lowering carbon emissions.

Some of these initiatives can also help with fuel independence and retain fuel revenue in Tasmania with Government businesses like Hydro Tasmania and Aurora Energy.

Scoping study for the development of a Renewable Energy Centre of Excellence

UPC consider this as a good initiative. We would encourage working with the University of Tasmania including the Australian Maritime College in developing up the centre of excellence concept.

Develop options to support the bioenergy sector

UPC are happy to see support for commercially attractive energy opportunities in Tasmania to realise the full potential of the Tasmanian renewable energy sector.

Develop a Tasmanian policy framework to coordinate the renewable energy growth required to achieve the Tasmanian Renewable Energy Targets and to support Tasmanian major energy projects (the "Renewable Energy Coordination Framework").

UPC considers there is a need to help manage the development and expansion of renewables in Tasmania. As indicated above a mechanism to support revenue certainty for new developments would be a key aspect to helping manage renewable development in Tasmania. Other aspects to consider would be to examine:

- Mechanism to support transmission upgrades such that these do not delay development. This
 may align with the current Energy Security Board proposal on developing REZ and include an
 independent planning body like a Jurisdictional Development Board to progress new
 transmission lines;
- Improve planning process for new developments such as crown consent, consistency of planning schemes, etc; and
- Promotion of the renewable energy zones, a renewable energy future and vision by Government to help communities to support such initiatives.

Transport industry emissions pathway

UPC support this action and would encourage programs to support use of electric and hydrogen fuel vehicles. Such initiatives could be for Tasmanian Government to set a target for percentage of Tasmanian Government and GBE fleets to be electrified or hydrogen fueled by 2030 aligned with the TRET targets. The action focus on government purchasing decision can help lower emissions from the sector but also help bring low cost vehicles into the Tasmanian economy. For example, a 50 percent target of Government vehicle fleet to be electric or hydrogen powered by 2030, would see a steady release of second hand EV/hydrogen vehicles into the Tasmania community making them more available to more and facilitating a faster uptake and faster transition to a lower emission Tasmanian fleet.

While it would be good for Government to support lower new EV costs or stamp duty relief etc, typically initiatives like stamp duty or insurance relief are not major barriers to the purchase of EV's. The upfront cost of new EV and hydrogen vehicle will be driven by larger economies (i.e. Europe/china/mainland Australia) so work to ensure Federal Government policy doesn't add cost or discourage EV/hydrogen car uptake should be advocated for.

In terms of hydrogen fuel vehicles, typically the heavy vehicle sector is showing the best short term opportunities such that initiative that encourage replacement of diesel/petrol vehicles should be considered. This could be targets to replace the Metro bus fleet, incentives or agreements with

councils for replacement of garbage truck fleet with hydrogen or support for joint (State and Local governments) refueling infrastructure to facilitate wider uptake of such vehicles. These initiatives may flow out of the Tasmanian Hydrogen EOI process and UPC look forward to seeing the outcomes of this process.

Great examples are already being seen across the world including one recently in NZ to support greater uptake of hydrogen fueled trucks https://www.hiringa.co.nz/post/hiringa-energy-and-hyzon-motors-to-deploy-fuel-cell-powered-heavy-trucks-in-new-zealand-in-2021.

Priority 2: Making energy work for the Tasmanian community

Actions

Supporting electricity consumers during COVID-19

Given the unprecedented times we are managing through then any help the Government can provide in ensuring electricity remains affordable would be welcomed.

Establish a pricing framework that results in affordable electricity prices for Tasmanian consumers

UPC support a mechanism that will deliver affordable prices to Tasmania consumers. The Tasmania Government is currently reviewing the contract pricing mechanism to de link it from the Victorian price to avoid Tasmanian paying higher prices due to issues on the mainland (as experienced during 2017-2019). UPC considers there should be a defined Tasmanian wholesale price less dependent of Victorian price. This could be integrated with the current Wholesale Contract Regulatory Instrument pricing framework (https://www.economicregulator.tas.gov.au/electricity/pricing/wholesale-pricing) and act as a cap to this mechanism such that low Victorian prices can be captured by customers in Tasmania but customers can be sheltered from extreme Victorian prices. This approach could also be applied such that customers get the benefit but the wholesale market can still works effectively and provide signals to new developments and efficient import and export. To do this is, any time the quarterly or annual wholesale forward contract price is greater than a defined Tasmanian "local" price then an effective subsidy could be applied to retail customers pricing to ensure the "local" prices is the highest price paid by Tasmanian retail customers.

Manage Tasmania's Energy Security Risk Response Framework in response to COVID-19

UPC considers the current framework works well in terms of highlighting the Energy Security Risk and should continue. Over time as more energy is added to the system this framework should be reviewed and potentially adjusted to better reflect the energy security risks for the Tasmanian system.

Monitor, evaluate and ensure the progressive rollout of advanced meters to Tasmanian households

UPC encourages the roll out of advanced meters to ensure customers have better insight into energy consumption and costs. Although, it is a disadvantage to consumers to have to pay \$40/annum to access the Aurora Energy App, so customers can access their data, to better manage their consumption and electricity bills. Most other retailers provide this app for free for the benefit of the

customer. The Government should consider making this app free to all customers, particularly those moving to a time of use tariff.

Continued roll-out of on-farms energy initiative

UPC supports this initiative and any initiative that supports more affordable energy solutions for all customers.

Continue support for energy efficiency programs

UPC supports this initiative as energy efficiency programs typically are one of the lowest cost ways to reduce energy bills for consumers. In Tasmania, the consumption of a typical household is nearly 8 MWh which is nearly twice as much as Victorian/NSW consumers. This results in higher bills for Tasmania consumers and hence energy efficiency is of greater value. Programs initiatives like NILS or the TEELS should be explored to encourage heat pumps, insulation, window sealing, curtains etc. In addition, for state owned housing, energy efficiency initiatives and/or a minimum energy rating could be adopted.

UPC also considers an initiative aligned with funding solar panels for schools should be explored. This could be via access to low cost loans (current interest rates should favor this) to install roof top solar on all schools to minimise energy bills over the short to medium term. Given the energy consumption at schools occurs during the day then solar will be able to offset a large proportion of the energy bills for schools. Combine this with energy efficiency actions and for a capital funding at low interest rates, the payback is likely to be in the order of 5 to 7 years. This would then allow future funding to schools to focus more on improving the educational outcomes for our students rather than helping to pay the energy bills. This scheme could be extended to also trial battery installations, and if managed with TasNetworks, this could lead to an outcome that reduces distribution issues and helps lower future distribution expansion costs.

Empower consumers through influencing the National Energy Policy agenda

UPC consider initiative that give consumers a stronger voice in the National Energy Policy development should be explored.

Priority 3: Growing the economy and providing jobs

Actions

Establish 'Renewables Tasmania' to promote and develop Tasmania's renewable energy advantage

UPC support any initiative that promotes and helps grow the renewable energy opportunity in Tasmania. We would advocate the Government focus on ensuring national initiatives support Tasmanian renewable development but also the promotion of renewable energy development in Tasmania. This includes a joint commitment by the Federal and State Governments to Marinus Link and locking in a operational target date to provide greater clarity to developers. For example without Marinus Link, it is unclear how much extra renewable energy can be built. But with Marinus Link and a clear time line, developers can plan the 2-3 year approval path and four + years construction timing and be ready when Marinus Link comes on line. If this doesn't occur, developers may need to re-apply for approvals after 2 years of achieving a successful development application to keep the approval active. This can happen for a second time but then the approval will lapse. If Marinus Link best date is 2028 this may mean no development approvals being lodged until 2025/2026 and work may not commence until 2023/24 (i.e. no on ground work for another 2-3 years).

UPC would encourage the Government to push ahead with Marinus Link to deliver it earlier rather than later (i.e. target 2027 at the latest) but provide a greater level of certainty to timing to better inform a coordinated development path.

Develop a new load growth attraction strategy for Tasmania

UPC agree with this approach as both complimentary to Marinus Link but also as risk mitigation to a delayed Marinus Link. A coordinated approach with Hydro Tasmania acting as an intermediatory providing certainty for renewable energy development through an offtake but also then enable Hydro Tasmania to ensure a firm supply for the new load should be developed. The Office of the Coordinator General should continue to promote the renewable energy opportunity and look to reduce red tape for new loads to attract more businesses to the state.

Continue to promote Tasmania as a premier investment destination for businesses wanting low cost, reliable and clean energy.

UPC support this action and look forward to working with the Government to achieve this outcome.

Skills Tasmania rollout of the Energising Tasmania skills and training initiative

UPC endorse and support the Energising Tasmanian skills and training initiatives and we look forward to engaging with the programs for our Robbins Island and Jim's Plain Renewable Energy Parks.

Maximise renewable energy development opportunities for Antarctic nations under the Antarctic Gateway Strategy

UPC have no comment on this initiative.