Brief Summary and Review of the TREAP Submissions

Richard Eccleston and Benjamin Parr Tasmanian Policy Exchange University of Tasmania November 2020

Summary

In May 2020, the Government released its *Draft Tasmanian Renewable Energy Action Plan* (link). As part of the consultation process, the Government invited submissions to the *Action Plan* between May and September 2020. According to Minister Barnett, the Action Plan received 33 submissions (link). The Department of State Growth displays 31 submissions (link), including our UTAS-wide contribution titled *Tasmania's Renewable Energy Future* (link). The Government is now considering the submissions, with the final Tasmanian Renewable Energy Action Plan to be released later this year.

This briefer provides a summary and review of the 31 submission on the State Growth website (minus our submission).

The is wide-spread support among the submissions for the TREAP vision and the 200% target (TRET). A strong theme from non-renewable energy producers, social justice outfits, and some local councils, was the importance of keeping power prices low. Other key themes was the importance of establishing a mechanism to support the TRET, and clarity on cost allocation. Particular energy providers and representatives conveyed concern that the Draft Plan unfairly favoured pumped hydro, onshore wind, and solar. Others - ranging from councils and their representatives, environmental groups and even natural gas providers - were concerned that electricity was too narrow a focus and that energy (in transport and industry) more broadly must be decarbonised. There was mixed views on Marinus, yet strong support to establish a renewable hydrogen industry. Another strong theme conveyed across the submissions was the need to enhance community engagement process and benefit sharing opportunities, particularly employment.

Most of the submissions focused on one or two particular areas of the TREAP that corresponds with the interests they represent. The UTAS submission adds significant value by being by far the most wide-ranging and comprehensive submission to the TREAP processes.

Submissions

1. Aurora Energy

Applauds the ambitious target and focuses of economic growth and keeping electricity prices low. Positive – TREAP presents tools and information so energy consumers can manage energy use and costs. Any policy or regulatory mechanism to support TRET should: use market signals; be technology neutral (not favouring one energy of the other); ensure benefits to tas is a priority (particularly given TRET exceeds our needs). Failure to do so would unfairly allocate risk, impede investment, undermine commercial viability of some participants, increase electricity prices for consumers. Aurora is a gas supplier.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0010/267967/SUBMISSION -______Aurora_Energy.pdf

2. Australian Ocean Energy Group

Business cluster advocating for offshore renewable energy. Highly supporting of TREAP, but concerned about the lack of inclusion of one of Tassie's most abundant and powerful re's – ocean energy. Recommends: ocean energy - tidal and wave - given public support and inclusion in TREAP; include ocean energy in CoS. This would deliver jobs and growth, skilled-up workforce and training; clean energy.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0011/267968/SUBMISSION -_Australian_Ocean_Energy_Group.pdf

3. Bioenergy Australia

National lobby that aims at accelerating Australia's bio energy sector. TREAP is ambitious and support Tas as re powerhouse. But TREAP too focused on electricity and missing the abundant opportunities in heat generation and transport fuels. If tas wants to lead it need to decarbonise transport using biodiesel, renewable diesel and ethanol; and decarbonise its gas network through the use of biomethane. This would deliver a global leading low pollution economy and jobs. Recommends: expand TREAP to decarbonise transport and gas networks; develop targets for renewable gas and methane energy; and support bio-hubs.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0012/267969/SUBMISSION -Bioenergy Australia.pdf

4. Blue Economy Cooperative Research Centre

Supports, and can support, the TREAP to transform Tasmanian into a re powerhouse; make re work for the tas community; and grow tas economy and provide jobs. Offshore wind is key component of Blue Economy, and is rapidly growing globally. Offshore renewable can return \$12 for every \$1 invested and has a triple bottom line: environment, social and economic dividends. Presents more advocacy about the global growth of offshore wind – floating and fixed platforms. Wish to highlight the exceptional opportunity available to Tasmania to develop its offshore renewable energy resource – wind, wave, solar, and tidal; and has more advantages (eg more consistent/predictable) than the other re options in the TREAP. Green hydrogen is also important in the Blue Economy – shipping and in remote locations – replacing diesel operations. Closes by stating that clearly the BE aligns with the TREAP. This submission focused on describing the BE opportunities and the global context rather than the TREAP itself.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0004/267970/SUBMISSION -Blue Economy Cooperative Research Centre.pdf

5. Business Northwest

Wholehearted support the TREAP. Wind, BoN, Marinus, will lower the cost of electricity for business and provides jobs and other social dividends such as medical and educational facilities and improved infrastructure. Jobs need to focus on opportunities for young people and we need to guard against FIFO workers who wont help build communities. Completely endorse the Hydrogen plan based on jobs and revenue; and green hydrogen export and green steel-making opportunities - all export ready via Burnie Port. Imagine: we should mine local iron ore with electric trucks, produce green steel and transport it using an electric train to port for export. Support CoE at Cradle Coast campus. Strongly support TREAP being legislated.

<u>https://www.stategrowth.tas.gov.au/_data/assets/pdf_file/0005/267971/SUBMISSION -</u> <u>Business_Northwest.pdf</u>

6. Caitlin Jackson

Supportive but concerned that hydrogen produces nitrous oxide which is a GHG and Ozone depleting substance. Need to consider the life-cycle and indirect impacts of exporting hydrogen.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0006/267972/SUBMISSION -______Caitlin_JACKSON.pdf

7. CEPU Tasmania

Represents 2000+ tassie tradies - electrical, plumbing etc. TREAP limitations - reasonable articulated goals with surprisingly limited map on how to actually get there; most of the plan presumes that benefits will automatically flow from private enterprise to the community; complete absence of consideration for embedding local workers in the process. Recommendations: to ensure cheaper electricity for tas we need to opt-out of the RIT-T assessment process and replace it with a much broader economic benefit text; consideration must be given to the Just Transition Authority in the transition to a low carbon economy and Tas should advocate for an Energy Transition Authority; (A lot of this submission is critical of feds lack of energy policy and urges a national approach); support a Clean Co-style enterprise to ensure energy remains in public hands - these will ensure benefits to tas consumers are maximised. Unconvinced about the need for Marinus because limited evidence that tas consumers will benefit and unrelenting focus on export. 3.5 billion better spent overhauling energy efficiency in Tas, lowering demand, reducing emissions and improving quality of life; and installing battery and solar on every home in Hobart and Launceston – this would cost less and deliver more jobs and energy security. Shouldn't follow fed mantra of "did it up and ship it off" - rather tas should use energy for advanced manufacturing and export at higher profit. Electricity prices in Tas ridiculously high for no reason. TREAP needs to pay more attention to tackling this issue as well as the issue of up-skilling, training and jobs for locals such as apprenticeships local supply chain. Rather the plan appears intent on expanding re via private investment for the benefit of Victorians, largely paid for by Tas consumers and taxpayers. Public ownership and democratic control over tas energy resources is requires, not privatisation and offshoring profits.

<u>https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0007/267973/SUBMISSION -</u> <u>CEPU Tasmania.pdf</u>

8. Clean Energy Council

Peak body representing clean energy industry in Australia. Congratulate tas on win-win vision and position itself as internationally-renowned clean energy powerhouse. Attracting energy investment will depend on tas ability to export clean power. While some capacity lies in Basslink, achieving 200% requires the Marinus Link, and renewable hydrogen production and export capacity and attracting other energy intensive industries. CEC supported AEMO's accelerated transition and 'step change scenario'. Should Tas gov support this CEC recommends: 1. establishing a further interim target for 2025; and mechanism such as a reverse auction or underwriting projects. 2. support and grow the renewable hydrogen sector by establishing a hydrogen certification/ guarantee of origin scheme (This sounds like they are suggesting Tas establish its own scheme): 'it is squarely in Tasmanian's interests to promote the development of a certification method and registry for 'below baseline' renewable energy generation as a matter of urgency', CEC would

welcome tas gov engagement with Feds on this issue. 3. Hydrogen not only industry to attract, other energy-intensive industries and manufacturing are looking for clean, low cost electricity destinations eg – metal refining and ammonia/ fertiliser production, which are hydrogen-based. 4. clean energy jobs. Analysis shows 1000 people working in Tas clean energy (half in wind, third in hydro, and remainder in rooftop solar, solar hot water, and batteries). Under step-change scenario, CEC expects this to double by 2032. Ongoing trade and technical roles in operation and maintenance of renewable energy are expected to double from 500-1000. Recommend all training accompanied by long-term and multi-industry vision of career pathways. 5. Realising TREAP vision will transform communities, need to bring community along on vision and improve livelihoods – discussion around community engagement and benefit sharing suggest CEC's best *Practice Charter for Renewable Energy Developments* is good framework (we cite this in the UTAS Sub).

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0008/267974/SUBMISSION -Clean Energy Council.pdf

9. Climate Tasmania

TRET is one part of transition to a low pollution economy. And one part of climate action underneath the proposed amendments to Climate Change Act 2008, and the development of the next climate change action plan from 2021 onwards. Net zero emissions should be sector based not state based, so would include reductions in industry, agriculture and transport. Marinus and legislated target not sufficient to drive investment and economy-wide change and emissions reduction. Need in TREAP: mechanisms such as reverse auction, much greater emphasis on public transport and active transport, use of renewable hydrogen in aluminium and streel production. Independence advice and community engagement should be central to these policy discussions. Energy efficiency is also critical. (focus of sub is sectoral: analysis, targets, emissions reductions, and mechanisms; not economy wide)

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0009/267975/SUBMISSION -______Climate_Tasmania.pdf

10. Cradle Coast Authority

Represents 9 councils on the west and north west. Support renewable energy vision – Marinus and BoN potential to create jobs, training, and lifestyle, and overcome social disadvantage in our region. Most of the TREAP activities are located in our council jurisdictions (Marinus, Hydrogen hubs, wind, and solar). Thus, community engagement and positive outcomes, and benefit sharing, must be central to TREAP going forward. Needs – accelerate decision on Marinus; engage more

closely with councils; priorities REZ and transmission discussion to assist local planning; establish Renewables Tas, which should be located on the Cradle Coast to encourage close connection with industry and the community; consider establishing gov owned renewable energy projects and interconnection through bonds and similar mechanisms; facilitate transition to electric vehicles which are proven and available unlike hydrogen, which may become available in the future.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0010/267976/SUBMISSION -Cradle Coast Authority.pdf

11. Dave Yetman

Hydro should be the focus.

https://www.stategrowth.tas.gov.au/ data/assets/pdf_file/0011/267977/SUBMISSION -_ Dave_YETMAN.pdf

12. Epuron

Solar and wind developer. Support TREAP vision based-on attract jobs, investment, industry, growth to Tas (nothing specific about tas emissions) and supply re to transition Australia. Marinus and BoN are vital to achieve the 200%. Hydrogen and other industries premised on Marinus proceeding. Need clarity about when, and timeline when, Marinus and BoN will be approved, for itself and to allow other businesses to plan. Needs: Priority 1. 2025 target (along with 2030 and 2040) and periodic review; 2. assurance of lower electricity prices for communities – and need to explore engagement and benefits sharing more broadly; 3. Focus on promoting Tas renewable energy brand nationally and globally.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0012/267978/SUBMISSION -_Epuron.pdf

13. Goldwind

Support 200% and wants to invest more. Target success and investor confidence enhanced if: policy mechanisms adopted such as Certificate regime or reverse auctions (eg ACT or VRET); adopt 2024 target (as well as 2030 and 2040) and perhaps even annual targets. Makes a big deal about benefits that Cattle Hill delivered across economic (eg construction jobs), community (eg sponsored football clubs), and environmental (eg eagle monitoring technology) benefits. <u>https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0004/267979/SUBMISSION -</u> <u>Goldwind.pdf</u>

14. Hydro Tasmania

Five key issues. 1. Hydro will be progressing BoN with support of tas and fed gov, which would unlock win-win scenario: jobs, economic growth, attracting new industry, reliable local supply, export renewable resources (no emissions discussion however). 2. Marinus link is a priority project for the feds, and key to tas energy vision. 3. We are committed to skilling-up Tasmanians across a range of sectors. 4. Community engagement is important and the Renewable Energy Coordination Framework is important in this respect. 5. Big opportunities to attract energy intensive industries seeking a 'sustainability' requirement, a significant growth opportunity is in renewable hydrogen for both domestic use and export, 'the development of an appropriate certification framework can support the production of renewable backed hydrogen in Tasmania'.

<u>https://www.stategrowth.tas.gov.au/ data/assets/pdf_file/0005/267980/SUBMISSION -</u> <u>Hydro_Tasmania.pdf</u>

15. John Harders

Pleased with TREAP. But needs to convert into projects. Tas climate change risk. Fossil fuels (gas, oil) expensive to import for Tas for both public and private sector; also tas vulnerable to disruption in supply. But need not be the case. EV are zero emissions and reduce fuel costs and enhance energy security, and enhance brand tas. Tas gov has done well on EV charging. But not much more. Gov should work to reduce the cost of the EV price tag itself, they are currently twice the price of an equivalent petrol vehicle.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0006/267981/SUBMISSION -______John_HARDERS.pdf

16. Julie Hargreaves

Support TREAP. More discussion needed about on-island advantages – particularly on hydrogen, future jobs and industries (ie data centres and IT), the impact of automation. Personal EVs' and in particular 'small vans - EVs' for businesses in tas is critical and gov should be doing more to facilitate uptake eg get more models in to tas, incentivise early adopters and bulk purchases; transition gov fleet. Energy efficiency programs need to expand to heating in social housing – this is a health issue.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0007/267982/SUBMISSION -_Julie_HARGREAVES.pdf

17. Kentish Council

Part of NW REZ. Supportive of electricity self-sufficiency and low-cost electricity, BoN and other projects should ensure power prices remain low for communities. Greater awareness of energy efficiency and cost saving measures should be established, which should include the benefits of changing technologies eg new electric tools such as chainsaws. The Gov should lead by setting an example on transitioning Tasmania to greater EV usage by having a increased and targeted proportion of there fleet as EVs for State and Local gov. We need to transition away from oil dependency for security reasons. Strongly support growing and attracting new low pollution industries to Tasmania for example Server Farms - for this reasons we want data cables embedded in Marinus Link. We support, and there is broad support in the community, for Cethana to be a pumped hydro site. Pumped hydro should be fast-tracked by the simultaneous installation of both Marinus cables. Marinus cables must not be privately owned. We query the need for Renewables Tasmania and CoE to be separate – they should be one entity.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0008/267983/SUBMISSION -_Kentish Council.pdf

18. Launceston Chamber of Commerce

Supports the TREAP and has developed its own climate change policy. But while we support it, it does little to recognise and plan for the decarbonisation of other forms of energy including petrol, diesel, natural gas, aviation fuel, LPG and coal which are used by Tasmanian businesses. Benefits for the community by shifting from fossil fuels to renewable energy (transitioning to low carbon economy) eg – petrol to EVs, diesel to fuel cells, gas to hydrogen or biomethane. Greater focus in TREAP on specific opportunities for businesses to reduce operational costs and be more sustainable vis a vis mainland competitors eg – what initiatives would assist business utilise rooftop space for solar; adopt EVs and fuel cell vehicles; invest in R&D that could lead to cutting edge technology; circular economy; how to access resources and capital to enable these initiatives. Strong supporter of: renewable hydrogen and use for trucks, buses, ferries and ships; biomethane waste to energy and bioenergy initiatives in the north. Recommends: focus on initiatives, targets, incentives on above fuel sources; set target to decarbonise petrol, diesel, gas by 2030; more resources from State Growth to achieve TREAP; recognise tas can be a leader in organic waste fugitive emissions capture to energy; offer incentives for business to adopt renewable targets.

<u>https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0004/267997/SUBMISSION -</u> <u>Launceston Chamber of Commerce.pdf</u>

19. Mornington Park Waste Transfer Station

Waste and recycling station prior to landfill (we do not own the landfill). Circular economy is key to supporting achievement of TREAP. Support converting waste streams into low cost, reliable clean energy. Tasmanian, like all states, has high waste, which should be reduced, and recycling is often going to landfill or shipped interstate for processing – this should be addressed and emphasised in the Waste Management Plan and TREAP; in addition there is an opportunity to generate bioenergy from waste; and there should be an emphasis on cultivating an reduce, recycle and reusing culture rather than throw away culture. Circular economy much be actionable and is critical to achieving the TREAP.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0009/267984/SUBMISSION -_Mornington Park Waste Transfer Station.pdf

20. National Wind Farm Commissioner

Critiques from national perspective. TREAP should consider – community engagement and benefits sharing opportunities (infrastructure/ facilities and ongoing impact assessment during planning and construction eg noise concerns), opportunities to sell the power generated. (this submission is largely about enhancing comm engagement and benefits)

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0010/267985/SUBMISSION -National Wind Farm Commissioner.pdf

21. Nietta Action Group

In principle support due to GHG emissions and need to sustain life on the planet, but TREAP seems like wishful thinking. Four key areas of concern: 1. TREAP offers businesses 'environmentally sustainable location': given transmission lines will be destroying native forests this is an incorrect statement; also aboriginal, scenic, species threatened by TREAP. Gov need to consider these aspects more carefully. 2. Large-scale renewable generators have negative impacts on local communities eg supposed REZ will become industrial landscapes. It is more likely that industries and jobs will be lost because of the extent of Tas natural heritage damage. 3. Big section on community engagement and benefits sharing – all pushing towards 'green zone' in UTAS submission (strong and deep engagement and empowerment). 4. Brand tas will be damaged by this destructive development.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0011/267986/SUBMISSION -Nietta Action Group.pdf

22. Regional Development Australia

To capitalise on win-win renewable energy opportunities (jobs and training, wind, solar, BoN, hydrogen, other industries in Tas and contributing to NEM and Australia's transition) export required via Marinus. But cost allocation and funding concerns. This is a lengthy report that covers all these issues. Recommends: fed and tas fund Marinus and support BoN; Tas support hydrogen; more thinking on regional employment required; deeper community engagement and benefits sharping required.

23. Tas Gas

TREAP too focused on the development of tas electricity industry. Need for greater focus on decarbonising other sectors that use energy such as heating and transport – TREAP needs to set targets and a roadmap to decarbonise natural gas and for reduced petroleum use in Tasmania. Recommendations: 1. Renewable/ Green gaseous fuels. Most of tas emissions come from transport, industrial processes, and agriculture. Tas gas can enable emissions reductions here by capturing fugitive emissions from waste water, industry and livestock and reinject into our networks; and/or substitute natural gas in our networks with renewable hydrogen. These initiatives would enhance global leader brand. Hydrogen is central to reducing emissions across these sectors. 2. Energy Security. TREAP should acknowledge the ongoing importance of natural gas in tas for energy security purposes (eg. Basslink 2016) and big industries rely on gas at present and not commercially viable to transition them to single energy source. Other recommendations – definitions of energy and bio in bioenergy; recognise importance of existing gas, that green gas could attract new industries, and the importance of gas infrastructure; set targets to decarbonise emitting sectors.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0004/267988/SUBMISSION -Tas_Gas.pdf

24. Tas Networks

This submission basically runs down the TREAP list stating what it is supporting and doing. There are few recommendations or criticisms eg carful network planning will be required to ensure 10,500GwH per year can be added and 200% is reached.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0005/267989/SUBMISSION -Tas Networks.pdf

25. TasCOSS

Peak body representing the community service industry in Tas, and low-income and disadvantaged Tasmanians. Key concern is to keep energy affordable for these Tasmanians. Support TRET, but key concern is that it is premised on Marinus and thus a risk that Tasmanians and low income Tasmanians - will have a disproportionate burden of carrying the costs, and low pollution transition, when it will primarily benefit mainlanders and big energy companies. However, also acknowledge that Marinus/ transition may bring jobs and opportunities - but remain unconvinced about the project/transition. Recommends 1 – that tas gov articulate its view on Tas fair share of marinus costs; and 2 – gov guarantee that Tasmanian residential consumers won't be worse off over life of asset; 3 - support gov covid support on electricity bills but recommends moratorium on disconnections and a customer support fund in light of covid income and ongoing energy bill stress; 4 - revises existing target of lowest regulated electricity prices to lowest electricity prices in the NEM; 5 – removal of the Aurora+ app fee (customers should not be charged to access their own data); 6 – energy efficiency is key to reducing bills, improving health and addressing climate change, and will also stimulate jobs in installation and maintenance, and should be pursued by the gov at a state and federal level, at a state level by re-establishing PowerSmart Homes and Tas Energy Efficiency Loans Scheme; 7 – would like to see distributed energy resources (DER) investments; 8 - Multi-stakeholder cooperation to up-skill and find jobs for young people, women, the long term unemployed, and elderly.

<u>https://www.stategrowth.tas.gov.au/ data/assets/pdf_file/0006/267990/SUBMISSION -</u> <u>TasCOSS.pdf</u>

26. Tasmanian Gas Pipeline

Supports the TREAP. Pleased TREAP identifies gas and TPG as enabler of renewables expansion as well as standalone on-island jobs and economy booster. TPG imports natural gas via Basslink to provide a 'clean source' of heat and cooking for 12500 residential and 1000 commercial customers. Gas will be an important dispatchable back-up generation even when 100% renewable is achieved in dry periods, or low wind and/or outages in Basslink cables. Gas saved Tassie's lights from going off in the 2015/16 energy crisis. Gas is important to keep in the mix. Estimates are that a serious outage in seabed cables occurs once a decade. In 2019, gas was used to keep dams above Prudent Storage Levels. Long-term rainfall trends and 'climate extremes' are uncertain; combined with the 'demonstrably fallible single cable' means gas is needed. If Marinus proceeds, gas must continue to act as a back-up energy source for the above reasons (low dam levels, and low wind, basslink cable failure) and support renewable operations. Supply of gas in critical to on-island manufacturing, including hydrogen. (Focus: gas needs to remain because critical to Tas energy security, low emissions dispatchable energy; facilitation of economic growth; accompanies growth in renewables)

<u>https://www.stategrowth.tas.gov.au/_data/assets/pdf_file/0007/267991/SUBMISSION -</u> <u>Tasmanian_Gas_Pipeline.pdf</u>

27. Tasmanian Minerals, Manufacturing and Energy Council

Supportive of the plan and targets. Little evidence that renewables will reduce the cost of energy. Repeated strong suggestion that the price of energy is the only thing that matters when seeking to attract international and national investors and industries. 200% aspiration goal should be accompanied with an aspiration energy price goal. Energy security via gas is not sufficiently addressed in the TREAP. The plan needs to recognise the importance of gas to Tasmania. More emphasis needed on retaining existing industries (not just attracting new ones). We support Marinus on the basis that it does not cause electricity price rises. Coal is a small but essential element in Tassie's energy portfolio. The TREAP should perhaps consider an offset mechanism to ensure remain in the Tas energy mix. (Focus: Gas needs to remain. Energy prices should be the priority.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0008/267992/SUBMISSION -_Tasmanian Minerals, Manufacturing and Energy Council.pdf

28. Tasmanian Renewable Energy Alliance Inc.

Support the target. Particularly happy with the community consultation dimension. Needs: explicit acknowledgement that net-zero emissions require emissions reductions across all sectors of the economy; a sector by sector emissions profile history and a comparison with mainland states/territory; sector by sector emissions reduction targets and trajectories. Concerned that 200% is export target based on and hydrogen – both with are not locked-in; Marinus costs allocation not finalised; surplus power should be used to decarbonise transport and industry as well. Target should not be legislated without demonstrated demand for surplus. More needed on public transport conversion to electric, and specifics about re in aluminium and steel production. https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0009/267993/SUBMISSION - Tasmanian Renewable Energy Alliance Inc..pdf

29. University of Tasmania

NA

30. UPC\AC Renewables

Develops, owns and operates re businesses, mostly wind, in Australia and internationally – several project in Tas including Robbins Island, Jim's Plain and seeking other opportunities. Also supports hydrogen development in Tas. Fully supports TREAP based on win-win: regional jobs, attracting industry. Market currently too small to achieve target, thus need Marinus or hydrogen. Risks to new projects include revenue certainty to finance projects and grid connection. Gov could reduce risks by establishing a reverse auction mechanism (explains this mechanism in useful detail) and though Marinus Link, ideally operational pre-2030. BoN real value is in export to Vic to transition mainland away from coal. Support hydrogen. To attach hydrogen to Tas (and accompanying industry – transport for example), Hydro would guarantee very high renewable energy supply to the industry - this would be tassie's competitive advantage compared to the mainland jurisdictions. Sectoral emissions reduction targets should be considered in transport (eq. hydrogen fuel cell or electrification), industry (replace gas) and agriculture (green UREA/ammonia). This would enhance fuel security in Tas. CoE good idea. Possible bioenergy if commercially attractive. UPC needs help managing renewable expansion: Coordination Framework is a good idea, but need mechanism to coordinate transmission development, improved planning processes, and promotion of REZs in communities. Gov should set targets to transition gov to EVs' fleet and advocate in Canberra to bring down cost of EV's; and gov should establish targets to replace Metro fleet, garbage trucks for councils, and other light vehicles, with hydrogen fuel cells and fuelling stations. Supports keeping electricity prices low – gov should start to decouple tas electricity pricing framework from Victoria. Support rollout of smart meters but oppose costs to access data on the Aurora Energy App – gov should make this free. Supports energy efficiency to lower electricity costs for consumers; solar panels for schools should be explored. National initiatives should support tas renewable growth – Marinus should be established asp. To attract renewable growth, Hydro should guarantee supply, and Coordinator General should reduce redtape for renewable projects. Supports training and education initiatives.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0011/267995/SUBMISSION -_UPC_AC_Renewables.pdf

31. World Wildlife Fund

Supports Tas becoming re powerhouse. TREAP provides opportunity to decarbonise tas and export. Recommends 1. Tas legislate 200% world-leading target by year's end. Opportunities for jobs, growth, exports new industries (doesn't mention emissions, as most submission don't). Paris Agreement means world is moving to renewables, tas has early mover advantage, and competitive advantage with natural assets. 2. Investigate 300-350% target by 2040, consistent with decarbonising all sectors in tas economy and expanding tas export to align with innovation and industry/markets trends and needs on mainland and globally. 3. To attract industry to Tas need to

establish Renewable Tasmania, strategy, global promotion of Tas renewable status, Marinus, Tas hydrogen action plan, decarbonise transport via electrification and industry. 4. Establish markets abroad for sale and export of renewable hydrogen for shipping and offshore uses. 5. Pilot Bell Bay as hydrogen hub. 6. Establish guide rails for community engagement, benefit sharing and nature protection specific to Tasmania (social licence). Do not support development of bioenergy industry in tas, apart from specific smaller scale projects in waste. 7. Bring forward Climate Change Act consultation process. 8. Support CoE.

https://www.stategrowth.tas.gov.au/ data/assets/pdf file/0012/267996/SUBMISSION -_World Wide Fund.pdf