UNIVERSITY of TASMANIA

University of Tasmania Submission to the Draft Renewable Energy Coordination Framework

Prepared by the
TASMANIAN POLICY EXCHANGE
in collaboration with the
FUTURE ENERGY RESEARCH GROUP

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This submission has been prepared by the Tasmanian Policy Exchange (TPE) in collaboration with the Future Energy Research Group at the University of Tasmania.

The TPE has been established to enable the University of Tasmania to make timely and informed contributions to key policy debates occurring in Tasmania thus making a positive contribution to the future of our state and its people.

The Future Energy Research Group is a research collaboration at the University of Tasmania focusing on energy governance, markets, culture, and technologies. The group brings together expertise from across the University to produce high quality research and to develop options for future energy provision in Tasmania and beyond.

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Contributing Authors

Richard Eccleston, Director, TPE and Professor of Political Science

Evan Frankin, Co-Director, Future Energy Research Group and Associate Professor in Energy and Power Systems

Dr Clinton Levitt, Co-Director, Future Energy Research Group and Lecturer in Economics

Dr Benjamin Parr, Energy Policy Analyst, TPE

Dr Phillipa Watson, Research Fellow, Syndicate of Technology, Environments and Design (TED)

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List of acronyms

AEMO - Australian Energy Market Operator

EPA - Environment Protection Authority

ESB - Energy Security Board

GWh - Gigawatt hours

ISP - Integrated System Plan

LREC - Large-scale renewable energy certificate

NEM - National energy market

REC - Renewable energy certificate

REZ - Renewable energy zone

TREAP - Tasmanian Renewable Energy Action Plan

TRECF - Tasmanian Renewable Energy Coordination Framework

TRET - Tasmanian Renewable Energy Target

Executive Summary

The *Tasmanian Renewable Energy Action Plan* (*TREAP*) established an ambitious goal of doubling renewable energy generation in Tasmania by 2040, which has the potential to deliver long term economic, social and environmental benefits both in Tasmania and beyond.

Whereas the TREAP establishes a 200% renewable generation target and identifies ways in which Tasmania's renewable energy resources can be used to reduce emissions and promote emerging low carbon industries, the Tasmanian Renewable Energy Coordination Framework (TRECF) addresses the questions of how to promote renewable energy investment and where new renewable energy projects and associated infrastructure should be located?

Australia's electricity system is undergoing a rapid transition from fossil fuel-based generation to a future where renewables play a much larger role. This transition promises significant economic and environmental benefits, but it is complex and requires careful planning in terms of renewable energy projects, transmission infrastructure and market design. The policy challenge facing the Tasmanian Government is compounded by the fact that prior to the implementation of the Energy Security Board's (ESB) Post-2025 Market Design process there may not be sufficient market incentives to support the investment in renewable energy projects required to meet the Tasmanian Renewable Energy Target (TRET). Given this situation, the TRECF is particularly important, both to support the next phase of renewable development in Tasmania and to contribute to the design of a national market framework which will ensure the supply of affordable and reliable electricity to consumers as Australia continues the transition to a low emissions electricity system.

Given these complexities, this brief submission will provide a high-level response to the main consultation questions raised in the TRECF. Our focus is on identifying the key questions which the final TRECF report should address and the specific approaches that should be considered.

Key ojectives

The TRECF identifies three broad objectives which are central to the successful implementation of the TREAP. These are:

1. Developing a market design and financial models to facilitate investment in new renewable generation while promoting transparency and minimising the financial risk to Tasmanian state-owned energy businesses and taxpayers. The approach can be used to inform the ESB's Post-2025 Market Design.
2. Developing a planning and approvals framework to identify optimal sites for new renewable projects and to support timely approvals.
3. Developing a comprehensive approach to community collaboration and benefit sharing to enhance community support for renewable energy projects and to maximise the long-term benefits to Tasmanian communities. .

Specific goals of the TRECF

This submission argues that a carefully designed and transparent framework for the funding and approval of new renewable energy projects in Tasmania will deliver a number of benefits which will support the implementation of the TREAP. It will:

- Ensure that new renewable energy projects can be delivered in a timeframe to meet the needs of the National Energy Market (NEM) as specified in the Integrated System Plan (ISP).
- Provide more certainty for proponents of renewable energy projects while identifying and minimising financial risks to Tasmania state-owned energy businesses and taxpayers.
- Enhance community support for the TRET by identifying the scale and location of likely renewable projects while maintaining a robust planning and approvals process and a commitment to community collaboration and benefit sharing.
- Strengthen the national case for Marinus Link through the development of a clear framework for implementing the TRET.

Reflecting these aims and the complexity of the issues central to the TRECF, this brief submission provides high level insights and outlines key issues for further consideration in relation to:

1. Market design required to promote investment in renewable energy generation in Tasmania
2. Establishing renewable energy zones (REZs)
3. Establishing a centralised Renewable Energy Planning Framework
4. Establishing Community Partnerships and Benefit Sharing

This submission endorses the agenda proposed in the TRECF consultation paper but notes that questions of energy market design, REZs, centralised planning and community collaboration are benefit sharing are complex and will require detailed policy development and analysis before the Coordination Framework can meet its stated objectives.

Section 1:

Market design to achieve the TRET

Tasmania is a leader in renewable generation having become 100% self-sufficient in late 2020 and with a world leading goal of being 200% renewable by 2040. Creating effective and transparent financial incentives for new renewable generation projects will require an innovative approach to market design, especially given the ongoing work of the ESB's Post-2025 National Electricity Market Review (ESB 2020).

The mix of electricity generation in the NEM is moving towards large scale renewables in more decentralised and dispersed locations. By 2040 it is estimated that 26-50 GW of new renewable generation will be added to the NEM supported by between 6 and 19 GW of flexible and dispatchable resource.

There is broad recognition of the need to develop nationally consistent approaches to incentivising investment in new renewable generation (as well as system services and demand management) but until the ESB's review of NEM's post-2025 market design is completed states are developing their own approaches. These include reverse auctions and direct incentives..

REVERSE AUCTIONS – VICTORIA, NSW AND THE ACT

By the end of 2021 Victoria's reverse auctions will have contracted over 1500mw of renewable generation as part of the state's commitment to secure 50% of electricity from renewable sources by 2030 (plus $540 million on transmission). Reverse auctions can be an efficient and transparent mechanism to subsidise new renewable generation in markets with sufficient scale and market participants to ensure genuine competition. Government specifies the quantum of renewable electricity it is seeking to purchase and the developer willing to supply at the lowest price wins a purchasing agreement. In practice reserve auctions are complex and involve risks, especially in rapidly changing markets such as for renewable energy. For example. financial risks associated with a commitment to a long-term purchasing agreements can be managed through contracts of difference.

NSW's Renewable Energy Plan released in November 2020 will also use reverse auctions to award 20 year contracts for new renewable projects in their REZs to establish a minimum return on new electricity generated. Renewables Tasmania should carefully analyse the use of reverse auctions in Victoria and NSW and assess whether they are a suitable instrument for the Tasmanian context.

Despite the advantages of reverse auctions there are some challenges associated with using this approach to market design in the Tasmanian context given the small-scale supply market and fact that any renewable capacity purchased through a reverse auction will be exported rather than used to meet on-island demand (see UTAS 2020, pp 20-22).

DIRECT INCENTIVES – QUEENSLAND, AND THE NATIONAL CLEAN ENERGY FINANCE CORPORATION

Market-based models for incentivising renewable energy development are preferable from a fairness and efficiency perspective but may not be appropriate in smaller, imperfect markets. An alternative is the direct provision of incentives via grants, equity holdings or loans. Nationally the Clean Energy Finance Corporation has invested over $6 billion in a wide range of renewable energy and emissions reduction projects since 2012, while at a state level the Queensland Government has established state-owned CleanCo to directly develop or invest in 1000 MW of new renewable generation by 2025.

TASMANIA

Tasmania has a relatively unique market structure given the state has sufficient renewable generation capacity to meet 100% of on-island demand and new renewable supply is not required to 'build out' or replace fossil fuel generation. However, it is important to note that the Tasmanian energy system is connected to the NEM via Basslink

and this integration will increase if Marinus Link proceeds with significant implications for the Tasmanian energy market.

The financial viability of early wind projects in Tasmanian was supported by Large-scale Renewable Energy Certificates (LRECs) but these are no longer available (and hence the use of other incentives in other states) and given the state's focus on the exporting renewable energy it is difficult to design a state-based Renewable Energy Certificate (REC) scheme.

More recent wind projects have been underwritten by long-term purchasing agreements negotiated on a project-by-project basis. This approach promotes private investment in new renewable energy projects but arguably lacks transparency and effectively shifts the financial risk associated with new renewable projects to taxpayers.

A further complication in the absence of a national market framework is developing a state-level pricing model to encourage the development of dispatchable supply and deep storage on which the NEM will increasingly depend.

The issue of energy market design is complex and this is especially true given the nature of the TRET and the fact that, as noted above, new renewable generation in Tasmania will provide a system services/deep storage function for the wider NEM. It is likely that the ESB's post-2025 Market Design Review will deliver a national framework which will support investment in Marinus Link, Battery of the Nation and additional on-island renewable development. In the interim, detailed analysis of alternative approaches to market design and their relevance to the contemporary Tasmanian context should be undertaken, including analysis of the financial implications of different approaches for a range of likely future energy market scenarios.

MARKET DESIGN PRINCIPLES

Any market framework design to support the TRET should be guided by the following principles:

Transparency: Where possible, any public subsidy (which may be necessary and should be justified in terms of economic development or emissions reduction benefits) should be transparent as should the distribution of financial risks associated with a project.

Consistency: There should be a consistent approach to renewable energy developments and the incentives available to them. If subsidies are not allocated via a competitive process such as a reverse auction (as in Victoria, NSW and the ACT), then they should be applied using a formal application process which is subject to independence assessment (as in Queensland through CleanCo).

Financial sustainability: The long-term financial consequences (both return to taxpayers and impact on electricity prices) of renewable energy purchasing or supply agreements entered into by the Tasmanian Government or state-owned energy businesses in order to achieve the TRET should be assessed for a range a likely energy market scenarios.

The successful implementation of the *TREAP* is dependent on developing a market design and incentives which balance the needs of investors with those of the Tasmanian community. The ESB Review of the NEM post-2025 market design will be critical to Tasmania achieving the TRET and the Tasmanian Government, through Renewables Tasmania, should undertake detailed analysis of market design models used in other jurisdictions and their relevance to Tasmania's unique circumstances. This analysis should include modelling of financial and energy pricing implications for a range of likely scenarios.

Section 2:

Establishing renewable energy zones

The goal of the TRECF is to encourage investment in renewable energy projects and to centralise and expedite renewable energy planning and approvals processes. Given the rapid transition to renewable energy generation occurring across the NEM there is a clear need to establish a planning framework which can deliver new projects into the grid at 'optimal timing' however, as noted below, there are trade-offs that need to be carefully considered and managed.

A central objective of the Draft TRECF is to establish renewable energy zones (REZs) in Tasmania as the preferred areas in which the estimated 2000MW (UTAS 2020, p. 18) of new renewable generation capacity, capable of delivering 10,000 GWh of renewable energy annually by 2040, would be developed. These zones would be based on AEMO's 2020 Integrated Systems Plan and would identify sites with cost effective access to transmission infrastructure and renewable energy potential while minimising social and environmental impacts.

Establishing clearly defined REZs is also a key feature of renewable energy strategies in both Victoria and NSW, with learnings from Victoria being particularly instructive for establishing REZs in Tasmania (Victoria 2021). While the REZs are important for planning transmission infrastructure, if they are established through a process that combines independent analysis and a commitment to community collaboration then the approach also has the potential to alleviate community concerns in relation to renewable energy developments.

FURTHER CONSIDERATIONS

There is broad support for the establishment of REZs but the following issues warrant further consideration.

The scale of REZs

The Australian Energy Market Operator (AEMO) proposed REZs across the NEM are based primarily on technical considerations including the proximity to existing and proposed transmission infrastructure, wind and solar resource and major consumers. Within these regional zones, governments can work with communities to identify smaller parcels of land which meet technical criteria while minimising social and environmental impacts. Identifying smaller parcels of land suitable for renewable projects can serve as the basis for an expedited planning and approval process. The TRECF consultation document (Renewables Tasmania 2021, p. 22) commitment to 'provide further state-level detail to drive optimal generation siting' appears to be consistent with this approach.

Planning and environmental approvals

A collaborative approach to establishing small-scale REZs for future renewable energy developments can enhance community support and help expedite planning and approval processes (assuming REZs have been established to minimise social and environmental impacts). However, developments within REZs should still be subject to the same environmental and planning assessments and standards which currently exist to allay concerns that such standards are being eroded.

Reflecting the need to maintain assessments standards, the TRECF consultation document (Renewables Tasmania 2021, p. 21) commits to maintaining 'existing robust and independent regulatory assessment process'. The Victorian Government's recent Directions Paper on establishing REZs has been criticised for failing to give sufficient consideration to environmental impacts (Government of Victoria, 2021). Given Tasmania's world-class environmental assets and history of environmental conflict, it will be important to adopt a best practice approach to assessing and minimising environmental impacts associated with renewable energy projects. To this end, UNESCO's Guidance Tool to avoid and mitigate the possible negative impacts of renewable energy projects on World Heritage properties could be considered (UNESCO 2021).

Section 3:

Establishing a centralised Renewable Energy Planning Framework

A central objective of the TRECF is to streamline planning and environmental approvals and the associated community consultation and engagement process (Actions 1.2.3, 1.2.3 & 1.3.1).

NSW has adopted a fast-track approach to renewable energy planning approvals, including for Snowy 2.0. The NSW approach is to fast-track approvals for transmission infrastructure as a means to unlock and incentivise large scale solar and wind projects in REZs. Accelerated approvals for renewable energy developments in NSW have been motivated by the twin desires to encourage investment and jobs in a post-COVID environment and to decarbonise the state's electricity system.

The proposed centralisation of renewable energy planning processes could deliver benefits but there are also a number of considerations and risks with the proposed framework which should be addressed. Specifically, if there is a perception that planning standards and assessments have been eroded or if the proposed Renewable Energy Planning Commission lacks independence and accountability then it may undermine community support for and confidence in the TREAP.

Issues which should be clarified and addressed include:

- The role, authority and accountability of the Renewable Energy Coordinator needs to be clearly defined and carefully justified. Concentrating a number of responsibilities such as investment promotion, community engagement and collaboration and oversight functions in one such position creates governance and political risks. Key questions include whether the Coordinator is a statutory appointment? How are they appointed? What is the right of appeal and is their oversight from the courts or ombudsman? Where possible the Tasmanian approach should be based on best practice models in other jurisdictions.
- Under what circumstances would a development be reviewed or delayed? Would the Environmental Protection Authority (EPA) have a role in the process? What if aboriginal artifacts or items of cultural significance were discovered at a development site?

Section 4

Establishing community partnerships and benefit sharing

The fourth and overarching objective of the TRECF is to develop a more structured approach to community collaboration and benefit sharing. As noted in the University of Tasmania's submission to the TREAP (UTAS 2020, pp.58-64), structured collaborations and partnerships with Tasmanian communities will be essential to ensure long-term benefits from the TREAP which, in turn, will enhance community support for the expansion of renewable energy generation in Tasmania.

There is a consensus that effective community engagement involves more than traditional 'top down' consultation where government or developers provide information about a proposal and seek input into design features. Significantly, Objective 3 of the TRECF on "Partnering with Communities" outlines a number of approaches to community engagement and benefit sharing including the development of mechanisms to strengthen community benefits commensurate with project profitability (Action 3.1.1) and formalising community engagement processes (Action 3.3.1).

This approach to community collaboration and benefit sharing is a positive step which should enhance community support for the timely rollout of renewable energy projects within Tasmania's REZs, but much will depend on the design and governance of these reforms. To reassure communities, reform processes should be transparent, lines of accountability formalised, and decision-making authority clarified. As it stands, the draft TRECF consultation document provides few details on specific consultation or benefit sharing methods and models and how best to engage with local community groups and individual community members. As noted in the UTAS submission to the TREAP, both Scotland and Victoria have established frameworks which could be considered in Tasmania (UTAS 2020, pp 58-64).

Further considerations:

- It will be important to give careful consideration as to how 'community' is defined for the purpose of the TRECF. For example, given the growth in smaller scale (including residential) generation and storage the traditional distinction between industry and community has become less clearly defined. Also, careful distinctions between the communities which host renewable energy projects and the wider Tasmanian community need to be established.
- Beyond direct collaboration and benefit sharing with host communities the broader benefits for energy consumers, the Tasmanian economy and community (via employment, dividends and brand value) should be assessed and communicated, especially if public investments and subsidies are involved. Above all, Tasmania's contribution to national emissions reduction should be promoted.
- Given the existing community opposition in some quarters to new energy projects, the importance of community collaboration and support cannot be understated. A collaborative approach to development projects, consistent with and contributing to identified community needs and aspirations, will ensure Tasmania enjoys long-term benefits from achieving the TRET. Any more formal model of community collaboration and benefit sharing should include a defined role for an independent ombudsman to resolve disputes.

Conclusion

The draft TRECF outlines a number of important initiatives which will help ensure the successful implementation of Tasmania's ambitious Renewable Energy Action Plan.

Developing market structures and incentives to encourage timely investment in new generation while promoting transparency and minimise financial risk to state-owned energy businesses and taxpayers will be important, especially during the transition to the proposed post-2025 market design.

Establishing small-scale REZs based on access to transmission infrastructure and wind and solar resources while minimising environmental and community impacts has the potential to expedite development and enhance community support if they are established by transparent, consultative and evidence-based processes.

Centralised renewable energy coordination and planning can also facilitate development but there are risks which have to be managed. There should be a clear commitment to maintaining existing environmental and planning standards and, in terms of governance, any assessment functions of the proposed Renewable Energy Commissioner should be separate from a development role and the position should be subject to appropriate oversight.

Finally, the draft TRECF consultation paper rightly acknowledges that developing a credible framework for enhancing community collaboration and benefit sharing will help ensure that future renewable energy projects secure community support and deliver long term economic, social and environmental benefits to Tasmanian communities.

This submission endorses the agenda proposed in the TRECF consultation paper but notes that questions of energy market design, REZs, centralised planning and community collaboration and benefit sharing are complex and will require detailed policy development and analysis before the Coordination Framework can meet its stated objectives.

As this submission has noted, experiences in other jurisdictions can be used to help inform the design of the TRECF so long as models from interstate and abroad are adapted to meet Tasmania's unique needs and circumstances. Naturally staff and researchers at the University of Tasmania are willing to continue to work with the Tasmanian Government to develop and promote the state's renewable energy future.

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