Submission No 65

INQUIRY INTO IMPACT OF RENEWABLE ENERGY ZONES (REZ) ON RURAL AND REGIONAL COMMUNITIES AND INDUSTRIES IN NEW SOUTH WALES

Organisation: Unions NSW

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Submission to the NSW Legislative Council inquiry into the impact of Renewable Energy Zones (REZs) on rural and regional communities and industries in New South Wales.

Introduction

1. Unions NSW is the peak body for trade unions and union members in NSW. We have 48 affiliated trade unions and labour councils who collectively represent over 600,000 union members in all industries in NSW.

2. Unions NSW welcomes the opportunity to provide a submission to the NSW Legislative Council inquiry into the impact of Renewable Energy Zones (REZ's) on rural and regional communities and industries in New South Wales.

3. This submission primarily addresses s. (a) of the terms of reference, 'current and projected socioeconomic, cultural, agricultural and environmental impacts of projects within renewable energy zones in New South Wales including the cumulative impacts'. The focus in this submission is on the potential positive socioeconomic impacts on jobs creation and for Australian manufacturing.

4. Unions NSW has also had the opportunity to review the submission of our affiliate, the Australian Workers Union, and supports its recommendations, particularly in relation to supporting minimum local content requirements.

5. As presented in the 2020 *NSW Electricity Infrastructure Roadmap* (NSWDPIE 2020), the NSW Government seeks to attract private investment into five (expanded from three) Renewable Energy Zones (REZs). REZs are 'selected for the quality of their renewable resource, and their proximity to consumers, existing transmission and available skilled workforces' (AEMO 2024, p. 52).

6. The aim is for government to enter 'Long Term Energy Service Agreements' with business which are designed to encourage the development of electricity infrastructure within the zones. This includes solar, wind, hydro, transmission lines, and dispatchables such as storage.

7. This submission presents evidence of the potential benefits to Australian jobs and manufacturing through development of the REZs in accordance with the *NSW Renewable Energy Sector Board's Plan* to maximise local content, jobs, and training.

Recommendation:
The NSW Government should ensure that the REZs are developed in accordance with the *NSW Renewable Energy Sector Board's Plan* with a clear focus on making informed decisions which maximise the use of local content, creating sustainable jobs, and training opportunities.

Ensuring the REZs support local content, jobs, and training

8. The NSW Renewable Energy Sector Board is a tripartite organisation established under the *Electricity Infrastructure Investment Act 2020* to produce a plan for the renewable energy sector. By implementing the plan, the Energy Corporation of NSW (EnergyCo) will coordinate development of the REZs such that they:

    a. maximise the use of locally produced and supplied goods and services,

    b. maximise the employment of suitable qualified local workers; and

    c. foster opportunities for apprentices and trainees.

    (NSWRESB 2022, p. 15; EnergyCo 2023, p. 70).

9. The Australian Energy Market Operator (AEMO) acknowledges that well planned REZs can 'promote regional expertise and employment over long periods to build and maintain generation and storage assets and the equipment needed to ensure power system security' (AEMO 2024, p. 53).

10. In recent decades, NSW has forgone much of the potential benefit that would come from utilising local content for infrastructure projects. The 2021 report by the Mckell Institute, *Build it here: The economic cost of offshoring major transport projects in New South Wales*, examined six NSW infrastructure projects awarded to international consortiums. These projects, representing the largest procurement project for each category of transport rolling stock, are captured in the following table.

	Project	Primary location	Stated budget*	Description
Intercity Rail	New Intercity Fleet (NIF)	South Korea	$2.8 b	500 train carriages
Suburban Rail	New Suburban Fleet	China	$2.6 b	17 new trains
Metro Rail	Sydney Metro	India	$1.2 b	22 train sets
Light Rail	Light Rail Trams	France, Spain	$1.6 b	60 carriages
Ferries	Sydney Ferries	China, Indonesia	$1.3 b	13 ships
Buses	B-Line Buses	Germany, Malaysia	$222 m	38 buses, chassis built in Germany and assembled in Malaysia

Table: Largest headline public purchases (Mckell Institute 2021, p. 7).

11. The report found of the six procurements examined, four would have produced greater economic benefits from local production than the savings generated from overseas sourcing. In the two remaining projects, the overall cost savings were marginal and may be eroded when factoring in other costs such as delays and design flaws.

12. The report estimated if the four projects with positive net economic value of local production were produced locally, 4,192 direct and indirect jobs would have been created.

13. The REZs present an opportunity to learn from past mistakes. The *NSW Renewable Energy Sector Board's Plan* (NSWRESB 2022, pp. 23-4) describes the socioeconomic opportunities for NSW through manufacturing the infrastructure for the REZs locally. According to the Plan, significant opportunities exist to create jobs through:

    a. solar farm infrastructure;

    b. wind tower manufacturing;

    c. wind farm manufacturing (non-tower);

    d. battery energy storage supply chain;

    e. offshore wind;

    f. electrical balance of plant;

    g. transmission tower manufacturing; and

h. End-of-life reuse and recycling.

14. Through the Board's plan, the REZs can create important and lasting socioeconomic benefits to NSW, particularly in the regions. According to the Board, the benefits of implementing its plan include:

    a. $520 million of net economic benefits from the minimum requirements for local content;

    b. $1.3 billion of net economic benefits from the stretch goals; and

    c. 13,400 job years created between 2020–2041 from the minimum requirements for local content.

    (NSWRESB 2023, p. 5).

Opportunities to leverage the REZs to support Australian manufacturing jobs

15. The REZs represent a cornerstone or anchor for the potential development of a much larger Australian renewable energy industry, which can provide greater socioeconomic benefits.

16. Firstly, the opportunity to develop an integrated battery supply chain represents an estimated $7.4 billion market opportunity for Australia, with the potential to generate 34,000 jobs (Future Batteries Industries CRC 2021, in NSWRESB 2022, p. 23).

17. Secondly, the opportunities created by offshore wind manufacturing in the Illawarra REZ were explored by Larkin, Carr, & Klocker (2023). They found that the 300,000 tonnes of steel required for one offshore wind project would represent 10% of the Port Kembla BlueScope steelworks' annual production (Nowland 2019 in Larkin, Carr, & Klocker 2023, p. 60). BlueScope currently directly employs 3,000 people in the Illawarra and supports approximately another 10,000 jobs dependant on the steelworks (BlueScope Steel, n.d.).

18. Thirdly, manufactured aluminium is another key material used in renewable energy development and the REZs could be leveraged to reinvigorate this high value domestic industry. While Australia is the number one global producer of bauxite, the raw material for aluminium, we export 90% to be

smelted and manufactured overseas (Stanford & Armistead 2022, p. 36). From 2010-2019, Australia's production of bauxite increased by 56%, however, our aluminium production *decreased* by 19% (Stanford & Armistead 2022, p. 17).

19. Nevertheless, NSW's Tomago aluminium smelter employs 1140 people, boosting the NSW economy by an estimated minimum of $882 million annual GDP (Stanford & Armistead 2022, p. 49). If renewable energy projects were harnessed to drive a restructure of this industry so Australia's mined bauxite was refined into alumina and then manufactured into aluminium domestically, it could generate an additional $25 billion in revenue and 24,000 new jobs (Stanford & Armistead 2022, p. 21). The development of our domestic manufacturing capacity can assist us to meet materials and supply chain challenges presented by the REZs in a way that supports jobs and economic growth.

20. These are some examples, but are not exhaustive, of the potential opportunities NSW and Australia have for improved socioeconomic prosperity through renewable energy infrastructure, with REZs as an important foundation in that development.

Conclusion

21. The REZs present an opportunity to provide socioeconomic benefits to the state of NSW by supporting jobs, economic growth, and the development of our domestic manufacturing industry. This opportunity can be harnessed by ensuring that the REZs are developed according to the *NSW Renewable Energy Sector Board's Plan*.

Recommendation:
The NSW Government should ensure that the REZs are developed in accordance with the *NSW Renewable Energy Sector Board's Plan* with a clear focus on making informed decisions which maximise the use of local content, creating sustainable jobs, and training opportunities.

References

- AEMO (Australian Energy Market Operator) (2024), *Integrated System Plan*, accessed 21 January 2025, https://aemo.com.au/energy-systems/major-publications/integrated-system-plan-isp/2024-integrated-system-plan-isp.
- BlueScope Steel (n.d.), *Illawarra*, accessed 21 January 2025, https://www.bluescope.com/illawarra.
- EnergyCo (2023), *NSW Network Infrastructure Strategy*, NSW Government, accessed 21 January 2025, https://www.energyco.nsw.gov.au/industry/network-infrastructure-strategy-nsw.
- Larkin, N., Carr, S., & Klocker, N. (2024), 'Building an offshore wind sector in Australia: economic opportunities and constraints at the regional scale', *Australian Geographer*, *55*(1), 45-68, DOI: 10.1080/00049182.2023.2276144.
- Mckell Institute (2021), *Build it here: the economic impact of offshoring major transport projects in New South Wales*, accessed 21 January 2025, https://www.unionsnsw.org.au/publication/build-it-here-the-economic-cost-of-offshoring-major-transport-projects-in-new-south-wales/.
- NSWDPIE (NSW Department of Planning, Industry and Environment) (2020), *NSW Electricity Infrastructure Roadmap*, NSW Government, accessed 21 January 2025, https://www.energy.nsw.gov.au/sites/default/files/2022-08/NSW%20Electricity%20Infrastructure%20Roadmap%20-%20Detailed%20Report.pdf.
- NSWRESB (NSW Renewable Energy Sector Board) (2022), *NSW Renewable Energy Sector Board's Plan*, Office of Energy and Climate Change, NSW Government, accessed 21 January 2025, https://www.energy.nsw.gov.au/sites/default/files/2022-09/nsw-renewable-energy-sector-board-plan.pdf.
- NSWRESB (NSW Renewable Energy Sector Board) (2023), *Fourth report on activities of the Board*, accessed 21 January 2025, https://www.energy.nsw.gov.au/sites/default/files/2024-04/NSW-2024-Renewable-Energy-Sector-Board-Report-June2023.pdf.
- Stanford, J. & Armistead, A. (2022), *Sustainable industrial jobs in the Hunter: aluminium manufacturing and Australia's energy advantage*, Centre for Future Work, Australia Institute, accessed 21 January 2025, https://futurework.org.au/report/sustainable-industrial-jobs-in-the-hunter/.