

Consenting improvements for renewable electricity generation and transmission

Climate Justice Taranaki submission, 1st June 2023

1. Climate Justice Taranaki Inc. Soc. (CJT)¹ is a community group dedicated to environmental sustainability and social justice. This includes issues of inter-generational equity, notably in relation to climate change, which will increasingly impact present and future generations' inalienable rights to safe water, food and shelter, crucial to sustaining livelihoods and quality of life. Composed of a broad range of people with varied expertise and life experiences, CJT has engaged respectfully with government on numerous occasions.
2. We welcome the opportunity to comment on the proposals about government direction and "consenting improvements" for renewable electricity generation and transmission². Our submission focusses on the two proposed national policy statements.

Submission key points

3. The increase and expansion of renewable electricity generation (REG) and electricity transmission network (ETN) is necessary to support decarbonisation of our electricity sector and emissions reduction, but it should only occur at the appropriate scales and in appropriate locations, with a focus on driving overall energy demands down.
4. Significant environmental values and significant natural areas should be protected from REG and ETN development.
5. The adverse impacts of REG and ETN development on the land and coastal environments, landuse, customary fisheries and cultural values must be considered fully.
6. Energy equity, democracy and resilience are crucial for community wellbeing. Fundamental reform of the electricity market is critical to ensure these.

Proposed National Policy Statement for Renewable Electricity Generation (REG)³

7. We note that the interpretation of REG assets encompasses assets and infrastructure required "*to generate and store the generated electricity and connect it to transmission or distribution networks or direct to end users*". We believe energy/electricity "storage" warrants more attention and focus than the way it is presented in the proposed national policy statement (NPS).
8. We fully support 1.4 which clearly states that the National Policy Statement for Freshwater Management 2020 and Coastal Policy Statement 2010 both prevail over the provisions of this NPS if there is conflict between them. We ask that this section be expanded to include the upcoming NPS for Indigenous Biodiversity, to also prevail over this NPS.
9. We question whether / how REG and transmission in the exclusive economic zone (EEZ) would be guided and regulated?
10. To be clear, we do not support large-scale offshore wind energy development to enable the export of 'green' hydrogen or related commodities, in the EEZ or coastal marine waters, as explained in our recent submission⁴. The extremely inefficient processes to produce, store, transport and convert 'green' hydrogen create wasteful energy demands counter to the need to reduce overall energy demand and material throughput. Massive offshore wind energy development would result in unacceptable impacts on coastal and marine ecosystems and threatened species.

Objective

11. The proposed objective is unrealistic. Significantly increasing REG alone would not enable NZ to achieve its emissions reduction targets, budgets and associated commitments, if energy demand, agricultural emissions,

and the exploration, extraction, import and consumption of fossil fuels, are allowed to continue. Systemic reform⁵ is needed to incentivise REG and phase out fossil fuels. The “energy targets” (100% renewable electricity by 2030, 50% of total energy consumption renewable by 2035, 170% increase in REG by 2050) are also unlikely to be achievable⁶, if there is no leadership and concerted efforts in prioritising energy demands. The latter would have to involve letting go of the most energy intensive, polluting and non-essential industries⁷ and transport, with the goal to reduce overall energy demand⁸.

12. Because of biophysical constraints⁹, renewable energies cannot possibly support the current level of economic activities, let alone economic growth. Globally and in Aotearoa New Zealand¹⁰, a multitude of planetary boundaries (e.g. CO2 emissions, biodiversity loss) have already been breached, while social thresholds (e.g. equality, social support) are falling short¹¹. Degrowth¹² in the form of reducing energy and material throughput while investing in community wellbeing and resilience through increasing support for public services, nature, resource circularity and the gift economy, offer solutions that the current extractive, energy-intensive economy cannot possibly do¹³. The recent joint presentation¹⁴ by doughnut economists Kate Raworth and Andrew Fanning to the NZ Treasury unpacked these concepts eloquently, endorsed degrowth and exposed the flaws of green growth.
13. Critically, the proposed NPS objective is too narrow. It does not capture the important issues of energy equity^{15, 16} and resilience at all levels, potential landuse conflicts, waste issues in the medium to long-term, and integrated approaches to enhance synergies.
14. Significantly increasing REG carries far-ranging risks, notably the degradation or loss of healthy ecosystems and biodiversity such as native forests, wetlands¹⁷, whales¹⁸, seabirds¹⁹ and other wildlife which otherwise serve as carbon sink and help to moderate extreme climate change. Under the UN Convention for Biological Diversity, Aotearoa New Zealand has international obligations to restore degraded ecosystems and promote the recovery of threatened species (UNCBD article 8)²⁰ and to protect 30% of our lands, oceans, coastal areas and inland waters by 2030 (COP15, 2022)²¹. National legislation such as the Wildlife Act and Marine Mammal Protection Act must also be followed.
15. Other serious risks of significant REG development include land conversion for large-scaled biomass forestry or solar farms causing the loss of food production and/or ecosystem restoration opportunities; mega hydro-dams or pumped hydro schemes destroying rivers/wetlands; massive offshore windfarms impacting on coastal fisheries and marine biodiversity; inappropriate REG affecting the ability of tangata whenua to express kaitiakitanga; and waste management issues at the end-of-life of the REG assets²².
16. Unlike large, centralised energy generation, decentralised, small-scale or community-based REG (e.g. rooftop solar, onshore windfarms, micro-hydro and community batteries²³ with smart micro-grids) would foster energy democracy²⁴, participation and equity. This approach will also provide more resilience in respect of main grid failures, an increasing risk as climate disruption drives more extreme weather events. Integration of such distributed energy resources (DER) with electric transport²⁵ and waste management²⁶ at the local scale could also generate synergies and co-benefits.
17. We therefore propose expanding the objective to incorporate “energy equity” in the main text, revising (a) and (b), and adding sub-clauses to the following effect:

“The Objective of this National Policy Statement is that electricity generated in Aotearoa New Zealand from renewable resources is significantly increased in a timely manner to achieve New Zealand’s emissions reduction targets, emissions budgets, energy equity, energy targets, and associated commitments under any emissions reduction plan:

(a) through enabling the effective and efficient development, operation, maintenance, and upgrading of assets for renewable electricity generation and storage;

(b) while avoiding, mitigating and managing adverse effects on the environment;

- (c) *avoiding land conversion that adversely impacts on local food production and resilience;*
- (d) *avoiding adverse impacts on coastal and customary fisheries;*
- (e) *avoiding adverse impacts on sites of cultural significance;*
- (f) *considering full life-cycle impacts of REG; and*
- (g) *facilitating synergies and co-benefits."*

Policies

18. **Policy 1:** The statement *"The benefits of increasing renewable electricity generation at any scale are realised at a national, regional, and local level"* is too one-sided. While increasing renewable electricity generation does provide benefits, it also comes with adverse impacts environmentally and socially, domestically and internationally, especially large-scaled REG. Landuse conflicts such as the potential loss of land for food production, ecosystem/biodiversity restoration or affordable housing and papakāinga development are likely.
19. Consequently, we do not support section 3.2 which ignores the potential environmental and social impacts of REG development; 3.3. which exaggerates the importance of cumulative increase and loss in REG *"at any scale and in any location"*; and 3.4(1)(c) which ensures sufficient land for current and future REG activities and ignores potential landuse conflicts.
20. We propose expanding sections 3.2, 3.3 and 3.4 so that decision makers, regional councils and territorial authorities must also consider:
- *the adverse effects of REG development at the wrong scale or in the wrong location, including:*
 - (i) *the loss or degradation of land for local food production and community food resilience;*
 - (ii) *adverse impacts on ecosystem values;*
 - (iii) *adverse impacts on coastal and customary fisheries;*
 - (iv) *adverse impacts on cultural values, tikanga and kaitiakitanga; and*
 - (v) *end-of-life waste issues;*
 - *the comparative advantages of local, community REG over centralised, large scale systems, in terms of energy participation, democracy, equity and resilience; and*
 - *alternatives and potential of cross-sectoral integration to create synergies and co-benefits."*
21. **Policy 3:** This policy should be strengthened and expanded. It is not enough to provide for Māori interests through *"early engagement, protection of sites of significance, and through enabling small and community-scale REG activities"*. To truly honour Te Tiriti o Waitangi, Māori should be equals in decision making. Co-governance and co-ownership can be considered especially for new, otherwise state-owned and governed assets and operations. Enabling small and community-scale REG in both Māori and non-Māori communities is critical for energy sufficiency and resilience.
22. **Policy 4:** We are gravely concerned about this policy which enables REG activities in areas with significant environmental values, *"where adverse effects remain after applying the effects management hierarchy... if the national significance and benefits of the REG activities outweigh those remaining adverse effects."*
23. Critically healthy ecosystems of many kinds have been shown to play key roles as carbon sink and provide environmental services, notably providing buffering effects to communities from wild storms, and improving water quality. Conversely, their loss / conversion for other land uses, as for example clearing of native forest for erosion-prone monoculture forestry, has had disastrous consequences in our climate-disrupted world. The present policy must avoid these serious errors of judgement. Significant environmental values and

significant natural areas must be protected for their innate values and because of our international obligations. The threats from REG development, especially large-scaled REG activities, are not acceptable in such areas. The government should not put renewable energy development over and above all else, notably biodiversity and ecosystem health. We support the statement by the Environment Defence Society (EDS) that ‘constraints mapping’ is urgently needed before REG is considered in areas with significant environmental values²⁷. The climate and biodiversity crises are tightly linked and must be addressed together, to create synergies and co-benefits, not compromises.

24. Consequently, we cannot support section 3.6 which requires adverse effects on significant environmental values and significant natural areas to be avoided, minimised or remedied only “*where practicable*”, and allows for offsetting and compensation. Offsetting is a false solution in many cases, not least in respect of the Emissions Trading Scheme and overseas offsets²⁸.
25. **Policy 6:** We strongly support this policy which enables small-scaled and community-scale REG activities, and believe that it should be much strengthened, given the need for energy resilience at the community level as climate disruptions become more widespread and severe. Community batteries and smart micro-grids that allow sharing and/or trading of electricity warrant particular support and mention. The government’s recent allocation of \$30 million into the Community Renewable Energy Fund is a small step in the right direction²⁹.
26. **Policy 9:** Plans for upgrade and repowering of existing wind and solar REG should also have regard to waste minimisation and the move towards a more circular system. Storage such as grid-scale batteries^{30, 31} are useful for energy security and reducing the need to over-build renewable energy capacity. Considerations should include the full life cycle impacts of the batteries from mining for components to end-of-life disposal. Consequently section 3.9 should be expanded to the above effect.

Proposed National Policy Statement on Electricity Transmission³²

Objective

27. The proposed objective is too narrow. It does not capture the important issues of energy equity, democracy and resilience at community levels which are increasingly important as climate disruptions become more frequent and extreme. Transpower’s proposed Renewable Energy Zones (REZ)³³ could go some way towards enabling more new REG by facilitating cost sharing amongst multiple generators, although there are concerns around too much competitive advantage amongst REZ customers over stand alone generators³⁴.
28. There are significant benefits in energy democracy and resilience from supporting more distributed energy resources (DER) such as rooftop solar, onshore wind and micro-hydro, as well as community micro-grids. Significant increase in DER would require substantial network adjustment and modernisation³⁵ to enable smart, two-way flow and management of electricity, and effective integration with the national grid / electricity transmission network (ETN)³⁶. Critically any new expansion or upgrade of transmission infrastructure should seriously take into account the increasing strength and frequency of extreme weather. Putting transmission lines in the ground is one way of protecting the assets and increasing resilience of the system. These will all need to happen at some point, better sooner than later, with significant additional benefits in employment and upskilling of workforce.
29. We therefore propose expanding the objective to the following:

“The Objective of this National Policy Statement is that the electricity transmission network is developed, operated, maintained, upgraded and modernised in an effective, efficient, and safe manner, while minimising adverse effects on the environment, increasing the resilience of the system and facilitating greater distributed renewable energy generation and community participation.”

30. **Policy 4:** This policy should be strengthened and expanded. It is not enough to provide for Māori interests through “*early engagement, protection of sites of significance, and through enabling small and community-scale REG activities*”. To truly honour Te Tiriti o Waitangi, Māori should be equals in decision making. Co-governance and co-ownership can be considered especially for new, otherwise state-owned and governed assets and operations.

31. **Policy 5:** We are gravely concerned about this policy which enables ETN activities to take place in areas with significant environmental values. Consequently, we cannot support section 3.8. Our rationale has been laid out earlier in respect of the NPS for REG.

¹ <https://climatejusticetaranaki.wordpress.com/>

² <https://www.mbie.govt.nz/have-your-say/renewable-electricity/>

³ <https://www.mbie.govt.nz/dmsdocument/26314-proposed-national-policy-statement-for-renewable-electricity-generation>

⁴ <https://climatejusticetaranaki.files.wordpress.com/2023/04/cjt-submission-on-mbie-enabling-offshore-renewable-energy-6april23-final.pdf>

⁵ <https://www.nzgeo.com/stories/how-to-fix-electricity-emissions/>

⁶ <https://climatejusticetaranaki.wordpress.com/2022/06/17/caution-needed-in-the-rush-to-embrace-wind-farm-solutions-to-climate-change/>

⁷ In Taranaki, urea produced from fossil gas is turned into fertilisers to fuel industrial agriculture, the latter contributing to nearly half of NZ's greenhouse gas emissions. It also degrades rivers, poisons groundwater, compacts soil and causes erosion. Efforts touting the use of 'green hydrogen' made from renewable electricity for the production of so-called 'green urea' would waste precious new renewable energy while perpetuating the numerous environmental problems caused by industrial agriculture.

⁸ <https://www.currentaffairs.org/2021/11/what-would-it-look-like-if-we-treated-climate-change-as-an-actual-emergency?fbclid=IwAR16rLS9XLx4C5a2Rza1nhnDYlpQl7SgedXUdEZwBLQNGZeUB23Forz8z6E>

⁹ https://mcusercontent.com/72459de8ffe7657f347608c49/files/be87ecb0-46b0-9c31-886a-6202ba5a9b63/Assessment_to_phase_out_fossil_fuels_Summary.pdf

¹⁰ <https://environment.govt.nz/publications/a-safe-operating-space-for-new-zealandaotearoa-translating-the-planetary-boundaries-framework/>

¹¹ <https://goodlife.leeds.ac.uk/>

¹² <https://www.degrowth.nz/>

¹³ <https://heliocene.org/2023/03/14/degrowth-presentation-to-the-nz-green-party-caucus/>

¹⁴ <https://www.treasury.govt.nz/news-and-events/our-events/wellbeing-report-seminar-series-doughnut-economics-action-perspectives-aotearoa>

¹⁵ <https://thespinoff.co.nz/business/29-07-2021/why-those-in-energy-poverty-should-be-angry-about-rio-tintos-latest-results>

¹⁶ <https://thespinoff.co.nz/business/29-10-2021/bernard-hickey-how-one-back-room-power-deal-cost-you-up-to-200-a-year>

¹⁷ <https://www.nature.com/articles/s41558-023-01637-0>

¹⁸ <https://www.bbc.com/future/article/20210119-why-saving-whales-can-help-fight-climate-change>

¹⁹ https://insideclimatenews.org/news/12052023/seabirds-restoration-climate-change/?utm_source=InsideClimate%20News&utm_campaign=56326fee84-EMAIL_CAMPAIGN_2023_05_13_01_00&utm_medium=email&utm_term=0_29c928ffb5-56326fee84-328740906&fbclid=IwAR1grAm3nY2tBiKkAZnPaqGLbFBLaXZr4OAE5QYzSBW_3Ynb9mXTK868PA

²⁰ <https://www.cbd.int/convention/articles/?a=cbd-08>

²¹ <https://www.cbd.int/article/cop15-cbd-press-release-final-19dec2022>

²² <https://www.stuff.co.nz/motoring/evs/124607176/big-plans-for-old-ev-batteries>

²³ <https://www.geni.energy/battery-info>

²⁴ <https://energy-democracy.net/>

²⁵ <https://thespinoff.co.nz/science/19-09-2019/more-than-a-set-of-wheels-how-electric-vehicles-could-soon-power-your-home>

²⁶ <https://run4life-project.eu/>

²⁷ <https://eds.org.nz/wp-content/uploads/2023/05/EDS-Submission-on-Strengthening-national-direction-on-renewable-electricity-generation-and-transmission-June-2023-Final.pdf>

²⁸ <https://www.abc.net.au/news/2023-02-14/carbon-credits-projects-papua-new-guinea-logging-four-corners/101936714>

²⁹ <https://www.rnz.co.nz/news/national/490432/solar-panels-reduce-kaumatua-s-power-bills-by-up-to-half>

³⁰ <https://www.theguardian.com/australia-news/2022/dec/17/eight-batteries-to-be-built-around-australia-to-increase-renewable-energy-storage-capacity>

³¹ <https://www.mysolarquotes.co.nz/blog/battery-storage-for-solar/the-rise-of-grid-scale-battery-projects-in-new-zealand/>

³² <https://www.mbie.govt.nz/dmsdocument/26315-proposed-national-policy-statement-for-electricity-transmission>

³³ <https://www.transpower.co.nz/projects/renewable-energy-zones>

³⁴ [https://tpow-corp-production.s3.ap-southeast-](https://tpow-corp-production.s3.ap-southeast-2.amazonaws.com/public/uncontrolled_docs/68.%20NZWEA%20Submission%20on%20Renewable%20Energy%20Zones%20%28REZ%29%20-%20FINAL.pdf?VersionId=tjeDFwpDqHprCRLbUXtEBIth4MgBYTid)

³⁵ [2.amazonaws.com/public/uncontrolled_docs/68.%20NZWEA%20Submission%20on%20Renewable%20Energy%20Zones%20%28REZ%29%20-%20FINAL.pdf?VersionId=tjeDFwpDqHprCRLbUXtEBIth4MgBYTid](https://www.energy.gov/sites/prod/files/2017/06/f34/Challenges_and_Opportunities_of_Grid_Modernization_and_Electric_Transportation.pdf)

³⁶ <https://www.wa.gov.au/government/distributed-energy-resources-roadmap>