

Climate Justice Taranaki submission to the Environment Parliamentary Committee on the Emissions Budget 2022 and Te hau mārohi ki anamata— Towards a productive, sustainable and inclusive economy— Aotearoa New Zealand’s First Emissions Reduction Plan (May 2022)

1. Climate Justice Taranaki Inc. (CJT) 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 impact current and future generations’ inalienable rights to safe water, food and shelter, crucial to sustaining livelihoods and quality of life. CJT became an incorporated society in 2015.
2. We appreciate the opportunity to submit on the Emissions Budget and Te hau mārohi ki anamata – Emissions Reduction Plan¹ (May 2022).
3. In our view, the government’s Emissions Reduction Plan (ERP) lacks social perspective and favours private business and industries. The Plan is weak and too slow. Too much public money goes into private industries and industrial agriculture.
4. These are contrary to what we really need – community focused solutions that lead to broad-based transformative changes that reduce inequality, enhance wellbeing and support regenerative, resilient local economies. Regenerative agriculture is one such solution that warrants greater attention and support.

Energy

5. The ERP allows low and medium temperature coal boilers to operate till 2037. It gives no end date on high temperature coal boilers, or the exploration and mining of coal, oil and gas. These are not acceptable to us.
6. What we need is an immediate ban on all new coal, oil and gas permits and the building of any new fossil fuel reliant infrastructure for power generation, heating and industrial processing, consistent with international recommendations from the IPCC.
7. With increasing climate disruptions, we desperately need to strengthen our aging electricity infrastructure while making it affordable to all, so that energy poverty and hardship² becomes a thing of the past.
8. To build community resilience and better adapt to climate disruptions, the government should invest much more in local, Māori and community-based renewable energy generation and distribution systems, including for public and Māori housing³. Yet the ERP allocates some \$650m for industries to decarbonise, and less than a tenth of that amount to investigate the need for the electricity system to support increased levels of renewables. Indeed, the electricity market is desperately in need of a reform⁴ that incentivises renewables rather than fossil fuel use, ensures energy equity rather than energy hardships, and benefits communities rather than corporations⁵.

¹ https://www.parliament.nz/en/pb/sc/make-a-submission/document/53SCEN_SCF_INQ_123972/emissions-budgets-published-in-2022-and-the-first-emissions#RelatedAnchor

² <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-hardship/defining-energy-hardship/>

³ <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/low-emissions-economy/energy-efficiency-in-new-zealand/maori-and-public-housing-renewable-energy-fund/>

⁴ <https://www.stuff.co.nz/business/opinion-analysis/111395776/electricity-price-review-protects-the-industry-not-consumers>

⁵ <https://thespinoff.co.nz/business/29-07-2021/why-those-in-energy-poverty-should-be-angry-about-rio-tintos-latest-results>

9. On dry years storage, we urge that the government considers all issues and options thoroughly re the Lake Onslow pump hydro proposal to avoid yet another sacrificial zone⁶ in the quest for more energy to support growth. We believe there are alternative ways that are less costly, risky, and environmentally damaging, especially if we focus on reducing overall and peak energy demands, and supporting smaller scaled, distributed solutions. Formulation of National Standards for Renewable Electricity Generation would help guide councils and communities in this area.
10. Moreover, integrating different forms of electricity generation, storage and distribution (e.g. floatovoltaics on hydro dams)⁷ and with other sectors such as electric transport, organic wastes management⁸ and even agriculture (e.g. agrivoltaics) have the potential to address problems and create co-benefits.
11. While we are encouraged to see a 'gas transition plan' in the ERP, we have serious reservations over the development of a 'hydrogen roadmap'. In our various submissions⁹, we have voiced our concerns over the push for a hydrogen economy especially involving exporting hydrogen or production of so-called 'green urea'. The Parliamentary Commissioner for the Environment (PCE)¹⁰ has written to the government, warning that "*Supporting the development of a green hydrogen industry too early could result in path-dependencies that may prevent other, more cost-effective solutions from materialising*". It could jeopardise Aotearoa's ability to decarbonise and meet our global commitment. The PCE requested a **whole energy system analysis** before committing substantial amounts of renewable energy into green hydrogen production.
12. Taranaki already has a hydrogen roadmap, launched by the Prime Minister herself^{11, 12}. What will the additional \$18 million worth of 'hydrogen roadmap' with offshore wind generation regulations entail? Will it incorporate a whole energy system analysis as recommended by the PCE? Or yet another government push for the hydrogen export agenda, to be fuelled by large-scaled offshore wind¹³ – another Think Big or White Elephant that could squander limited resources and time that we don't have in a climate emergency?
13. We support the development of an Aotearoa NZ Energy Strategy¹⁴, informed by the above-mentioned whole energy system analysis. In addition to addressing the strategic challenges of the sector and signalling pathways away from fossil fuels, the energy strategy should specify areas and means of reducing total and peak energy demand, and fostering resilience. This would help us prepare for the inevitable economic degrowth as more and more resource limits¹⁵ are breached and multiple environmental, social and geo-political crises escalate¹⁶.

Transport

14. We are pleased to see the emphasis on integrating land-use, urban development and transport planning and investments to reduce transport emissions. It's also good that the ERP supports

⁶ <https://www.youtube.com/watch?v=FZh1F5Lxbl>

⁷ https://www.nature.com/articles/d41586-022-01525-1?utm_source=Nature+Briefing&utm_campaign=92cddb5a-briefing-dy-202200607&utm_medium=email&utm_term=0_c9dfd39373-92cddb5a-43822165

⁸ <https://run4life-project.eu/about/technologies/>

⁹ <https://climatejusticetaranaki.files.wordpress.com/2019/10/cjt-submission-on-mbie-hydrogen-green-paper-oct19-v3-final.pdf>

¹⁰ <https://www.pce.parliament.nz/media/197206/letter-to-ministers-woods-shaw-and-robertson-about-green-hydrogen-pdf-145-kb.pdf>

¹¹ <https://www.rnz.co.nz/news/political/384782/prime-minister-jacinda-ardern-launches-plan-to-develop-hydrogen-industry-in-taranaki>

¹² <https://www.rnz.co.nz/news/political/384782/prime-minister-jacinda-ardern-launches-plan-to-develop-hydrogen-industry-in-taranaki>

¹³ <https://climatejusticetaranaki.wordpress.com/2022/06/17/caution-needed-in-the-rush-to-embrace-wind-farm-solutions-to-climate-change/>

¹⁴ <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-strategies-for-new-zealand/>

¹⁵ <https://www.gtk.fi/en/current/a-bottom-up-insight-reveals-replacing-fossil-fuels-is-even-more-enormous-task-than-thought/>

¹⁶ <https://www.ourclimatedeclaration.org.nz/webinars>

low-income earners in accessing low- and zero-emissions vehicles. Why not reduce speed limits, both on highways and urban streets to reduce emissions and crashes^{17, 18}?

15. The ERP targets of 20% reduction of total kilometres travelled by the light fleet and attaining 30% of zero-emissions light vehicles by 2035 are both too low. The importation of new internal combustion engine vehicles should stop much earlier than 2035.
16. We support the requirement for purchase of only zero-emissions public buses by 2025. There is not enough investment or commitment for expanding and improving the public transport system. We really need an efficient and affordable public transport network including rail to get most of our cars and freight off the roads. More support for public transport (small electric buses or vans) on demand and car sharing initiatives would help to reduce car reliance outside cities.
17. We do not support funding hydrogen trucks for freight, without conducting an energy system wide analysis on green hydrogen production recommended by the PCE or completion of a national freight and supply chain strategy to identify decarbonisation pathways as proposed in the ERP. Transition Engineer Susan Krumdieck has argued that it would be far more energy and economically efficient to have an integrated smart rail system, coastal shipping¹⁹ and local electric freight²⁰ delivery than relying on hydrogen²¹. It would also save lives by reducing road accidents.
18. On shipping, we advise banning all fossil fuel intensive cruise ships, because of their emissions and minimal contribution to local economy.
19. On aviation, the role and impact of 'sustainable aviation fuels' in reducing emissions is very limited, especially with conventional biofuels. The key to substantially reducing aviation emissions is by reducing the total distance of air travels including airfreight. Why not set a target similar to, but greater than, the 20% reduction in total kilometres travelled by the light fleet on land by 2035? To reduce the reliance of air travels, restrict advertising^{22, 23} (see Amsterdam)²⁴ and bargain pricing to better reflect emission costs, especially for domestic journeys where there are alternatives. Review the extent of government subsidies^{25, 26} for airlines during Covid and set clear priorities and limits vis-a-vis emission reduction needs.

Agriculture

20. The split target to reduce biogenic methane emissions by 10% by 2030, relative to 2017 levels, and 24 to 47% lower by 2050, is far too weak, given New Zealand's exceptionally high agricultural and per capita emissions, and compared with our obligation under the Global

¹⁷ <https://www.nzta.govt.nz/about-us/consultations/archive/state-highway-3-north-of-new-plymouth-proposal-to-make-the-temporary-80kmh-speed-limit-permanent/>

¹⁸ <https://www.npdc.govt.nz/community/have-your-say/consultations/safer-speeds-review/>

¹⁹ <https://www.nzta.govt.nz/planning-and-investment/national-land-transport-programme/2021-24-nltp/activity-classes/coastal-shipping/>

²⁰ <https://www.eeca.govt.nz/insights/case-studies-and-articles/electric-inter-city-freight-truck-pushes-boundaries/>

²¹ <https://theconversation.com/why-new-zealand-should-invest-in-smart-rail-before-green-hydrogen-to-decarbonise-transport-153075>

²² <https://www.newscientist.com/article/mg25433851-200-it-worked-with-cigarettes-lets-ban-ads-for-climate-wrecking-products/>

²³ <https://www.greenparty.org.uk/news/2020/10/11/green-party-to-end-advertising-for-%E2%80%9Chigh-carbon%E2%80%9D-goods-and-services/>

²⁴ <https://verbiedfossielereclame.nl/first-step-amsterdam-is-banning-advertising-for-fossil-fuel-products-from-the-subway-stations/>

²⁵ <https://www.stuff.co.nz/business/126651565/air-nz-receives-additional-170-million-in-subsidies-as-government-continue-to-support-cargo-flights>

²⁶ <https://www.stuff.co.nz/business/industries/127805818/covid19-air-nz-confident-government-will-agree-to-extend-airfreight-subsidies#:~:text=Ranger%20says%20since%20May%202020,been%20subsidised%20by%20the%20Government.>

Methane Pledge²⁷ of 30% reduction from 2020 levels by 2030. The government must stop using overseas offsets to buy our way out²⁸.

21. It is refreshing to see the emphasis on Māori-led solutions informed by tikanga and mātauranga Māori. However, based on the funding allocations, the ERP relies largely on unproven techno-fixes rather than te ao Māori or **regenerative agriculture** that restore healthy soils capable of sequestering carbon.
22. The ERP acknowledges that *“The most promising mitigation technologies are several years away from use on pasture-based systems (eg, methane inhibitors), or are still in an early stage of research (eg, a methane vaccine).”* Yet it allocates \$339m for agri-tech which is almost ten times more than that for farmers, growers and whenua Māori to transition. Rather than investing hugely on unproven technologies, the plan should focus on helping farmers through a steep reduction of stock number by retiring some of the land for rewilding and shifting to low-input, diversified and regenerative agriculture. Much support is needed to incorporate biodiversity restoration, fruit and nut trees, timber, fibre and coppiced woodlots²⁹ on farms, to help sequester carbon and support rural livelihoods, skills and resilience.
23. We welcome more research *“to understand and measure the potential environmental benefits of regenerative agriculture – a nature-based solution – in Aotearoa New Zealand’s specific context”*, but this should not delay financial and on-ground support for farmers trying to transition to **regenerative practices**. Phasing out artificial fertilisers is a key step and farmers could benefit from both technical advice and regulatory framework. The government should eliminate the free emissions units that fertiliser companies like Ballance Agri-nutrients receive under the ETS and ban imports of artificial fertilisers (notably urea, super-phosphate) and feeds (notably palm kernel expeller). At the same time, incentivise local manufacturing of natural fertilisers notably composting and vermiculture (See section on waste).
24. We also welcome *“science and mātauranga Māori-based research and development plans to accelerate R&D to grow and transform the food and fibre sector, while promoting lower-emissions land use and food production.”* However, we are concerned over the very heavy export focus described in Fit for a Better World – Accelerating our economic potential³⁰, e.g. *“The food and fibres sector will be at the forefront of our export-led recovery and can lead the way to a more sustainable economy... There is significant scope to grow our customer base... We will prioritise free trade agreements... Add **\$44 billion** in export earnings over the next decade via a focus on creating value and building off the strong position of our core sectors.”* Despite the highly aspirational language used in the roadmap, the reality tells us that the export-driven primary industry^{31, 32, 33}, while claimed to be feeding 40 million people worldwide, is over-exploiting the environment, and failing to ensure that all New Zealanders have enough affordable, nutritious food to eat³⁴. Recent geo-political unrests, marked by the Russian war on Ukraine, is escalating food and fuel prices across Aotearoa, highlighting the critical importance to build our food sovereignty and resilience, rather than export growth.
25. The He Waka Eke Noa framework including guidance and support for farmers and a proposed farm-level split-gas levy from 2025, would only reduce emissions by 4-5.5% by 2030³⁵. Clearly

²⁷ <https://www.globalmethanepledge.org/>

²⁸ <https://www.stuff.co.nz/environment/climate-news/126838746/new-zealand-increases-climate-pledge-aims-to-cut-emissions-by-50-per-cent-by-2030>

²⁹ <https://fodderfarm.co.nz/2021/04/18/coppiced-woodlands/>

³⁰ <https://www.mpi.govt.nz/dmsdocument/41031-Fit-for-a-Better-World-Accelerating-our-economic-potential>

³¹ <https://www.rnz.co.nz/news/whoseatingnewzealand/446357/who-s-eating-new-zealand>

³² <https://www.fonterra.com/nz/en/our-stories/articles/advancing-our-active-living-business.html>

³³ <https://www.rnz.co.nz/news/business/469600/sanford-targets-growth-in-salmon-mussels-as-it-sets-ambitious-earnings-target>

³⁴ <https://www.rnz.co.nz/news/whoseatingnewzealand/447324/calls-to-feed-the-5-million-first-before-exporting-nz-food>

³⁵ <https://hewakaekenoa.nz/wp-content/uploads/2022/06/FINAL-He-Waka-Eke-Noa-Executive-Summary.pdf>

much more is needed, other than techno-fixes, and much greater increase in climate-focused extension and advisory services.

26. Put greater emphasis and resources to advise, support and connect farmers and growers in their journey to adapt to the drastically changing climate and the shifting global market from dairy and meat to diverse, regeneratively produced plant-based products.

Forestry

27. Planting ‘the right type and scale of forests, in the right place’ is indeed the key.
28. Planting vast areas of pine monoculture for log export is dumb economically and environmentally. Vast expanse of exotic monoculture plantation is particularly vulnerable to fire, drought and disease exacerbated by climate change, with the potential to cause irreversible ecological disasters. Large-scaled forestry also concentrates ownerships and profits.
29. We need to diversify and look at integrating activities that generate co-benefits. A network of numerous, smaller permanent mixed plantation forests on farms and suitable locations could offer similar outcomes in carbon sequestration, and be better in terms of equity, benefits and resilience for farmers and rural communities. The mixed forests should have a large percentage of native species but may incorporate non-native tree crops³⁶ with fruit, nut, timber, coppicing firewood and biochar (as carbon holding soil conditioner), to compensate for some of the financial loss from reduced pastures and stock numbers. The smaller forests would allow better protection and management. Multi-strata agroforestry also has the potential to incorporate kai, erosion prevention, rongoā and iwi businesses³⁷.
30. We caution the focus on Māori-owned land that is “*landlocked and far from urban centres*” for exotic forestry because “*options for this type of land are narrow*” (p.275 of the ERP). Without knowledge of the existing vegetation cover and landuse, such a statement is unhelpful. We need strong commitments from the government, Māori and non-Māori, to protect all remnant natural areas, and to support massive rewilding efforts involving native planting and restoration of wetland. Doing these would help address both the climate and biodiversity crises, and safeguard wellbeing.
31. We fully support a review of the NZ ETS yield tables to ensure accurate indigenous yield data, extend the tables beyond the current 50 years, and recognise carbon storage resulting from particular indigenous forest management practices. We also support the government’s plan to invest in native nurseries and ways to support the sustainable expansion of the sector. All these should help to encourage native reforestation, especially with Māori leadership and mātauranga. On the contrary, giving financial incentives to large-scaled exotic plantation forestry through the ETS for carbon offsets goes against international scientific advice^{38, 39}.
32. We agree that incentives are needed to protect and manage pre-1990 forests for carbon sinks and biodiversity, and that mechanisms should be developed to enable the recognition of additional carbon storage for pre-1990 forests.
33. We fully support the revival and expansion of forestry and wood processing industry, to deliver more value from the products and more jobs, to address our housing crisis and vulnerability to imported materials, and to strengthen local communities.

³⁶ <https://treecrops.org.nz/>

³⁷ <https://environment.govt.nz/assets/publications/ngaa-rauru-kiitahi-climate-change-strategy.pdf>

³⁸ <https://www.auckland.ac.nz/en/news/2022/03/01/ann-salmond-ipcc-report-condemns-forestry-use.html>

³⁹ <https://www.ipcc.ch/report/ar6/wg2/>

34. We caution attracting investment in the production of wood products and biofuels, without robust science and understanding of the trade-offs⁴⁰. The government should not let investors on the drivers' seat in this area. The IPCC AR6 WGII⁴¹ warned, "*Deployment of afforestation of naturally unforested land, or poorly implemented bioenergy... can compound climate-related risks to biodiversity, water and food security, and livelihoods, especially if implemented at large scales, especially in regions with insecure land tenure*".
35. We do not support mass planting of commercial forest crops to replace coal process heat to fuel a dairy export economy which is environmentally, socially and economically unsustainable. A zealous push for developing a bioeconomy, and perpetuating economic growth in general, could push us further off multiple natural and social limits.

Waste

36. The goal to ban organic wastes to landfill by 2030 is weak. Move it forward to 2025 or 2027.
37. As illustrated in the waste hierarchy diagram in the ERP, recycling organic waste by composting is preferable to recovery such as energy production which should only involve materials that cannot be reused or recycled.
38. More funding should go into local community initiatives integrating kai rescue, organic waste collection, composting, food growing, skill training and job creating initiatives⁴² while reducing transport emissions. Large corporate operations involving trucking organic wastes around the country should be avoided.
39. Strict regulations, monitoring, and enforcement of composting and vermiculture operations are needed, to ensure public health and safety and to avoid serious impacts to the local environment and communities⁴³.
40. We fully support investing in recovering construction and demolition waste. The IPCC AR6 WGII highlighted the important role of recycling, especially emissions intensive materials such as cement and steel, to reduce emissions involved in producing new materials.
41. We urge the government to consider the advice from Zero Waste Network and ban waste to energy incineration⁴⁴.

Conclusion

42. We are at the edge of the cliff literally, with the sea rising and storms threatening our survival. We need to ditch the economic growth mantra, reduce our energy and resource consumption, and stop wastage and exploitation. Invest in a sharing, wellbeing economy that focuses on caring for people, social equity, community resilience and nature restoration instead.

⁴⁰ https://rs.figshare.com/collections/Supplementary_material_from_Environmental_sustainability_of_biofuels_a_review_/5208549

⁴¹ https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf

⁴² <https://www.beehive.govt.nz/release/funding-five-projects-reduce-food-waste>

⁴³ <https://www.rnz.co.nz/news/national/438713/compost-firm-stockpiles-20-000-tonnes-of-contaminated-waste>

⁴⁴ <https://zerowaste.co.nz/waste-to-energy-incineration/>