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Consultation: ERP2
Climate Change Commission
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**SUBMISSION ON THE CLIMATE CHANGE COMMISSION'S:
2023 DRAFT ADVICE TO INFORM THE STRATEGIC DIRECTION OF THE GOVERNMENT'S
SECOND EMISSIONS REDUCTION PLAN**

The Electricity Retailers' Association of New Zealand ('ERANZ') welcomes the opportunity to provide feedback on the Climate Change Commission's consultation paper '2023 Draft advice to inform the strategic direction of the government's second emissions reduction plan' from April 2023.

ERANZ is the industry association representing companies that sell electricity to Kiwi households and businesses. Our members supply almost 90 per cent of New Zealand's electricity. We work for a competitive, fair, and sustainable electricity market that benefits consumers.

ERANZ and its members support the government's commitment to achieving net zero emissions by 2050. New Zealand should be proud of its electricity system, one of the lowest emitting in the world, reaching 82.1% renewables share in 2021.

However, along with sustainability, New Zealand must continue to balance the other two legs of the energy trilemma, namely security of supply and affordability. These are important public policy considerations and underpin user confidence and trust in our energy system. ERANZ draws policy makers' attention to the size of the challenges ahead of us, with significant investments required across generation, transmission, and distribution.

Executive Summary

For New Zealand to achieve its emissions reduction targets, we require abundant and available renewable electricity. This is an enabler for decarbonisation right across our economy.

ERANZ welcomes the Climate Change Commission's package of advice for lowering our country's emissions, predicated on enabling the rapid expansion of renewable electricity generation and distribution infrastructure. In particular, ERANZ supports the following:

1. Resource Management Act reform to speed up consenting for the necessary generation and transmission infrastructure required to electrify the transport and industrial sectors.
2. Providing investor confidence through regulatory certainty.
3. Catering for an equitable transition by taking care of those who cannot afford to take advantage of electricity's cheaper power.

Specifically, ERANZ supports the Commission's recommendation 13:

"Prioritise and accelerate renewable electricity generation build and ensure electricity distribution networks can support growth and variability of demand and supply."

In addition, ERANZ supports adjacent recommendations covering greater building efficiency (11) and electric vehicle charging infrastructure (17).

Need to electrify

The Commission notes the need for substantial contributions from electricity generation and process heat in the second emissions budget and transport in the third emissions budget. Our members understand the importance of this task.

New Zealand's electricity system enables emissions reductions across the economy through increased electrification – transport, space and water heating, and industry. This, in turn, requires expanding transmission and distribution infrastructure and increased system flexibility through demand response, energy storage, and potentially more flexible generation.

'The Future is Electric' is the Boston Consulting Group report commissioned by electricity sector participants to illustrate the size of the transition ahead. It looks at the likely infrastructure requirements out to 2030 and concludes the sector can complete this sizable task. The forecast cost is around \$42 billion this decade.¹ This is challenging, but the sector is committed to achieving it.

ERANZ members are working towards the '2030 benchmarks for action' for electricity supply, and progress, so far, is positive. There is a strong pipeline of new renewable generation, mainly wind and geothermal, which will be used to replace coal and gas for baseload electricity generation. The consultation paper notes: "The Tauhara geothermal power plant and the Harapaki and Turitea wind farms will displace around 2.2 TWh of fossil gas or coal generation per year, avoiding over 0.9 MtCO_{2e} of emissions per year."

Although, the need for some thermal peaking will remain to cover short, discreet periods of high demand. Meeting peak loads will ensure continued confidence in the electricity system to deliver, which allows other sectors to decarbonise by converting to predominantly renewable electricity.

Overall, this means the sector will reach 96 percent renewable generation by 2030. As illustrated by Figure 2.4 on page 40, the energy and industry sector is already very close to meeting the second and third emissions budgets, even under the "low policy impact" scenario. Currently, electricity generators are already able to supply short periods where our electricity is powered by 100 percent renewable sources – the goal is to increase these periods continually so they become more common.

With further enhancements to legislative settings, particularly consenting rules, and with enhanced investor confidence, New Zealand will realise its renewable electricity goals out to 2035.

Favouring renewable electricity

The emissions reduction plan as designed by the Commission relies on energy and industry making the largest share of reductions. Therefore, New Zealand's ability to continually design, consent, and build new renewable generation is crucial. The dependency of other sectors to decarbonise relies on the electricity system, greatly increasing its capacity using solely renewable sources. All government policy and investment decisions should support electricity's pathway. However, this is not the case with the key reforms of the Resource Management Act.

At the moment, consenting rules and wider policy settings are creating investment uncertainty and delaying construction. Existing generators, and potential new entrants, consider the current consenting system is complex, onerous and time-consuming. There is a risk that if policy reforms do not address these challenges, it will be harder or more expensive than it needs to be for New Zealand to meet its upcoming emissions budgets.

¹ Boston Consulting Group, 'The Future is Electric', October 2022.

ERANZ supports the Commission’s declaration that:²

“The lengthy transition period, uncertainty around currently unspecified environmental limits, and the potential provision of exemptions could create additional uncertainty that delays renewable generation build. A simplified or streamlined consenting process that makes renewable build easier and quicker is needed by the start of the second emissions budget period, if not earlier.”

The sector has been making this point for some time, but progress is slow. Now is the time for action. The passage of the Natural and Built Environment Bill and development of associated Natural and built environment plans provide an opportunity for the government to positively assert the positive value of renewable electricity generation under law.

In the meantime, the government can take immediate action using current instruments to provide generation owners and developers with quicker and more certain pathways to consent their projects. ERANZ supports the Commission’s recommendation that:³

“It would be particularly beneficial if the Government provided stronger directive language within existing policy instruments to remove barriers to building new renewable generation or reconsenting existing generation in the interim. ... Slow resource consenting times can impact the attractiveness of projects to investors, increase the risk of project abandonment, and increase overall project costs.”

Beyond the generation requirements of our members, ERANZ supports additional measures to assist the work of Transpower upgrading their transmission infrastructure and distributors upgrading their distribution infrastructure. Additional renewable generation will increasingly be built in diverse locations, but the core infrastructure to get the electricity to end users requires significant improvements over the coming decades. This will require a favourable consenting environment, but it will also require the government and regulators to allow them the revenue required to fund it coupled with oversight to ensure an efficient deployment of resources in customers’ best interests.

Rapidly rising demand for electricity, particularly during periods of peak demand or congestion, can be met in a variety of ways. This will include additional capacity upgrades, time-shifting demand to low congestion times, and utilising dispersed backup resources such as solar panels or batteries. All of these methods hinge on adequate and timely funding and planning consents. ERANZ supports the Commission’s proposal:⁴

“We also propose recommending ensuring electricity distribution networks can support the growth and variability of supply and demand. This will require appropriate consenting and network planning processes to support the deployment of new renewable electricity, backed by energy efficiency and demand-side management.”

Certainty and confidence

New Zealand’s electricity system relies on private capital to grow and expand. Demand for investment is set to expand rapidly, so it is important that those making long-lived investment decisions have confidence in our regulatory settings.

² Climate Change Commission, ‘2023 Draft advice to inform the strategic direction of the Government’s second emissions reduction plan’, April 2023, page 113.

³ Climate Change Commission, 2023, page 114.

⁴ Climate Change Commission, 2023, page 10.

ERANZ supports the Commission's call for policy changes to be signalled well in advance and aligned to clear strategies set for industries and communities. A credible Energy Strategy will inform the public's understanding of the speed and direction of travel for transitioning to a low emissions economy.

ERANZ supports the government development of an Energy Strategy, however, it is not due for completion until next year. There are already actions we can take now which will advance the government's decarbonisation goals while delivering greater certainty to the sector. For example, the NZ Battery Project is introducing uncertainty into the sector, further compounded by its large cost which is likely to fall on industry participants.

As the consultation paper notes, pursuing a 100 percent renewable electricity system is technically feasible, but comes at a significant cost which, by falling on the electricity system, will unnecessarily increase prices at the expense of decarbonisation elsewhere in the economy. New Zealand's overall emissions targets are better served by allowing a residual amount of non-renewable generation to remain to cover periods of extreme peak demand or unexpected generation shortfalls. The opportunity cost of building a Lake Onslow type facility, at an estimated cost of \$16 billion, must be examined within the context of emission reduction opportunities across the economy.

Equitable Transition

Rising electricity use by households and businesses, particularly when replacing fossil fuel usage, coupled with the improved efficiency of buildings and appliances, will significantly reduce average household energy expenses. Various recent analyses show that New Zealanders who can transition their households to entirely electric appliances and utilise electric vehicles by 2026 could save thousands of dollars in the long run.⁵

However, while household and businesses' energy expenditure is likely to fall over the coming years, this advantage accrues earlier to those who can afford the capital outlay of new equipment, appliances and vehicles. Those already facing disadvantage will likely continue to do so with higher energy bills than might otherwise be the case.

ERANZ agrees with the Commission's observation that:⁶

"Emissions pricing through the NZ ETS will have greater impacts on low-income households than high-income households, as higher income households likely have more capacity to adapt."

Higher bills will come from more than just the rising ETS costs. Over the coming decades, as customers switch fuel types to take advantage of renewable electricity, the declining number of users still requiring fossil fuels will have to foot an ever-increasing share of the overheads and fixed costs involved in supplying those fuels.

The government has a range of support mechanisms either in place or in development which can help lower income households adjust their energy use to take advantage of renewable electricity. For example, EECA's Warmer Kiwi Homes insulation grants, electric car share schemes in low-income neighbourhoods, and Kainga Ora installing rooftop solar panels on public housing. Beyond such energy efficiency and fuel switching policies, ERANZ recommends the government tackles energy hardship through existing income support mechanisms. The risk is that creating bespoke policy solutions based on artificially lowering the price of electricity for certain categories of consumers sends conflicting signals back into the market at the same time as New Zealand requires significant levels of investment in generation, transmission and distribution.

⁵ Toby Stevenson and Michael Young, 'Total Household Energy Costs NZ', November 2022.

⁶ Climate Change Commission, 2023, page 10.

Housing quality is a particular concern, especially for lower income families. The Commission lays out the problem definition clearly:⁷

“More than 130,000 households in Aotearoa New Zealand (or 7.3% of all households) cannot afford to keep their home adequately warm. More than 90,000 households also had a major problem with damp and/or mould, with renters more likely to experience dampness and mould than homeowners. Coupling heat pump installation with better insulation and improved weathertightness will immediately reduce the amount of energy required to heat or cool a home to the same temperature.”

One apparent policy benefiting everyone is higher housing standards. New Zealand’s poor quality housing stock leads to inefficient homes that require more energy than they should keep warm and dry. ERANZ supports lifting the Building Code for new homes and the Healthy Homes Standards for rental homes. In addition, the government must take further steps to enforce existing rules, particularly in the monitoring of rental properties where there is little documented evidence of compliance efforts. Creating more efficient homes reduces aggregate demand, meaning the electricity can be used for other things, such as electric vehicle charging, while lowering household bills from what they would otherwise be.

Conclusion

ERANZ would like to thank the Commission for its ongoing efforts to reduce emissions and guide New Zealand towards achieving its international commitments. We are happy to provide any further information on this submission as required.

ERANZ looks forward to engaging with officials further as the government progresses with its Second Emissions Reduction Plan.

Yours sincerely



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⁷ Climate Change Commission, 2023, page 125.