ENA submission to discussion document on New Zealand's second emissions reduction plan (2026-2030)

Submission to the Ministry for the Environment | Manatū mō te Taiao

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āhuarangi. kiritaki. mahi ngātahi. climate. customers. collaboration.

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1 Introduction

Electricity Networks Aotearoa (ENA) appreciates the opportunity to make a submission to the discussion document on *New Zealand's second emissions reduction plan* (the discussion document).

ENA represents the 27 electricity distribution businesses (EDBs) in New Zealand (see Appendix B) which provide local and regional electricity networks. EDBs employ 10,000 people, deliver energy to more than two million homes and businesses and have spent or invested $8 billion in the last five years.

ENA is broadly supportive of the actions the Government is proposing to take to successfully deliver on New Zealand's climate change targets. ENA has focused its submission on Chapters 5, 6, and 11, which are most relevant to the electricity distribution sector and, therefore, ENA members.

2 Chapter 5 – Energy

2.1 Q5.8 Please provide any additional feedback on the Government's proposals to reduce emissions in the energy sector and the industrial processes and product use sector.

ENA supports the Electrify NZ policy and its focus on reducing the consenting burden and amending the Energy Efficiency and Conservation Act 2000 to enable standards to be set for devices with capability for demand flexibility (particularly for EV smart chargers in residential settings). If this is accompanied by the necessary regulatory tools to enable things like access to smart meter data, this will be useful for EDBs as it will enable better management of network demand peaks.

To help maximise the value of devices with demand flexibility, it would be useful to develop a centralised platform for the mandatory registration of large new devices of this sort, particularly large EV chargers. This would provide distribution networks with greater visibility of where these devices are connected, so they can more efficiently manage their network and optimise the value of renewable energy resources. It would also allow third party flexibility providers a way to understand where a useful amount of flexibility resource is available on the networks. Another way to maximise the value of flexible devices is to introduce a mechanism that allows EDBs, alongside the grid operator, to call on these flexible assets in a system emergency where direct intervention is needed to 'keep the lights on'. This will help to mitigate the increase in emissions by avoiding the need to expand the network to maintain security of supply in these rare emergency situations. Under the Electricity Industry Participation Code (the Code), EDBs and Transpower already have priority access to hot water ripple control, which allows them to manage hot water assets controlled by retailers during a system emergency.[1] ENA proposes this is simply expanded to include devices managed by flexibility providers not currently captured in the Code. Maximising the benefits of flexible devices through this change will support the stable and secure electricity system needed to electrify Aotearoa New Zealand.

An enabling planning regime is necessary to facilitate efficient EDB investment in new and existing network infrastructure. While having a more efficient consenting process is important, clear national policy direction and standards for distribution will be critical for investment in distribution infrastructure. The discussion document notes the need for considerable investment in generation, transmission and local lines.[2] However, the focus on helping end-users electrify is primarily on renewable electricity generation rather

[1] Wellington Electricity, "Submission to Measures for Transition to an Expanded and Highly Renewable Electricity System Paper," submission to the Ministry of Business, Innovation and Employment, November 2023, 19, Part 4, Q 5.45, https://www.welectricity.co.nz/disclosures/submissions/industry-con/document/340.

[2] Ministry for the Environment. 2024. *New Zealand's second emissions reduction plan (2026–30): Discussion document*. Wellington: Ministry for the Environment, p. 51, 53.

than the whole electricity system.[3] Without a planning regime that incentivises investment in distribution, the potential emissions reduction from generation and transmission developments is uncertain, particularly as distributed energy resources become a larger part of our electricity system. ENA strongly supports the development of a clear national policy direction that encourages investment in distribution infrastructure so that the benefits of renewable electricity generation can be realised. Long-term certainty of regulatory and policy settings is also critical for EDBs to confidently invest in their infrastructure assets which often have a long-life span. The certainty provided by national direction could significantly reduce risk for distribution investment which has many flow on benefits.

ENA appreciates the Ministry of Business, Innovation & Employment's (MBIE) work on amending the Electricity (Hazards from Trees) Regulations 2003 concerning how vegetation is managed near power lines. Effective regulations are essential to mitigate both the current and anticipated future impacts of severe weather events on electricity infrastructure and ensure a resilient power supply to consumers. ENA is working with MBIE to ensure that the amended regulations effectively assess risk and allocate responsibility appropriately.

3 Chapter 6 – Transport

3.1 Q6.1 Do you support the proposed actions to enable EV charging infrastructure?

The proposed actions most relevant to EDBs are those relating to enabling EV charging infrastructure. ENA supports the supercharging EV infrastructure work programme. As noted in the discussion document, installing chargers at the pace required will depend in part on how promptly charging providers can connect to the electricity distribution networks. ENA and its members are working closely with the Electricity Authority, Electricity Engineers' Association, Energy Efficiency and Conservation Authority, and Charge Point Operators (via their industry body, Drive Electric) to ensure consistent approaches to EV charging connections across all 27 EDBs.

EDBs that are subject to price quality regulation under Part 4 of the Commerce Act (also known as non-exempt EDBs) must also operate within the limits of their price-quality paths as set by the Commerce Commission. Capacity on an electricity distribution network is largely shaped by past decisions aimed at making the network the right size for the needs of consumers at the time. Unused network capacity is therefore not available to new connectors at no cost—historic and current network users have funded it, so any new users must fairly compensate existing customers through capital contributions and ongoing fees.

ENA supports the direction the government is moving in with respect to enabling EV charging infrastructure. ENA would welcome the opportunity to engage with Government on the specific supporting actions listed in the discussion document.

4 Chapter 11 – Helping sectors adapt to climate change impacts

4.1 Q11.3 What are some examples of how industries are already managing climate risks?

4.2 Q11.4 How can these kinds of activities be further supported?

In response to the above questions, ENA has attached its submission to the Environment Committee | Komiti Whiriwhiri Take Taiao inquiry into Climate Adaptation as Appendix A. This submission explains how

[3] Ministry for the Environment. 2024. *New Zealand's second emissions reduction plan (2026–30): Discussion document*. Wellington: Ministry for the Environment, p. 54.

EDBs already manage climate risks and resilience of their infrastructure. It also outlines what changes are needed to further support the adaptation of electricity networks to the impacts of climate change.

The discussion document notes that energy specific policies proposed in the second emissions reduction plan may help reduce pressure on the cost of electricity by reducing the cost of consenting electricity infrastructure projects. However, this is largely only possible if electricity retailers are passing through these reduced costs to the consumer.

5 Conclusion

ENA appreciates the Government's emphasis on resilient communities and infrastructure, as well as the importance of affordable and abundant clean energy, as integral pillars of the second emissions reduction plan. ENA supports both the Electrify NZ policy and the supercharging EV infrastructure work and alongside our members we are engaging with other sector organisations and officials to support these programmes. ENA notes that the discussion document does not mention work on a clear framework for managed retreat which would be useful for EDBs in planning for the future of their network. However, the indication that more will be done to improve the quality of, and access to, climate information, tools, and guidance on future risks is encouraging. This will help EDBs better manage the effects of climate change on their networks.

Appendix A - ENA submission on the Environment Committee inquiry into Climate Adaptation

1 November 2023

Environment Committee Secretariat
Environment Committee | Komiti Whiriwhiri Take Taiao
Parliament Buildings
1 Museum Street, Wellington 6160
By email to en@parliament.govt.nz

ENA submission on the Environment Committee | Komiti Whiriwhiri Take Taiao inquiry into Climate Adaptation

Electricity Networks Aotearoa (ENA) appreciates the opportunity to submit on the Environment Committee | Komiti Whiriwhiri Take Taiao inquiry into Climate Adaptation.

ENA is the industry membership body that represents the 27 electricity distribution businesses (EDBs, sometimes called lines companies) that take power from the national grid and deliver it to homes and businesses. ENA harnesses the collective expertise of members to promote safe, reliable, and affordable power for our members' customers. ENA is supportive of the Government's efforts to increase the resilience of communities and infrastructure in the face of climate change and establish an ordered regime for when managed retreat must be used.

ENA, on behalf of its members, recently commissioned a review of the sector's response to Cyclone Gabrielle. This report, containing learnings from this severe weather event, is available on the ENA website[4] as a resource for the Committee. ENA also has a few key points concerning possible changes to legislation and the regulatory framework which may be of interest to the Committee. These specific points on the inquiry into climate adaptation are attached to this letter as Appendix A.

Do not hesitate to get in touch with ENA if you'd like to discuss any of the points raised in our submission. Please contact Richard Le Gros (richard@electricity.org.nz, 04 555 0075) in the first instance.

Yours sincerely,

Tracey Kai
Chief Executive
Electricity Networks Aotearoa

[4] http://ena.org.nz/assets/ENA-EDB-Cyclone-Gabrielle-Review-Report-ISSUED-13-Jul-23-1197.pdf

Appendix A

1. Cyclone Gabrielle

The resilience of electricity sector infrastructure is becoming increasingly important as the frequency of extreme weather events continues to increase alongside the reliance on electricity to decarbonise the economy. While ENA acknowledges there is a need for continuous improvement of the resilience of infrastructure in the face of these challenges, EDBs must work within the legislative and regulatory frameworks to do so. Cyclone Gabrielle highlighted that EDBs have a good level of preparedness in their management structures and in the availability of mutual aid across the sector. Preparedness and response to more typical weather events is well practiced by the distribution sector and is an element of business as usual.

2. Changes needed to existing legislation and regulatory framework.

ENA encourages the Committee to consider reviewing section 105 of the Electricity Industry Act 2010. This prescribes that EDBs must maintain supply of lines services to all customers in the EDBs network or supply that customer with electricity from some alternative source. As technology advances, many more options for alternative sources of electricity are viable. This includes photovoltaic solar panels with the excess energy being stored in batteries and a backup generator being available for instances of low solar output or high load. Currently, EDBs are prohibited from ceasing to supply line services to a customer without consent of either the Minister or every customer that would be affected by the ceasing of the service. That is, the customer must consent to receiving their electricity supply from some alternative source, rather than the lines service.

With the appropriate caveats to safeguard customers interests, this section could be amended to allow EDBs to change the nature of electricity supply to an alternative source without needing the consent of every customer who is being supplied. If the section was relaxed, it would provide an opportunity for EDBs to better coordinate the retreat of infrastructure alongside communities. It would also avoid all EDBs customers carrying the cost of maintaining vulnerable electricity lines that only benefit a small number of customers who could be potentially supplied by an alternative, more economic and resilient electricity source.

As the Ministry for the Environment mentions in their *Community-led retreat and adaptation funding: Issues and options* paper, if we fail to adapt, we may be in a constant state of recovery from the effects of climate change. If EDBs are not able to withdraw their infrastructure from vulnerable locations as communities retreat, this may put both those assets and the well-being of the EDB staff that service them, at unreasonable risk.

3. Targets and indicators for assessing progress to more resilient infrastructure.

ENA understands the Committee's desire to measure the progress being made on improving the resilience of infrastructure, particularly that which supplies lifeline utilities. The electricity distribution sector is continuously reviewing and amending standards to improve the resilience of its infrastructure to give the best possible service to its customers while balancing the need to maintain affordability. This ongoing process of review and revision of standards, given the long-lived and expensive nature of the infrastructure managed and the geographical spread, can only occur over time, rather than 'at once'. The distribution sector is already regulated by the Commerce Commission to ensure that an appropriate balance is struck between service (including resilience) and cost to customers – the price-quality trade-off. Adding additional targets to the sector can be unnecessary and potentially counterproductive. There are already significant incentives on EDBs to ensure an appropriate level of resilient infrastructure, not least of which is to maintain their social licence to operate.

Appendix B – ENA Members

Electricity Networks Aotearoa makes this submission along with the support of its members, listed below.

Alpine Energy

Aurora Energy

Buller Electricity

Centralines

Counties Energy

Firstlight Network

Electra

EA Networks

Horizon Energy Distribution

Mainpower NZ

Marlborough Lines

Nelson Electricity

Network Tasman

Network Waitaki

Northpower

Orion New Zealand

Powerco

PowerNet

Scanpower

Top Energy

The Lines Company

Unison Networks

Vector

Waipa Networks

WEL Networks

Wellington Electricity Lines

Westpower