22 August 2024

ERP2 Consultation
Ministry for the Environment
Via email: ERPconsultation@mfe.govt.nz

Tēnā koe,

Focused emissions reduction actions to grow to zero

Powerco is one of Aotearoa's largest gas and electricity distributors and is committed to our role in Aotearoa achieving a net zero economy in 2050. We supply around 357,000 (electricity) and 114,000 (gas) urban and rural homes and businesses in the North Island. The Emissions Reduction Plan (ERP) and related policy for energy, waste, transport, financing and the Emissions Trading Scheme (ETS) not only affects our business and investment decisions, but our ability to deliver lower emissions services to around 1 million kiwis.

We are playing our part in Aotearoa's electrification and development of lower emission gases. The 2026-30 period is critical for investment and action on the path to net zero. We have commented on sections of the ERP2 discussion document in the attached table. Our summary views are:

Policy certainty to support investment

- New Zealand must grow to zero, this will be enabled by leveraging our competitive and natural advantages. Growth is critical to fund climate mitigation and adaptation
- Policy certainty, removal of barriers and a credible level playing field are needed to enable investment and continue the current momentum in emissions reduction
- We support a net-based approach and least-cost pathway to achieving climate targets, using the ETS with complementary policies to drive gross emissions reductions
- ERP2 should be focused on a smaller number of actions (compared to ERP1) with a cross-sector approach to the best options for Aotearoa to reach net-zero by 2050

The energy trilemma will be tested

- Resilient, low-carbon, affordable energy for all New Zealanders is ambitious but achievable. The recent energy market situation clearly illustrates the benefit to be gained for all elements of the trilemma if we have a longer-term plan for a smooth energy transition focusing on energy security and resilience.
- Fuel diversity is essential to security of supply. Government actions such as a long-term energy strategy, and a renewable gas target can support electrification, natural gas and renewable gas.
- Significant investment is required in electricity distribution networks and ERP2 needs to signal key supporting measures such as national policy direction for distribution, rather than focus just on generation consenting.

This submission does not contain any confidential material and may be published in full. If you have any questions regarding this submission or would like to talk further on the points we have raised, please contact Irene Clarke (Irene.Clarke@powerco.co.nz).

Nāku noa, nā,

Emma Wilson
Head of Policy, Regulatory and Markets
POWERCO

Attachment 1: Response to discussion document

Topic	Powerco response
Approach & system plans Ch 1 - 4	While we support the "ERP2 outlines actions to reduce net greenhouse gas emissions at least cost to New Zealanders, while adapting to a changing climate", not at the expense of the economy and not without looking for highest longer-term value – New Zealand must **grow to zero**. We support an approach that **leverages our competitive and natural advantages**. New Zealand's natural endowment of clean energy is an opportunity to be leveraged to grow to zero. Growth is critical to fund climate mitigation and adaptation, and our clean energy system offers an advantage. Renewable endowment can be leveraged to attract new business and investment across the energy system. But we need to see this in the whole for the longer term, for example not just focused on short term cost of traditional generation build. We support a continued focus on **net reductions**, **with complementary enabling policies** to drive gross emissions reductions. This would provide ongoing policy certainty, the timeframe to enable technology development and the enabling, rather than directive, environment to support investment confidence. There is a need to **anticipate and plan for the Nationally Determined Contribution (NDC) and future emissions budgets**. This means not doing the minimum just for EB2 but planning and enabling investment now for longer term outcomes for EB3 and beyond. Otherwise, there is risk of severe changes (in policy and action and social/economic disruption) for periods beyond EB2 or for significant cost in meeting NDC commitments internationally. It is critical during this EB2 period that there is transparent tracking and reporting on the progress towards emission budgets, the NDC, and domestic abatement vs 2030 international financial obligation. We endorse a **principle of policy certainty for emissions reduction policy** towards net zero 2050. We have no comment on the changes to ERP1 recognising that this reflects the current government's direction. But this illustrates the importance of having an ERP2 and action plan that has a longer commitment from Parliament not just today's government. There are some actions to be removed from ERP1 that we note are likely to have significant impact on the pace of decarbonisation for those 'hard to decarbonise sectors' such as actions and support for the industrial sector, and support for residential equipment conversions. We support a market-based approach using the ETS, and proposals for **a stable credible ETS through market confidence**. This will need to be monitored to ensure the ETS functions effectively, including at a price that incentivises action. Ongoing industrial allocation are important, and any updates must be confirmed soon to avoid emissions leakage and support investment confidence. Complementary policies to remove regulatory barriers are also important as the ETS alone will not be enough. The current ETS does not efficiently address emissions and avoidance/reduction opportunities related to renewable gas - which crosses the energy, waste and agriculture sectors. Our waste sector comments below discuss the need for the ETS to be adjusted to provide a level playing field.

Topic	Powerco response
	We support actions that can **enhance confidence and certainty in investment** including through removing investment barriers. This could include extending the mandatory climate-related disclosures (as identified in the discussion document), but there are also several actions that could specifically support energy investment confidence. Some of these are also identified in the discussion document such as removing the 100% renewable electricity target. Additional **priorities to enhance investment confidence** are: • A cross-party energy strategy that provides policy certainty on the long-term direction for New Zealand's energy mix and renewable energy target. The current energy supply, price, and economic consequences is a stark illustration of the need for stable policy settings to encourage investment and avoid any perception of sovereign risk • Remove restrictions on arms-length investment in generation by EDBs to introduce more potential investors • Establish a climate change mitigation and adaptation objective for energy regulators to support investment levels needed in energy expansion and resilience • RMA streamlining for distribution and network activities. This is about an enabling environment for routine or low impact activities and protection for existing distribution infrastructure. Fast track consenting for renewable electricity does not provide this, but a NPS/NES for distribution can do so. A regime to provide certainty and streamline consenting biogas projects would also enhance investment confidence. • Infrastructure financing tools available for large load customers requiring significant network upgrades for connection (eg EV charging hubs). We encourage a more **systemic, cross-sector, approach to policy and actions for both climate mitigation and adaptation**. The sectors are connected, just as climate change mitigation and energy resilience and economic prosperity are connected. A more systemic approach will provide clearer modelling of potential impacts and opportunities. An **action plan** for implementing the ERP2 is also recommended as part of the final ERP2 document – to confirm where the accountability sits (eg which department), the steps/actions and timing. The modelling and numbers used for ERP2 and emissions budgets tracking should be easy to access/use for all, enabling businesses to align modelling and goals to New Zealand's goals.
Energy sector Ch 5	We agree that light transport and process heat are key sources for energy sector emissions reductions in ERP2. We note that energy use in buildings may be 'well suited to electrify' but in the case of residential buildings are also 'hard to electrify' due to the logistics and costs. The discussion document recognises that **significant investment is required in generation, transmission and local lines** (p51 and p53), and that energy security depends on investment in **all forms of energy** (p52). However, the discussion about enabling end-users to electrify (p54) is more focused on generation of renewable electricity rather than the full system. Without certainty for distribution investment, the contribution to emissions reduction of generation and transmission development cannot be guaranteed, particularly as distributed energy becomes a more significant part of our energy mix. The key policy proposed is reducing consenting burden through Electrify NZ. Table 0.1 states "Faster and cheaper consents for renewable electricity generation will support greater investment in renewable electricity capacity and grid infrastructure. Faster investment in electricity generation alone will not provide energy emissions reductions for two reasons. Firstly, **investment in other fuels is needed (eg natural gas, renewable gas, LNG)** to create the much-needed back up during the transition.

Topic	Powerco response
	Secondly, **faster consenting of electricity generation does not help investment in the grid infrastructure to operationalise that electricity generation**. Faster and cheaper consents is not the solution for the distribution sector either. The key solutions will involve **clear national policy direction** (NPS) and consistent enabling environmental standards (NES) for distribution rather than just streamlining consents. For example, distribution upgrades or new build is more likely to be designed to meet NES rather than go through a consenting process. The certainty provided by national direction could have a significant impact to reduce risk and improve programming for distribution investment. It also has the potential to improve project timelines and reduce administration costs. While national direction for distribution is signalled in Electrify NZ, the work underway (that we are engaged with) does not provide confidence in the timely development of this new national direction. In addition, streamlining non RMA approvals will assist. It is not clear how the projected emissions reduction in the discussion document accounts for necessary grid infrastructure in operationalising new (and existing) generation. There are a number of measures listed in the discussion document that we support as measures that can really contribute to reducing emissions. We support **measures to reduce barriers to CCUS**[1], but note that action will be required quickly to achieve the projected emissions reductions in the 2026-30 period. There is a greater opportunity to achieve emissions budgets if a range of existing, emerging and new technologies are supported through the ERP, for example renewable gases and flexible distributed energy resources discussed below. Other measures outlined in the discussion document we support include development of an enabling environment for gas production, amending the tree regulations (with stronger measures required to manage the risk of trees falling onto lines[2]), enabling new fuels through work on measures for uptake of renewable gas, clarifying the flexibility regulatory regime, establishing provisions to enable standards to be set for smart devices such as EV chargers, and enabling tariff and pricing innovations. In all cases little detail of new proposals is provided. We see **renewable gases as an important opportunity in security of lower emissions supply**. The discussion document states that the government is exploring what measures are needed to increase the uptake of renewable gases however it is not clear how the renewable gases opportunity has been projected as part of emissions reductions modelling. In one of the consultation webinars, two measures were identified as enabling supply projects through the ETS, and a tool to join up market for producers and users of renewable gas, with the intent of developing the supply rather than directing where renewable gases are used. In our view, the key supporting measures to increase uptake of renewable gas fall into two categories. Firstly, certainty for future viability of gas pipeline infrastructure which is necessary for economic transmission/distribution of renewable gases[3], and secondly measures to support increased renewable gas uptake which includes adjustment to the ETS and other measures:

[1] See Powerco submission on CCUS regime, August 2024: Powerco Submission, Regulatory regime for CCUS, MBIE 2 August 2024

[2] Powerco has recently provided detailed input to the targeted MBIE consultation on the Tree Regulations (August 2024) and would be pleased to share our feedback about managing the risk of trees falling onto lines from oursite the growth limit zone. The proposals need adjusting to effectively reduce treefall risk, eg there is a need to restrict planting within the fall zone to limit future vegetation management, to appropriately assess risk and allocate responsibiltiy and cost, and to provide equitable treatment of all vegetation near lines.

[3] Viability of gas pipeline infrastructure is also necessary for security of supply to ensure that gas remains a viable *delivered* energy source.

Topic	Powerco response

	• **Measures to provide certainty for pipeline infrastructure**
	  ○ Economic regulation of gas pipelines be reviewed as part of the Commerce Act review to ensure that pipelines remain viable over the medium to long term for the benefit of gas customers and security of supply
	  ○ Consider whether other financing measures are required to avoid material risk to the viability of gas pipelines
	• **Measures to increase renewable gas uptake**
	  ○ Explicitly endorse renewable gas (particularly biogas) in the ERP as a lever to achieving decarbonisation targets. A clear way to do this is to set a renewable gas target supported by clear processes for certification of renewable gas
	  ○ Ensure the ETS drives the capture and most efficient use of landfill gas, so waste to energy projects (eg renewable gas) are incentivised
	  ○ RMA national direction for renewable energy to support consistent and enabling treatment for consenting renewable gas projects
	  ○ Supporting education, training and awareness across government agencies and consumers
	  ○ Promoting government funded organisations (such as hospitals, schools) to procure renewable gas as part of their gas energy needs
	  ○ Linking to the waste sector (see below) actions, for example use of waste minimisation fund for organic waste infrastructure and measures to improve landfill gas capture.
	
	Further information about the barriers and responses for gas pipelines and renewable gas is provided in a separate joint submission from the three major gas pipeline businesses[4], which we support.
	
	Other **priority actions to enable electrification** which we endorse include:
	• A cross-party energy strategy that provides policy certainty on the long-term direction for New Zealand's energy mix and renewable energy target that supports net zero 2050
	• Remove restrictions on arms-length investment in generation by EDBs to introduce more potential investors
	• Establish a climate change mitigation and adaptation objective for energy regulators to support investment levels needed in energy expansion and resilience, and ensure the regime for distribution and transmission businesses provides confidence that all regulated businesses are investing at the pace and scale required
	• Infrastructure financing tools available for large load customers requiring significant network upgrades for connection (eg EV charging hubs). Amend the electricity regulatory incentive regime (IRIS) so that customer connection capex is excluded and the difficulty for networks and customers to forecast need is not an impediment to connection costs (EDBs that are nor regulated do not face this constraint)
	• RMA streamlining for distribution build. This is about an enabling environment for routine or low impact activities and protection for existing distribution infrastructure. Fast track consenting does not provide this, but an NPS/NES for distribution can do so.
	• Investigate options for 'hard to decarbonise' sectors which would need government support eg electrification of residential and some industrial

[4] First gas, Powerco and Vector

Topic	Powerco response
	• Strengthening energy efficiency and demand flexibility for a smarter electricity system needs more than a regulatory regime (p 54). Data is a critical enabler and actions are needed to support data access and sharing. • Implementing the pending *Sector and Government Energy Transition Framework* - an important opportunity to collaborate in decarbonising the energy sector.
Transport sector Ch 6	EDBs have a key role in supporting government and EV charging businesses in the target of 10,000 public chargers by 2030. The **work by EA on price and non-price measures to remove market barriers** will need to move at pace to achieve the certainty needed by investors. ENA and EDBs are working closely with the Authority, Electricity Engineers' Association, EECA, and Charge Point Operators (through Drive Electric) on consistent approaches to EV charging connections across all EDBs. We acknowledge that the govt is working on its approach to co-investment for EV chargers. As part of this, we encourage **establishment of financing tools or co-investment for large load customers** requiring significant network upgrades for connection (eg EV charging hubs). For example, financing tools to enable private businesses and EDBs to spread the upfront connection cost or fund it through different sources.
Waste sector Ch 10	We support **investment of waste levy revenue into waste recovery and infrastructure for organic waste**. The discussion document does not recognise the co-benefit of reducing natural gas emissions (displacement of natural gas) if landfill gas is used to produce renewable gas. This opportunity does require investment in infrastructure such as anaerobic digestion facilities, and can be part of the waste minimisation fund investment options in the ERP. We also support measures to improve organic waste diversion/processing, disposal and landfill gas capture. Fairly recognising waste emissions in the ETS and incentivising a level playing field for disposal operators is encouraged. These initiatives could assist in **optimal use of both organic waste, and captured landfill gas**, for example to produce biogas for distribution/use as renewable gas rather than flaring landfill gas or producing renewable electricity which does not displace any fossil gas use. We would support actions to address the scope of landfills that require landfill gas capture, and improving evidence on landfill gas capture and reporting. In June 2024 we submitted[5] on the ETS settings consultation and proposed changes for the waste sector regulations. This submission included the call for a **broader review for appropriate ETS settings** to support a market response incentivising production of biogas to displace natural gas use, including incentivising production at landfill in preference to flaring. We recommend a specific action in the ERP to **line up the ETS, renewable gas targets, renewable energy targets and waste sector targets**. The discussion document does not address the significant link between the waste sector and energy sector in actions and targets to incentivise the most efficient options for organic waste, landfill gas and renewable gas. We encourage looking at this to optimise the emissions reduction opportunities.

[5] Powerco submission available on our website: Powerco submission, ETS settings, MfE, 14 June 2024

Topic	Powerco response
	We have discussed renewable gas in the energy sector comments above and recommended a number of actions to: • Provide certainty for future viability of gas pipeline infrastructure which is necessary for economic transmission/distribution of renewable gases • Support increased renewable gas uptake. In particular ETS settings that support a market response incentivising production of biogas to displace natural gas use. In identifying the proposal for further investigation and engagement with industry on possible changes in organic waste disposal and landfill gas capture (p91), we assume this refers to the waste industry. We would strongly recommend **broader engagement on proposals** with organisations such as Powerco who are actively pursuing renewable gas opportunities from landfill gas capture.
Adaptation Ch 11	Powerco is actively assessing risk and planning for adaptation and supports an ERP that considers both adaptation and mitigation. The potential for the current Select Committee inquiry to result in a cross-party adaptation framework is a significant opportunity for clarity and national progress. **Data access and sharing** is the cornerstone for a future adaptation framework. We have discussed this and other learnings from our recently published Climate adaptation & resilience plan[6] in our submission[7] to the inquiry. Our submission also notes the initiative in table 11.1 for national direction for natural hazard decisions under RMA, will not support improved resilience for infrastructure. Resilience of critical infrastructure is addressed through other government workstreams, but we support the proposal (table 11.2) to **consider energy system and critical infrastructure resilience in finalising energy sector ERP actions**. We have identified actions earlier in this submission that support both adaptation and emissions reduction: • Establish a climate change mitigation and adaptation objective for energy regulators to support investment levels needed in energy expansion and resilience, and ensure the regime for distribution and transmission businesses provides confidence that all regulated businesses are investing at the pace and scale required • Strengthening energy efficiency and demand flexibility for a smarter electricity system needs more than a regulatory regime (p 54). Data is a critical enabler and actions are needed to support data access and sharing • Measures to provide confidence for investment in fuel diversity, including renewable gases.

[6] Climate Adaptation & Resilience Plan.indd (powerco.co.nz)

[7] Powerco submission, Select Committee, Climate Adaptation Inquiry, 14 June 2024

Attachment 2 – Information about Powerco and our network

Providing an essential service

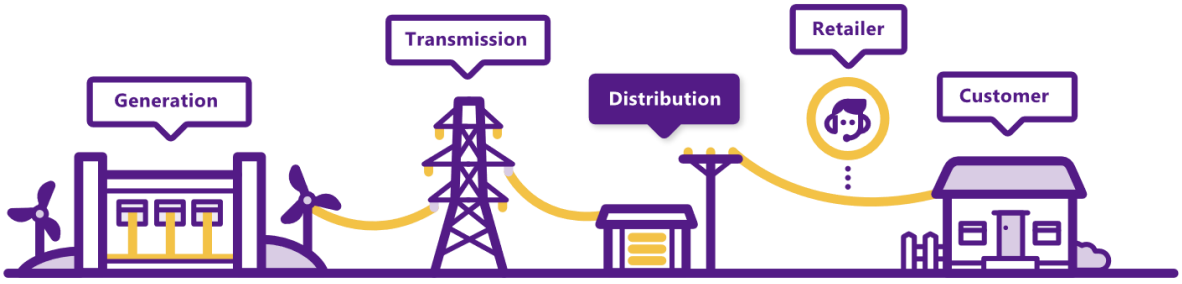
We bring electricity and gas to around 1 million kiwis across the North Island. We're one part of the energy supply chain. We own and maintain the local lines, cables and pipes that deliver energy to the people and businesses who use it. Our networks extend across the North Island, serving urban and rural homes, businesses, and major industrial and commercial sites. We are also a lifeline utility. This means that we have a duty to maintain operations 24/7, including in the case of a major event like an earthquake or a flood.

The cost of operating our business is not dependent on the amount of gas or electricity we distribute in our networks. These costs reflect the need to maintain the safe operation of the network and are mostly driven by compliance with safety regulations. This includes replacing assets when they reach their end of life. Additional costs to grow the size or the capacity of the network are often met by customers requiring the upgrade or new connection.

Under Part 4 of the Commerce Act, Powerco's revenue and expenditure are set by the Commerce Commission as part of monopoly regulation. We are also subject to significant information disclosure requirements, publicly publishing our investment plans, technical and financial performance, and prices. The regulatory regime allows us to recover the value of our asset base using a regulated cost of capital (WACC) set by the Commission, and a forecast of our expenditure. Every five years, the Commission reviews its forecasts and resets our allowable revenue. This process is designed to ensure the costs paid by customers for us to manage and operate our network is efficient given we are a monopoly and an essential service.

Our electricity customers

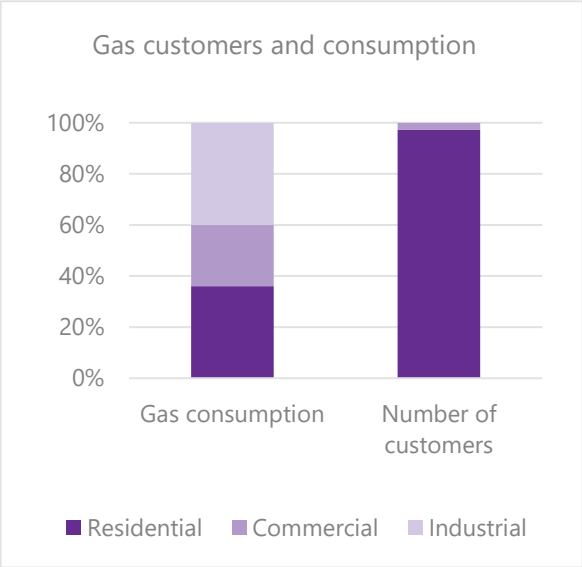
Powerco is New Zealand's largest electricity utility by the area we serve. Our electricity networks are in Western Bay of Plenty, Thames, Coromandel, Eastern and Southern Waikato, Taranaki, Whanganui, Rangitikei, Manawatu and Wairarapa. We have over 29,000 km of electricity lines and cables connecting around 357,000 homes and businesses. Our place in the electricity sector is illustrated below.



Our network contains a range of urban and rural areas, although is predominantly rural. Geographic, demographic, and load characteristics vary significantly across our supply area. Our development as a utility included several mergers and acquisitions that have led to a wide range of legacy asset types and architecture across the network.

Powerco is one of 29 electricity distribution companies. Our customers represent around 13% of electricity consumption (similar in magnitude to the Tiwai aluminium smelter) and around 14% of system demand. Powerco's network is almost three times the size of Transpower's in terms of circuit length. The peak demand on our combined networks (2023) was 974 MW, with an energy throughput of 5,225 GWh.

Our gas customers



Powerco is New Zealand's largest gas distribution utility. Our gas pipeline networks are in Taranaki, Hutt Valley, Porirua, Wellington, Horowhenua, Manawatu and Hawke's Bay. We have over 6,200 km of gas pipes connecting to around 114,000 homes and businesses. Our customers consume around 8.6 PJ of gas per year.

Our industrial customers are less than 1% of our customer base and consumer approx. 40% of gas on our network. Our residential customers are 97% of our customer base and consume approx. 35% of gas on our network. The remaining 25% of gas is consumed by our commercial customers.

Around 30% of our larger customers are in the food processing sector, around 20% in the manufacturing sector and around 10% in the healthcare sector.

Our network footprint

Our network represents 46% of the gas connections and 16% of the electricity connections in New Zealand. We operate assets within six regions and across 29 district or city council areas.