

8 July 2026

Waste policy team
Ministry for Cities Environment Regions and Transport
Via consultation portal

Tēnā koe,

Organic waste options to reduce emissions and achieve broader benefits for New Zealand

Powerco is one of Aotearoa's largest gas and electricity distributors, supplying around 360,000 (electricity) and 114,000 (gas) urban and rural homes and businesses in the North Island. Powerco is also actively pursuing renewable gas opportunities, and we see the role of renewable gas growing significantly in the next ten years. Recovery of organic waste provides an opportunity to upgrade biogas into biomethane for New Zealand's gas transmission and distribution system.

New measures to reduce emissions from organic waste are an important opportunity to both maximise beneficial outcomes of methane capture and anaerobic digestion while also reducing emissions. We have provided commentary on the consultation issues and responded to the relevant consultation questions in Attachment 1. Our summary views are:

A review of organic waste regulation is timely and necessary

- Options are changing for management of organic waste and beneficial reuse of captured gas
- It is encouraging that the government is recognising this change and reviewing measures (including regulation) that will ensure the right incentives and disincentives for upfront decisions about organic waste management, and operation of facilities
- The explicit recognition of the biogas opportunities is supported and aligned to the Government statement on biogas.

Improved support for decision makers is a key opportunity

- The proposed measures must target the need for improved education, tools and support for decision makers
- Assessing options for organics management is complex. It is not just about the costs and benefits of a kerbside collection but canvasses multiple benefits and opportunities for use of gas and other end products by a facility, a council, or the broader public
- Uncertainty about a secure, consistent and long-term supply of organic material for a biomethane facility is the primary barrier to biomethane growth. Measures that assist in increasing the value of feedstock will support decisions about organic waste options by investors, councils and other waste sector parties.



Information about Powerco is provided in Attachment 2. This submission does not contain any confidential information 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,

A handwritten signature in black ink that reads "E Wilson".

Emma Wilson

Head of Policy, Regulation and Markets

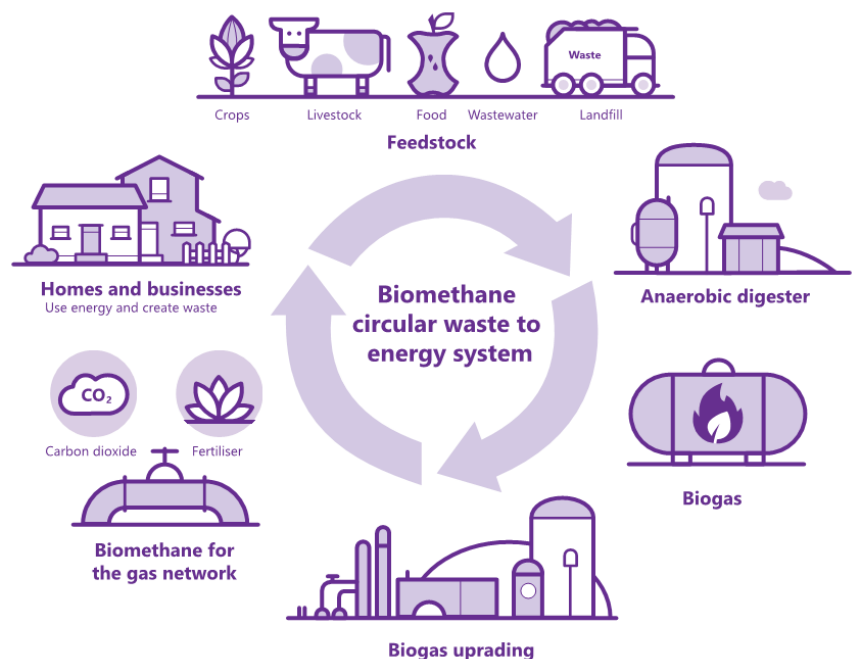
POWERCO

Powerco feedback – options to reduce emissions from organic waste

1. The biomethane opportunity and benefits

Powerco is actively pursuing renewable gas opportunities. While our primary interest is injecting biomethane into the gas network to supply current natural gas customers, our scoping of opportunities illustrates broader opportunities and benefits from biomethane projects. Recovery of organic waste provides an opportunity to upgrade biogas into biomethane.

Biomethane has the potential to deliver 1 PJ of gas per year by securing biomethane from projects already under development and upgrading biogas from existing sources. By 2035, a goal of 5 PJ per year is achievable by cross-sector collaboration, government support, and systematic removal of barriers. This is enough to supply 2/3 of the natural gas used by all commercial businesses, or nearly ¾ used by residential. By 2050, 25 PJ per year is achievable with enabling actions and a full range of solutions. This is enough to supply over half of New Zealand's total expected natural gas demand in 2050.¹



Producing approximately 25 PJ of biomethane could reduce emissions by 3.7MtCO₂-e, and diverting organic waste to biomethane production could achieve 23% of the 3.3Mt target for waste-to-landfill reduction.²

Conservative modelling by Sense Partners estimates that producing 1 PJ of biomethane delivers at least \$61 million in additional benefits – not only for gas producers, but for local communities and New Zealand as a whole. These benefits include improved long term energy security, reduced waste and emissions, regional development projects, and the creation of additional products such as digestate fertiliser, heat energy and a new source of bioCO₂.³

2. Feedstock security is a key barrier to biomethane growth

While New Zealand has been exploring biomethane for decades, projects have been slow to progress to market. The feedback document outlines the one significant production project, the Ecogas Reporoa Organics Processing Facility, which opened in 2022 and converts Auckland's food waste into biomethane that is now injected into the gas network.

¹ Gas NZ Biomethane strategy and action plan, March 2026. [Biomethane — Gas New Zealand](#)

² Blunomy 2023, [Vision for biogas in Aotearoa New Zealand](#).

³ Data available in Gas NZ Biomethane strategy and action plan, March 2026. [Biomethane — Gas New Zealand](#)

Powerco's experience scoping a range of biomethane opportunities, is that while we are keen to make progress, there are significant risks and uncertainties in these projects which can delay decisions on the investment required.

The most significant barrier is feedstock security. There are other barriers such as the complex partnerships and supply chain, high upfront costs, consenting risk, policy uncertainty, network access challenges, and ensuring the scale necessary to enable economic development. However, it is the uncertainty about a secure, consistent and long-term supply of organic material for a biomethane facility that is the primary factor. Clarity in the management of New Zealand's organic waste is a key contribution to enabling more long-term certainty for investors.

3. Making organics diversion and biomethane an easy choice for councils and the waste sector

We support options that will assist councils in decision making about organic waste diversion and reuse. To assist council decision making, tools such as modelling, guidance and trials, must address the full scope of a council decision about waste management options. Targeting tools towards the kerbside collection aspect only, will not provide councils with the resources to facilitate evidence-based decisions that canvas the costs/benefits (including emissions reduction) of collection, processing and use options.

In our view, modelling tools will add most value for council decision making. Modelling could assist councils to assess the costs and benefits across a range of aspects such as kerbside collection services (both green waste and landfill waste), landfill life, landfill gas impact, emissions profile, biogas generation, use of biomethane for council activities (for example displacing use of natural gas in a swimming pool with biomethane and asset life implication).

One barrier we see for councils' understanding about anaerobic digestion and biomethane is that the place of anaerobic digestion in the waste hierarchy may not be clear. We recommend clarifying that anaerobic digestion is 'resource recovery' for the purposes of the waste hierarchy, and within that resource recovery part of the waste hierarchy, there is an expectation that all organic materials that are suitable for resource recovery via anaerobic digestion should go to anaerobic digestion in preference to composting, as it delivers the most abatement.

Increasing participation in existing green waste diversion and supporting new kerbside organics collection will optimise green waste diversion and beneficial reuse. There are already some resources available for territorial authorities to support them in optimising household use of kerbside organic services, however we recommend additional resources could support both council knowledge and public understanding about the options and rationale for organics diversion and beneficial reuse.

We agree that public awareness of the opportunity for organics diversion to contribute to emissions reduction is low. In our experience, awareness about anaerobic digestion and the potential values of biomethane is even lower. Helping people do the right thing with organics diversion may require new incentives, drivers and education.

Technical resources, case studies, trials and public information could improve understanding about organics diversion, anaerobic digestion and biomethane. Further assessment should be undertaken to refine knowledge gaps and target new resources or trials where they would assist most.

Sharing of data between the Ministry, other regulators, councils, and the public will be a key enabler in supporting decisions about organic waste management. Expectations or obligations for sharing of data will be integral to any new mechanisms introduced. We acknowledge that this would not be at an operator or commercially sensitive level but improved regional and national waste data will contribute to an improved waste system.

4. Changing the way organic resources are valued

In order to take up the opportunity that anaerobic digestion options provide, councils and waste producers need access to organics processing solutions. It is important that funding support such as the Waste Minimisation Fund has the scope to support all infrastructure involved in the full production cycle of organics processing options, for example collection, sorting, anaerobic digestion, biogas treatment. We recommend clarity that Waste Minimisation Fund provides a funding option for such infrastructure. This could be achieved with updated guidance on the Waste Minimisation Fund with waste-to-energy examples.

We agree that improving the availability and accessibility of information on organic waste processing options could support more informed, strategic decision-making. In our view information and tools to support evidence based decision-making needs to span both collection (including kerbside) and processing options, rather than one or the other. We have commented on this in section 3 above. We agree that updating the MfE waste-to-energy guidance would be a good step to better recognise the options around anaerobic digestion and biogas.

We support the option to map local infrastructure gaps and opportunities. This will provide useful reference for decision making and would complement the work that EECA is doing to collate information on feedstock. This mapping of infrastructure should include gas network infrastructure that is suitable for injection of biomethane produced from organics processing. We caution that maintaining the value in infrastructure mapping will require a commitment to keep this updated.

In our experience, organics processing / biomethane projects can involve a significant number of parties to collaborate on a solution. A council may be a central party, but this is not always the case. For a council to assess all possible options in organic waste management, they need to understand which parties are active (or important) for a district or regional solution. The combination of mapping infrastructure and the EECA feedstock work may, by default, also provide a picture of key parties for council to approach about biomethane options. Consideration could also be given to alternate ways of highlighting key parties or where to go for someone looking to get started on the biomethane journey.

The Government statement on biogas recognised the value of a domestic biogas market across waste management, energy security and emissions reduction. This needs to be built on with policy that increases certainty around future feedstock supply through recognising the value that this feedstock can provide:

- Clarify resource recovery expectations in the waste hierarchy (see section 3 above)
- Elevate resource recovery over disposal through phased diversion of all anaerobic digestion suitable organics from landfill or composting to biogas facilities
- Changes to increase the waste disposal levy to align disposal incentives with the goal of diverting organics as much as possible
- Government's own organic wastes (eg schools, defence) are measured and committed for AD.

5. Fairly recognising emissions at waste facilities

Powerco supports an approach that fairly recognises waste emissions in the ETS and incentivises a level playing field for disposal operators. This could assist in optimal use of both organic waste, and captured landfill gas, for example to produce biomethane for distribution/use as renewable gas or producing renewable electricity rather than flaring landfill gas.

We would support actions to broaden the scope of landfills that are subject to the ETS. The principles identified in the feedback document for determining the appropriateness of ETS to waste sector types are appropriate.

If changes to the ETS are made around waste-to-energy facilities, this must be clearly defined as waste-to-energy incineration plants, so as not to capture anaerobic digestion or biomethane production. Resource recovery facilities that handle organic materials should not be subject to ETS obligations. Small quantities of fugitive emissions in anaerobic digestion facilities are managed and can be guided through planning rules (and consents). A key aspect of anaerobic digestion is that it is avoiding emissions (from landfill, from displaced fossil gas, from displaced fertiliser). Any ETS obligation would add cost and be a significant disincentive for projects that are already economically marginal.

We also recommend consideration of bio-CO₂ produced in anaerobic digestion facilities processing organic waste. This could receive credits in the ETS to ensure this is not a disincentive to anaerobic digestion options rather than disposal. Direction about bio-CO₂ in emissions accounting guides could also assist users to see the value of this lower-emission option.

To support waste organics actions, it will be important to align the ETS, renewable gas targets, renewable energy targets and waste sector targets. Updating the Measuring Emissions Guide⁴ to provide specific emissions factors for biomethane use will also assist in incentivising demand for biomethane.

For landfills that collect and destroy landfill gas, the method of calculating landfill gas emissions for the purpose of the ETS means there is a real incentive to determine a unique emissions factor (UEF) for that facility. Many large landfills have published UEFs indicating 100% collection/destruction efficiency for enclosed flares. An alternative option to capture and upgrade biogas to biomethane at a landfill facility offers no ETS benefit as a biomethane case at 90-100% collection efficiency has the same ETS obligation as an enclosed flare listed at 100% collection efficiency. While there are other, non-ETS, benefits for a landfill facility to consider biomethane options, the ETS regulations do not account for, or drive, beneficial reuse of captured landfill gas. We recommend further consideration of ETS regulations applying to waste facilities to better incentivise a range of options to reduce emissions, rather than just flaring. One part of this is the evidence around UEF claims on efficiency, which the feedback document highlights as requiring improvement.

The review of national direction for air quality under the new planning system is an important opportunity to review the incentives and disincentives in the regulations about the approach to management of emissions at waste facilities.

⁴ <https://environment.govt.nz/what-you-can-do/calculate-your-emissions/measuring-emissions-guide/>

Powerco supports requiring landfill gas capture at a broader scope of landfill. We acknowledge that a scale of landfill may be required for economic viability of gas capture, but encourage extending this as far as possible so that all landfill sites accepting any putrescible and biodegradable materials are managing their methane emissions. A requirement to divert organics away from landfills where gas capture is not possible is also a sound option. Requiring more and/or existing landfills to retrofit for landfill gas capture may be costly in some cases.

Using waste levy revenue as a funding source to contribute to the cost of a landfill gas capture system is an option, but does not align well with the purpose of the waste levy to appropriately price the 'true' cost of landfills. It is also using the waste levy for an emissions outcome rather than a waste minimisation outcome, when the ETS is the tool for emissions outcomes.

We recommend the consideration of landfill emissions not only focus of capture of landfill gas, but also on the treatment or use of that gas. Case studies in the feedback document provide examples of the potential beneficial use of captured landfill gas as well as the beneficial use of gas captured from organics processing. This highlights the many options for beneficial reuse.

Upgrading biogas to biomethane will displace natural gas use and can be at a smaller scale for on-site gas use (eg for heat), or for exporting into the gas network. Alternatively biogas can generate electricity for on-site use, or nearby use or export to the electricity network.

Landfill gas capture efficiencies need to be supported by evidence. Regulation, including both through the ETS and planning national direction, can guide the evidence requirements, as well as drive improvements in performance, measurement and reporting.

We agree that in future, possible changes to criterion 6 or to regulation 27 of the NES-AQ should be looked at to further improve the management of emissions, and the economic opportunities arising from reusing energy from organic waste.

6. Feedback on consultation questions

Topic	Powerco response
1. Supporting businesses to reduce and recover food waste	
1.1-1.8	We support options to better measure and report on food loss and waste as improved data will provide an input to measures in section 3 (organics processing). We do not have specific feedback on the consultation questions in section 1.
2. Supporting councils to implement or enhance kerbside organic services	
2.1 Do you support the option to develop standardised modelling tools for territorial authorities to scope and contract kerbside collections?	Yes, but the scope must be broader that only the kerbside collection component. Tools and support must consider outcomes and end products rather than just amount of organics collected. Refer comments in section 3.

Topic	Powerco response
2.2 Do you support the option to share resources with territorial authorities to support optimising household use of kerbside organic collections?	Yes, but the scope must be broader that only the kerbside collection component. Refer comments in section 3. Sharing information and resources about infrastructure (see next section) will be one priority.
2.3 Do you support the option to fund trials for increasing uptake of kerbside organic collections and share findings nationally? What are some priority research areas for increasing resident uptake of kerbside organic collections that your council could benefit from?	Yes, noting that there is a significant body of research and experience existing. Any trials should focus on specific knowledge gaps and be broader that only the kerbside collection component. Refer comments in section 3.
2.4 Do you support the option to showcase organic waste reduction and diversion as a climate change mitigation tool to the public?	Yes, but the scope must be broader that only the kerbside collection component and only the climate change mitigation benefit. Helping the public understand the options and costs/benefits needs to appeal to a range of interests. Climate change mitigation is one of those. Further work may be required to understand drivers and interests for the public to generate new options for education. Refer comments in section 3.
2.5 Which options would have the most impact and should be prioritised for implementation?	Modelling tools incorporating costs and benefits across a wide range of related aspects in council decision making – including both collection and end outcomes/products.

3. Enabling organics processing

3 What factors do you think are most important when selecting an organic waste processing solution? What data or information do you think would be most useful to support decision-making on organic processing solutions? Could improved data from anaerobic digestion and composting facilities (ie, from a voluntary reporting scheme) help inform decision-making on organic waste processing solutions? If so, how? Please outline any other suggestions (aside from the options outlined below) that could help enable organic processing solutions, including biogas.	Important factors in selecting an organic waste processing solution will include: - Distance between source feedstock and processing (mapping will help here) - Understanding the parties involved in a local solution, or who could coordinate or who to go to first - Ability to undertake evidence-based assessment across all relevant factors, impacts and opportunities - Certainty in the policy context. These factors contribute to underlying drivers: - Value recovered from the material - Emissions outcomes. Understanding all the costs and benefits of different organics processing options is important. Not just from a waste management lens. We have commented on the need to focus on feedstock certainty in section 2 and the broader view of costs and benefits in section 3 and 4. We support sharing of data about organics collection (volume, composition and location of feedstock) to inform parties involved in options assessment including waste producers and potential investors.
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Topic	Powerco response
3.1 Do you support the option to map local infrastructure gaps and opportunities for diverting organics?	Yes, we support this option. Mapping must include gas networks that can take biomethane as a component in the infrastructure network.
3.2 Do you support the option to provide more information on biogas through a waste lens, including updated waste-to-energy guidance?	Yes, this is required from a waste lens, and also to facilitate decision makers consideration of broader costs, benefits and options. The waste-to-energy guidance is outdated, for example it does not reflect the 2025 Government statement on biogas. The place of anaerobic digestion in the waste hierarchy must also be clarified.

4. Broadening waste sector involvement in ETS

4.1 Are the principles identified (in table 2) appropriate for guiding decision-making on waste sector coverage for the ETS?	Yes
4.2 Are the current rules for participation in the ETS sufficient to cover all meaningful emissions sources in the waste sector? Should all classes of disposal facility that accept putrescible and biodegradable waste be subject to ETS obligations for the emissions they produce? Should resource recovery facilities that handle organic materials be subject to ETS obligations for the emissions they produce? Should ETS obligations cover any other facility or infrastructure types in the waste and resource recovery sector?	No. We support applying the ETS to a broader scope of landfills to incentivise organics diversion. The ETS is a tool to drive behaviour ie driving divertible organic material away from landfill. Resource recovery facilities that handle organic materials should not be subject to the ETS. There is no behaviour factor at these facilities. Emissions at these facilities can be managed through planning rules (and consents). Applying the ETS would be a significant disincentive. We have commented on this in section 5.
4.3 Do you believe any other changes (beyond those included in this sector feedback document or the 2026 ETS regulatory review consultation) could be made to the ETS regulations for the waste sector to maximise emissions abatement opportunity and incentives?	We are concerned that the calculation methodology for landfill gas capture and approach to UEFs is targeted at destruction through flaring rather than facilitating other beneficial reuse options. This requires review. We have commented on this in section 5.

5. Considering landfill gas management in the planning system

5.1 Review the criteria for when regulations under the current National Environmental Standards for Air Quality would apply	We support review and changes to all criteria for the regulations to ensure landfill gas capture requirements apply to any landfill that accepts organic waste. We have commented on this in section 5. This includes review of criterion 6. Requirements for both capture of gas and beneficial reuse would support local and national goals, for example this could support use of captured biogas for use as gas on site, generation of electricity for use on site, or options use off site or export/inject into the energy system to support energy security.
5.2 Do you support the option to introduce a minimum efficiency standard for landfill gas capture systems required by regulation?	Yes. An efficiency standard for a site must be backed by appropriate evidence.

Information about Powerco and our network

Providing an essential service

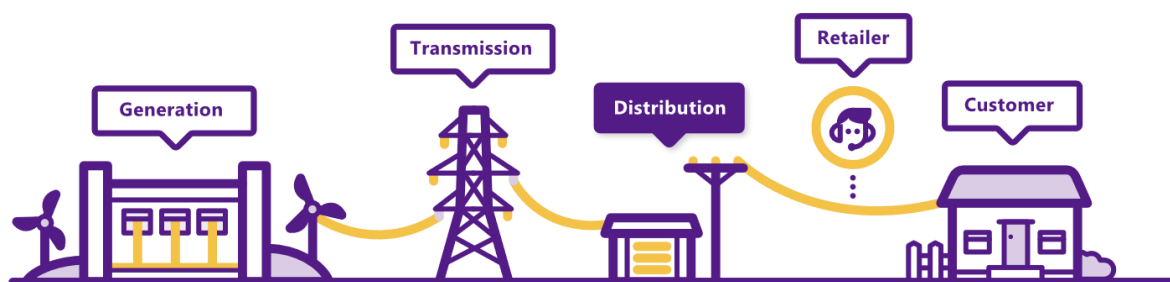
We bring electricity and gas to over 1 million kiwis across the North Island. We're one part of the energy supply chain. We own and maintain the local lines, cables and pipes that deliver energy to the people and businesses who use it. Our networks extend across the North Island, serving urban and rural 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

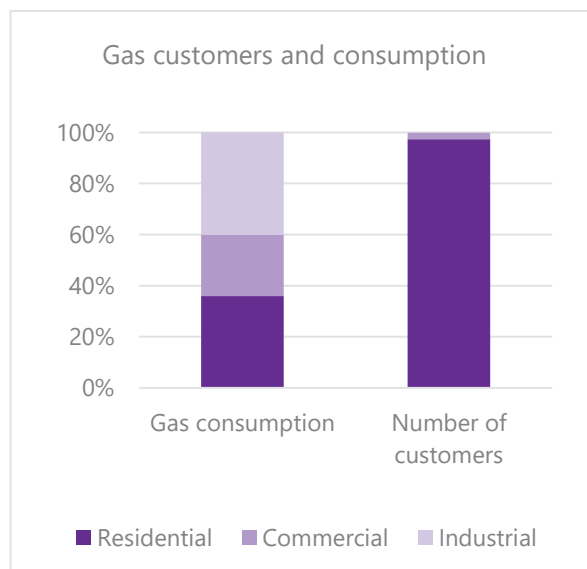
Powerco is New Zealand's largest electricity utility by the area we serve. Our electricity networks are in Western Bay of Plenty, Thames, Coromandel, Eastern and Southern Waikato, Taranaki, Whanganui, Rangitikei, Manawatu and Wairarapa. We have over 29,000 km of electricity lines and cables connecting over 360,000 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 28 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 (2025) was 940 MW, with an energy throughput of 5,297 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 113,000 homes and businesses. Our customers consume around 8 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.

