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Tēnā koe e te tumuaki

DRAFT ADVICE ON THE SECOND EMISSIONS REDUCTION PLAN (2026-2030)

Thank you for the opportunity to comment on the Climate Change Commission's (CCC) consultation paper *"Draft advice on the second emissions reduction plan (2026-2030)" released in May* 2023 (the Draft Advice).

GasNZ is the new industry association representing the full gas value chain. Our vision is that renewable gases are a material part of New Zealand's energy system, providing energy choices and a net zero carbon future for all New Zealanders.

We have a history of over 100 years. We are a merger of the legacy institutions of the Gas Association of New Zealand (established in 1909) and the Liquefied Petroleum Gas Association of New Zealand (established in 1977), combined with the express inclusion of renewable gas interests and investors.

Today, with new gas fuels being developed, renewable gases and low carbon gases are a key part of our future energy system and integral to a sustainable future.

Our submission is singularly focussed and addresses Recommendation 12 (the Recommendation) in the CCC Draft Advice - "Prohibit the new installation of fossil gas in buildings where there are affordable and technically viable low emissions alternatives in order to safeguard consumers from the costs of locking in new fossil gas infrastructure."

The Recommendation is a relatively blunt and specific directive and out of keeping with the tone of the rest of the advice which is less sector specific and takes a higher-level strategic approach. The Recommendation also appears to be in direct contravention of the Commission's own reasoning or guiding principles - in particular, the principle that: "The decisions taken now should open up a wide range of future options and keep options open for as long as possible.

We suggest the impact of a ban must be fully considered through the lens of the National Energy Strategy and Gas Transition Plan. In isolation of these key pieces of work it is impossible to determine whether it is the best way to reduce emissions and meet the principles of a just transition.

A ban could have negative implications for market dynamics, consumer affordability and consumer choice and will limit the potential for supplying renewable gases in New Zealand.

Gas plays a crucial role in meeting energy demands and providing affordable heating options. Furthermore, it has been a reliable source of energy during natural disasters and extreme weather events, the likes of Cyclone Gabrielle.

A ban on new gas connections will put undue pressure on the already-constrained electricity networks and will compromise the reliability of energy supply to meet consumer demand at times of supply shortage.

The Recommendation jeopardises energy resilience and the renewable gas pathway that the sector has already begun; it will deprive New Zealanders of energy choices in the future, and could detrimentally impact the 600,000 New Zealander homes and businesses that use gas now.

We acknowledge the intent of the Recommendation, but we think there are better options and we believe the Gas Transition Plan is the place to consider the myriad issues in a broader context. Rather than Recommendation 12, our suggestion is to reframe the recommendation to await the detailed work on options currently underway, and in the interim, recognise the link between current networks, new connections, and renewable gas potential.

The following sections outline the basis of our position.¹

New Zealanders choose gas and rely on gas, and its essential for resilience

A ban on new gas connections from 2025 would have a negative impact on the nearly 600,000 homes and businesses (including restaurants, cafes) that currently use natural gas or LPG. A ban would force them into use energy sources that they prefer not to use when their current gas equipment reaches the end of its lifespan.

People choose natural gas or LPG for a range of benefits: It is affordable and reliable; and it provides high and instantaneous heat. For these reasons it is not only a preferred fuel for restaurants and the hospitality sector, but electricity is not a natural replacement.

¹ Note our position in regard to Recommendation 12 is supported by the evidence in the BusinessNZ Energy Council submission, the Firstgas submission and the Powerco submission and these submissions are referenced in our response.

Gas is relied on by electricity consumers too. A ban on new connections will put undue pressure on the already constrained electricity networks and will compromise the reliability of energy supply to meet consumer demand at times of supply shortage.

Vitally, gas is a reliable source of energy during natural disasters and extreme weather events. In general, gas networks demonstrate high reliability compared to electricity networks due to the different risks faced by each of them. Recent natural disasters in New Zealand and around the world have underscored the significance of LPG in times of crisis.

The value of the natural gas network and LPG, for community resilience was clearly demonstrated during Cyclone Gabrielle. Cyclone Gabrielle caused widespread power outages in Te Tairawhiti and Hawkes Bay, leaving many without electricity for an extended period of time. The gas network was less exposed, and LPG as a versatile, portable, safe, and reliable source of energy for cooking, heating, and lighting, came into its own. In disaster situations, gas can provide a much-needed source of energy when other sources are unavailable or disrupted.

The renewable gas potential is real and the evidence is abundant

The technology exists now to supply carbon-zero gas through the current natural gas network. This is happening at scale in Europe (supported by government policies that require a shift away from fossil fuels) and emerging in New Zealand. A biomethane plant is currently being built to process biomethane from the Ecogas Reporoa Organics Processing Facility.

In April 2021, GasNZ and Bioenergy Australia hosted a Renewable Gas Tour of Australia and saw first-hand the range of biogas projects being undertaken in Australia, from organic waste, primarily from waste water.

The energy system in Australia is very different to New Zealand's, and as a result the biogas is being used to generate renewable electricity, however in New Zealand there is a strong case for it to be processed to pipeline standard and injected in the pipeline. Firstgas and Ecogas have a project underway and expect to be injecting biomethane in 2024.

In September 2022 Castalia was commissioned by GasNZ, Energy Resources Aotearoa, and the Major Gas Users Group to provide an independent analysis of gas demand under plausible pathways for transitioning the gas sector and to evaluate the trade-offs involved. The <u>report</u> found that renewable gas was plausibly part of the pathway to net zero. In particular it noted:

- Certificates should be explored and targets used if prices fall.
- Integrating renewable gases could provide options for New Zealand's gas networks and gas consumers, and also provide energy choices to consumers, while achieving emissions reductions.

• Retaining LPG for some users and exploring use of renewable LPG. LPG will remain an important energy source for commercial and residential, agriculture, and transport sectors into the future because switching to alternative energy sources is likely to be costlier than retaining LPG.

<u>Renewable LPG</u> - In 2021 the then LPG Association commissioned Worley to undertake a study on the decarbonisation of the NZ LPG sector, that report was the <u>"Pathway to</u> <u>70/100% renewable LPG"</u>. The picture was bright, with early indications showing that achieving significant decarbonisation of the NZ LPG sector was credible and within reach. GasNZ saw value in demonstrating smaller scale 2nd generation pathways at a pilot or early commercial scale and accordingly, undertook further study to more deeply explore the status of the pathways in <u>Exploring short term renewable LPGDME production for NZ</u>

<u>Biogas</u> - Powerco commissioned Advision/Worley in 2022 to evaluate and estimate the potential Biogas supply and impact on its gas network. As a result of that study, Powerco is now undertaking technical and economic assessment of short-listed supply options to develop for trial. The figure below is a summary of the finding that there is 1 - 1.5 PJ pa potential 'site ready' biogas from key sites accessible to Powerco network footprint; equivalent to around **50%** of its current residential gas demand.

		No. of locations	Biogas potential		
	Organic waste in landfills	3	~740- 920 TJ		
	WWTP	30	3- 5 TJ		
(Bb)	Major agriculture sources (Meat processing)	21	70- 80 TJ		Biogas Potential:
	Organic waste (green, sawmill & other farm waste)	N/A*	360-450 TJ		~1,170 – 1,450 TJ
4		Ø	\bigcirc	Additional opportunity source	e of supply

A just transition requires full consideration of the impact of a ban in a broader energy context

The CCC recognises that natural gas plays an important role in the energy system and will continue to do so as a back-up for electricity generation. The Commission's preference for a 98% renewable energy target also reflects this.

We agree that removing gas too quickly could increase electricity prices and reduce reliability. The Business NZ Energy Council modelling has clear conclusions that removing fuel options will increase the cost of emissions reductions. Confidence in availability of fuel options is a key way to keep the downward pressure on both costs and emissions.

In addition, policy and regulatory incentives are likely to be needed to drive investment in renewable gas, and need deeper consideration. For example, the industry is committed to accepting renewable gas targets and we submitted on this in our previous submissions (via the LPG Association submission and the Gas Association Submissions in 2021). The submissions specifically recommended that Government:

"Set an obligation for a proportion of gas used in building heating to come from renewable (non-fossil fuel) sources. This obligation should be sufficient to supply new building heat added to gas networks from 2025 and should increase over time."

GasNZ stands by its predecessor organisations 2021 advice to set a renewable gas target and to incentivise investment. This needs consideration within the context of a broader energy work programme, namely via the Gas Transition Plan and the National Energy Strategy.

A smooth transition is essential but complex. A targeted recommendation on the residential gas network is both unjustified and premature and jeopardises the goals of a just transition for all New Zealanders.

The Gas Transition Plan is the appropriate policy response to provide a sector-wide pathway to the transition

In its 2021 final advice on the first ERP, the CCC recommended that a national energy strategy would need to include the creation of "a plan for managing the diminishing role of fossil gas across the energy system, covering the associated consequences for network infrastructure and workforce during the transition."

The CCC's advice on the first ERP also recognised a need to better understand options for renewable gas and how those might become affordable options for widespread adoption over time.

As a result, the Government has undertaken to deliver a Gas Transition Plan by December 2023. We are supportive of the CCC's 2021 advice and the development of the Gas Transition Plan and have been constructively engaged in the process with Government.

While the timing is unfortunate relative to the CCC's timing requirements, the Gas Transition Plan can provide a sector-wide approach to the transition that includes and balances the myriad of complex issues involved and can achieve the CCC objectives.

Modelling commissioned by the Business Energy Council (BEC) using the TIMES-NZ model led them to write that:

"Optionality is a key factor for a successful energy sector transition. The TIMES-NZ model uses various combinations to find the lowest-cost options to reduce emissions across all energy relevant sectors including transport, industry, electricity, commercial and residential and agriculture. New Zealand's energy system can best reflect the findings of this deep dive by ensuring we have options for all types of fuels. The more options we have, the more resilience, the lower emissions, and lower costs we are likely to have."

Alternative Recommendation to Recommendation 12

In conclusion:

- New Zealanders choose gas and rely on gas
- It is essential for energy resilience
- In disaster situations, gas can provide a much-needed source of energy when other sources are unavailable or disrupted.
- The renewable gas potential is real and the evidence is abundant
- A Just Transition requires full consideration of the impact of a ban within a broader energy context
- The Gas Transition Plan is the appropriate policy response to provide a sector-wide pathway to the gas transition

To reiterate the BusinessNZ Energy Council's advice "The more options we have, the more resilience, the lower emissions, and lower costs we are likely to have."

We anticipate direction and comprehensive analysis of any phase-out approach (including approaches to address resilience, best value emissions reduction, equity and complexities in an energy transition), to be part of the Gas Transition Plan.

We consider that once the Gas Transition Plan (GTP) is finalised (as recommended by the CCC in Ināia Tonu Nei), the Government and all New Zealanders can consider the full implications of a transition pathway, without a single focus and distracting issue being Recommendation 12.

Further, the specificity of Recommendation 12 is out of synch with the tone in almost all other areas. It is a sector-specific, highly prescriptive policy solution. Accordingly, we urge the Commission to avoid making recommendations on a pathway or specific approach in advance of the Gas Transition Plan work being completed.

Rather than recommendation 12, our suggestion is to reframe the recommendation to await the detailed work on options currently underway, and in the interim, recognise the link between current networks, new connections, and renewable gas potential, with a positive recommendation to support developing new technology and the ramping up in renewable gas production.

Heoi anō, nā

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