



28 February 2020

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Dear Vicky

## Reforming the New Zealand Emissions Trading Scheme: Proposed Settings

GasNZ (Gas and LPG Associations of NZ) welcomes the opportunity to comment on the consultation document, *“Reforming the New Zealand Emissions Trading Scheme: Proposed Settings”* (consultation document), released in December 2019.

GasNZ supports reducing New Zealand and global emissions.

Our submission is primarily concerned with the assumptions used to inform the interim ETS targets and settings. We acknowledge the desire to accelerate change and support this. However, we are concerned that unrealistic (“ambitious”) targets and settings to “signal urgency” will only undermine real efforts to achieve New Zealand’s emissions reduction targets. The real work to reduce emissions without creating shocks to the economy and communities requires careful planning and investment, and there are practical limits to how much the abatement timeframes can be compressed.

We also note the other linked policy processes underway in addition to ETS reform which are occurring across several government portfolios. We are concerned about the fragmented policy development, the lack of robust integrated analysis to inform key ETS assumptions, and the rushed nature of the legislative process at the expense of constructive debate. We raise this point here because it is out of scope for this consultation and there have been few forums to raise the “whole of economy” cumulative impact of recent climate change related proposals made by other agencies.<sup>1</sup>

### Structure of our submission

Our submission has two parts:

- Part one provides background on GasNZ and our general thoughts on the consultation document and areas we thought deserved more attention
- Part two responds to the specific questions in the consultation document (**Appendix 1**).

### About GasNZ

Gas NZ is a collaboration between the Gas Association of NZ and the LPG Association of NZ.

The Associations represent members who have interests in gas storage, transmission, distribution and appliance supply, as well as LPG production, distribution, transport, retailing and installation.

Natural gas supplies 45 PJ of energy to approximately 281,000 industrial, commercial and residential customers and LPG supplies 9 PJ to approx. 162,000 industrial, commercial and residential customers (this does not include BBQ's, camping and mobile users).

### **General comments on the discussion document**

We provide the following comments on areas not covered by the specific questions in the discussion document.

#### **An enduring New Zealand ETS will need to include international emissions units**

We believe that the New Zealand ETS should include certified international ETS units and we are encouraged by the suggestion that this option may be available in the future.

We think sole reliance on domestic forestry for local abatement concentrates the risk of not meeting New Zealand's provisional and longer-term abatement targets. The scale of land-use change to forestry to offset all New Zealand's emissions will invariably damage some regional communities and re-weight the economy as agriculture and other economic land-use activities are displaced. If New Zealand is not prepared to support other forms of sequestration such as carbon capture and underground storage (CCUS), then it is likely New Zealand will need to access abatement options such as CCUS in other countries in the future.

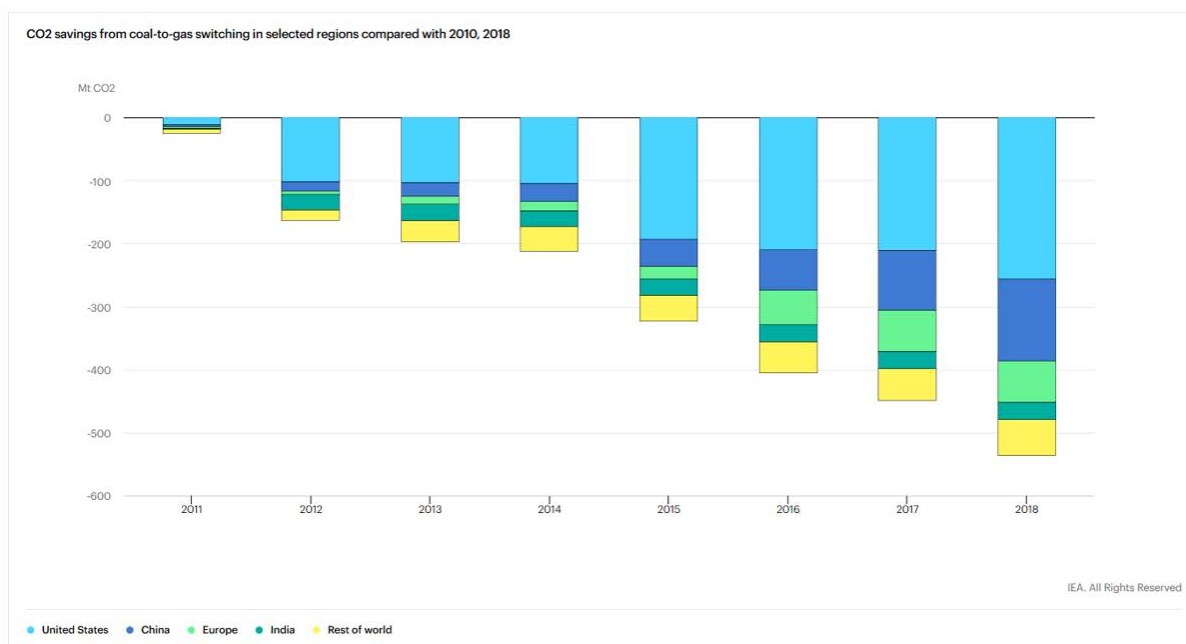
Rather than waiting to see how the new ETS settings bed in, we recommend accelerating efforts to prepare to re-introduce international ETS credits into the New Zealand ETS.

#### **Technology bias and limiting options will slow emissions abatement and concentrate risk**

We think the scenarios outlined in the consultation document ignore proven abatement options, in favour of options that are either unproven or have unknown consequences. For example, replacement of coal as a fuel for process heat, skips gas altogether in favour of electrification. Further, gas is removed from baseload electricity generation and peaking in favour of greater renewable electricity generation and pumped hydro. This is also a concentration of risk towards options that have not previously been deployed at scale under short timeframes in New Zealand. There is no analysis to suggest the scenarios presented are credible from a practical perspective.

Gas is a proven substitute for coal globally (Figure 1) and has the potential to play an important role in meeting New Zealand's 2050 emissions reductions targets. We recommend promotion of abatement pathways that are credible and executable over sensible timeframes.

**Figure 1: CO<sub>2</sub> savings from coal-to-gas switching**



We also note that conversion away from coal has benefits in addition to emissions reductions. The Ministry for the Environment recently published a paper “Identifying the social good co-benefits of electrifying process heat”<sup>2</sup>. This paper emphasizes the potential for improvements in air quality and a reduction in the health and safety risks associated with handling coal. While the focus of the paper is electrification, we think the same benefits apply equally to gas.

In summary, we recommend promotion of abatement pathways that are credible and executable over sensible timeframes.

### **2025 forecast assumptions are unrealistic**

Like the recent Ministry of Business, Innovation and Employment (MBIE) discussion paper on the acceleration of renewable energy and energy efficiency<sup>3</sup>, the ETS consultation document ignores the importance of gas as a transitional fuel in favor of biomass and electrification. We think this is shortsighted and takes an overly simplistic view of what is practically required to reduce emissions without economic shocks.

The Interim Climate Change Commission in its 2019 paper on accelerated electrification<sup>4</sup> has already stated that 100 percent renewable electricity generation is only possible at very high cost, and the International Energy Agency (IEA) has also recently highlighted the important role of gas in the global energy transition.<sup>5</sup> The role of gas in the transition to lower global emissions is generally well understood, and so we are concerned by the view expressed in the discussion document (page 27) that wind and geothermal power stations can be built to displace coal and gas fired generation by 2025 at low to moderate cost. Even with the current broad support for increased renewable energy generation, we understand some renewable projects are having difficulty obtaining resource consents. These challenges need to be reflected in the modelling that led to the 2025 targets.

<sup>2</sup> <https://www.mfe.govt.nz/sites/default/files/media/Climate%20Change/identifying-social-good-co-benefits-of-electrifying-process-heat.pdf>

<sup>3</sup> <https://www.mbie.govt.nz/have-your-say/accelerating-renewable-energy-and-energy-efficiency/>

<sup>4</sup> <https://www.scoop.co.nz/stories/BU1907/S00437/decision-electricity-and-gas-is-nzs-energy-future.htm>

<sup>5</sup> See the IEA’s July 2019 publication “The Role of Gas in Today’s Energy Transitions” <https://www.iea.org/reports/the-role-of-gas-in-todays-energy-transitions#key-findings>

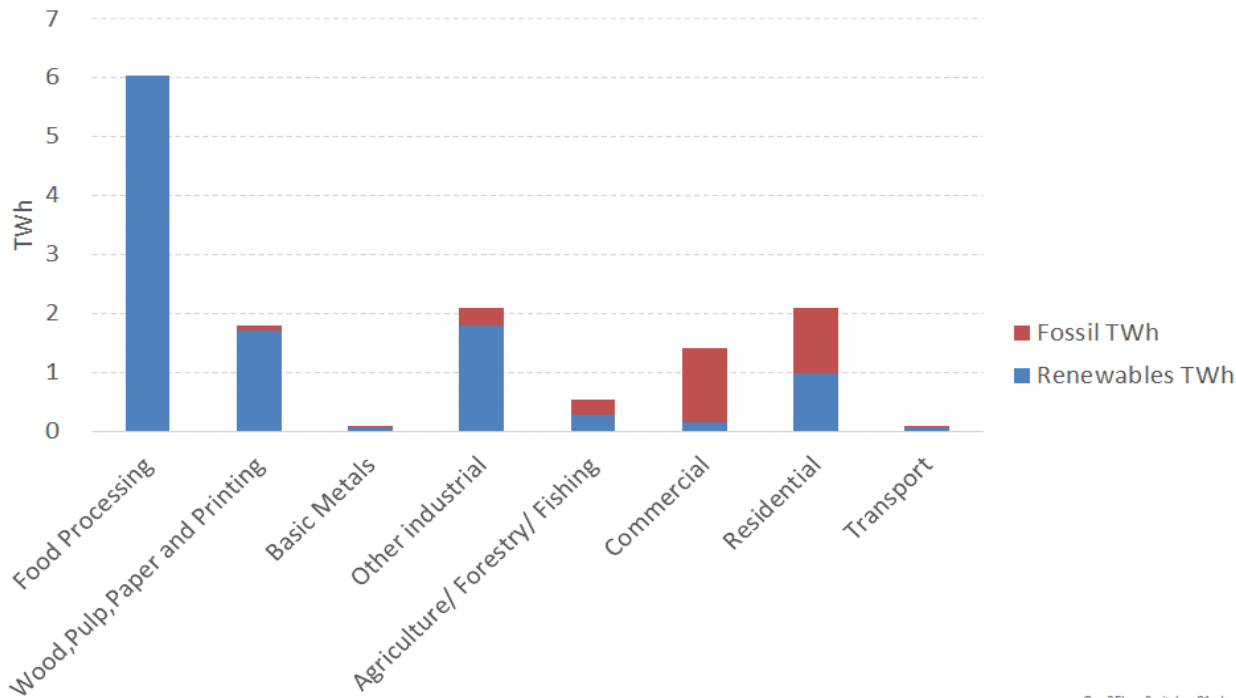
There are currently no realistic alternatives to replace the energy storage and generation benefits of gas and coal by 2025. Even in the longer term, with a greater proportion of renewables and pumped hydro or batteries, there will still be a need for dense stored energy, that can be released at short notice. Dry, windless hydro conditions occur a few times each decade and New Zealand will need to continue to have a range of reliable options to manage those conditions. We accept that over time new technology solutions may replace gas generation, but for now we place high value on the security of supply that gas provides the energy market. Overbuilding wind and geothermal is not a silver bullet. Some geothermal fields have a similar CO<sub>2</sub> emissions profile to gas fields, and there are other environmental considerations that may block development of new projects.

### **Where will the extra electricity come from?**

The 2018 Concept Consulting report “Electricity generation implications of large-scale fuel-switching from gas to electricity”, highlighted the future electricity generation and network problems of replacing gas with electricity, considering the move from petrol/diesel to EV and population growth.

In total, the report estimated that 14.2 TWh of additional generation would be required if today’s existing direct users of gas were to switch to electricity (excluding those direct users for whom electricity is not feasible). It is estimated that 11.2 TWh would come from renewable generation and 3 TWh from increased fossil-fuelled generation. The relatively high proportion of space heating demand drives the need for peaking fossil-fuelled generation to meet much of the demand for commercial and residential consumers.

### **Estimated electricity generation required to meet direct users' energy services demand currently met by gas and LPG.**



The report showed that, if New Zealand wished to completely transition away from petrol/diesel for transport, and coal for industrial process heat, and gas for process-space-and-water heating, the amount of new renewable generation required would be very large – approximately doubling the annual electricity demand.

The assumptions regarding process heat conversion also ignore the timing and risk that companies face in moving to new technologies and switching fuels. Industrial process and fuel conversions

takes significant planning and cost and are rigorously assessed years beforehand. We believe the least risky option for businesses to convert away from coal-fueled processes is to initially reduce emissions via the use of gas. The emissions reduction benefits are well understood globally, and the technology is proven.

#### Contact details

If you have any questions regarding this submission please contact me on [REDACTED] or via email at [REDACTED]

A handwritten signature in blue ink, appearing to read "Peter Gilbert". The signature is fluid and cursive, with a large initial "P" and a long horizontal stroke at the end.

Peter Gilbert  
Gas NZ

## APPENDIX 1: RESPONSES TO CONSULTATION QUESTIONS

Question	Response
<p>1. Do you agree with the proposal to set a provisional emissions budget of 354 Mt CO<sub>2-e</sub> for the 2021 –25 period? If not, why not?</p> <p>Please include your views on:</p> <ul style="list-style-type: none"> <li>• Using a straight-line approach towards the 2050 target</li> <li>• The considerations that were included in proposing the provisional emissions budget.</li> </ul>	<p>We note that this is the first time, budgets have been set and the headline number must start somewhere. Only time will tell if 354 Mt is the right number. However, as highlighted in the first part of our submission, we think it is probably wrong because many of the underlying assumptions are unrealistic. We appreciate the intention is to be ambitious and to “signal urgency” but think it would be more sensible to consider what can be realistically achieved by 2025.</p> <p>The straight-line approach appears reasonable.</p>
<p>2. Do you support the decisions made regarding the technical volume adjustment decisions? If not, why not?</p>	<p>We support the technical volume adjustment decisions. We think it’s important to retain the flexibility that the option to make technical volume adjustments provides.</p>
<p>3. Are there other adjustments that need to be considered?</p>	<p>N/A</p>
<p>4. Do you agree with the proposal to address the NZ ETS unit stockpile by reducing the annual volume of NZUs available for auction? If not, why not?</p>	<p>Reducing the auction volume is a reasonable way to adjust and manage the stockpile. However, we think the nature of the stockpile needs a better understanding before reducing auction volumes.</p> <p>Forestry owners may be withholding some units to cover ETS liabilities associated with harvesting at the end of each growing cycle. In which case, reducing auction volumes may not address the perceived issue.</p> <p>We believe stockpiled NZUs should have an expiry date. The Government is correct in its position that NZUs should be procured 6 to 36 months before use. We are also aware that some parties have historic units, purchased at much lower prices. These may ultimately slow the pace of change in some sectors and can provide a competitive advantage or barrier to entry. One possible solution is to ensure that NZUs obtained more than 36 months ago should be used within 5 years.</p>
<p>5. Do you agree with 27 million NZUs being removed from auction volume between 2021–25? If not, why not?</p>	<p>See answer to question 4.</p>
<p>6. Do you agree with the steps and calculations taken to reach the proposed annual auction volumes?</p>	<p>We refer to our earlier point that the stockpile assumptions need to be understood before calculating the auction volumes.</p>
<p>7. Do you support the proposal to auction 80 million NZUs over the 2021–25 period plus 2 million NZUs for auctioning trial in 2020? If not, why not? Please include your views on the process for adjusting auction volumes.</p>	<p>We think the auctioning trial is a sensible approach to test the market. As above, whether the auction volume is appropriate or not will depend on whether the assumptions made about the stockpile are correct.</p>
<p>8. Do you agree with the proposal to set an auction reserve price floor at \$20 for 2020–25? If not, why not?</p>	<p>We agree with the price floor and believe this will give foresters and emitters certainty.</p>

Question	Response
9. Do you agree with the proposal to increase the fixed price option to \$35 for obligations arising from activities over 2020?	We note that the fixed price option has already been increased to \$35. This was done at short notice with no time for businesses to adjust their annual budgets. The resulting percentage increase in immediate abatement costs will be very high for some businesses. We also note that this now presents an arbitrage opportunity for existing traders.
10. Do you agree with the proposal to set the price ceiling trigger of the cost containment reserve at \$50 for the 2020–25 period? If not, why not?	We think the ceiling trigger of \$50 for the cost containment reserve will encourage a skewed market. We would expect the market to generally price up to or close to the cost containment reserve trigger.
11. Do you agree with the proposed annual cost containment reserve volumes to be released if the price ceiling trigger is hit? If not, why not?	We do not think the proposal provides enough certainty that prices won't go well above \$50 and that the reserve volumes will be sufficient to reduce prices.
12. Do you agree with the proposed approach for release of NZ ETS settings information? If not, why not?	Yes, we agree with the proposed approach for the release of New Zealand ETS settings information.
13. Do you have any further comments?	Please see the earlier comments in part one of this submission.