

Submission by

Hamilton City Council Staff

GAS MARKET SETTINGS INVESTIGATION CONSULTATION PAPER

23 June 2021

It should be noted that the following submission is from staff at Hamilton City Council and does not necessarily represent the views of the Council itself.

1.0 EXECUTIVE SUMMARY

- 1.1 Gas is an important part of the transition to achieving net zero by 2050. There needs to be a focus on ensuring New Zealand maintains a reasonable amount of gas supply to get us through the transition period to beyond 2030.
- 1.2 This could mean Methanex, New Zealand's single largest user of natural gas, would have to stop using natural gas between 2025 to 2030, if reserves continue to fall.
- 1.3 Incentivise gas storage to manage gas supply for thermal power stations in dry hydro years i.e., we are better to burn gas rather than coal.
- 1.4 Ensure the gas network is maintained so it can be repurposed for low carbon fuels.
- 1.5 Oppose calls to import Liquefied Natural Gas (LNG) to replace natural gas.

2.0 INTRODUCTION

- 2.1 Staff at Hamilton City Council would like to thank the Gas Industry Company for the opportunity to make a submission to the **Gas Market Settings Investigation Consultation Paper**.
- 2.2 As noted by the Gas Industry Company: *The Minister of Energy and Resources has asked the Gas Industry Company for advice on gas supply in the context of New Zealand's path to a net zero emissions economy by 2050 and the Government's commitment to transition to 100% renewable electricity by 2030. To inform its advice to the Minister, Gas Industry Company is investigating the current market, commercial and regulatory settings in the natural gas market with a view to advising how these:*
 - *Affect overall availability and flexibility of gas supply.*
 - *Support security of supply in the electricity market.*
 - *Provide major gas users with sufficient certainty/transparency about gas supply for their operations.*
 - *And whether they are fit for purpose for the transition.*
- 2.3 *The consultation paper reflects what the Gas Industry Company has heard from a wide range of stakeholders, and they are now seeking views on whether they have understood the settings and issues correctly and whether they have missed anything.*

3.0 RESPONSE TO QUESTIONS IN THE CONSULTATION PAPER

3.1 Question 1: Do you agree with our characterisation of the current role of gas in New Zealand?

3.2 In terms of fossil fuels, we agree that natural gas is a particularly good option, given it is lower carbon than other fuels, is locally sourced, has clean emissions, has a dedicated network and can be used relatively efficiently.

3.3 While there are many opportunities to reduce the use of natural gas, completely transitioning away from natural gas in the short term would damage New Zealand's economy. It has an important role to play in securing and limiting the cost of increased renewable electricity as we make this transition.

3.4 Question 2: Do you have any comments in relation to the gas supply and demand outlook?

3.5 Methanex is the world's largest producer and supplier of methanol to major international markets and has production sites around the world, including New Zealand. Methanex New Zealand is the only producer of methanol in New Zealand and has three production facilities which can produce up to 2.2 million tonnes of methanol annually. Approximately 95% of the methanol produced is exported to the Asia Pacific Region. Methanex New Zealand is the country's single biggest user of natural gas and has been increasingly called upon to provide a demand side response. According to the Gas Markets Setting Investigation consultation paper, since 2018 New Zealand's gas supply has been unable to meet the full market demand.

3.6 Until sufficient renewable electricity comes online or 'battery supply' put in place, natural gas is the best option to provide thermal power generation. Given that the expected timing of sufficient 'battery supply' is not until 2030, there is an argument that Methanex can play a valuable role by underpinning New Zealand's gas supply.

3.7 From a carbon emissions point of view, Methanex's natural gas use is significant. Given that Methanex's production from New Zealand mostly ends up in China, is this offsetting higher carbon emissions that would otherwise occur internationally if the methanol came from alternative high carbon fuels?

3.8 Securing New Zealand's electricity supply in a dry year via low carbon sources has been left far too late and the availability of natural gas will be critical for some time. Government could consider stopping Methanex production for security of supply considerations and retain the natural gas for the electricity market.

3.9 This would require increased Government investment in the gas supply side to extend/increase reserves and presumably lead to a pass through of cost to the demand side for both gas and electricity users. What would be the impacts of this domestically and internationally?

3.10 Either option will provide for sufficient gas supply for New Zealand's domestic users for some years to come. Would the closure of the Methanex plant reduce global greenhouse gas emissions, or would it be substituted elsewhere with potentially worse emissions?

3.11 Question 3: Do you agree with our characterisation of the commercial outlook for gas?

3.12 Under the current gas pricing model and framework, there are significant price risks for all participants as New Zealand transitions to a low carbon future. These price risks need to be managed to provide upper limits for costs so that businesses can still receive pricing signals that they can respond to (curtailment or technology change over time) without necessarily going out of business.

3.13 The measures to ensure security of supply should be factored into energy pricing, which may mean an overall average higher price but provide greater certainty for businesses to operate

in and more time to respond to increased costs.

- 3.14 **Question 4: Have we captured the issues fairly and accurately? Have we missed anything?**
- 3.15 We agree that the issues have been captured fairly, noting that the current system is based on the ready availability of natural gas. Going to a constrained supply means that the existing system may not work well and that modifications need to be made.
- 3.16 **Question 5: What are your views on the potential solutions stakeholders have raised? Can you share any more detailed information to help inform us on how feasible or effective they might (or might not) be?**
- 3.17 Increasing gas storage for the purpose of security of supply seems a sensible option. A capacity charge would be needed to incentivise this activity. From a carbon emissions viewpoint it makes sense as it offsets coal use at Huntly, which has a much higher carbon footprint.
- 3.18 New regulation is needed for the gas pipe network to ensure this infrastructure is preserved to maintain supply to customers and for new low carbon fuel(s) in the future.
- 3.19 Liquefied Natural Gas (LNG) should not be imported as it does not lead to New Zealand's carbon reduction goals. The investment required would be better spent on the existing natural gas supply and infrastructure, energy efficiency and demand side management, and alternative local fuels or CO₂ sequestration.
- 3.20 Government intervention to support security of supply and network infrastructure is most likely required.
- 3.21 **Question 6: Are there any other potential solutions?**
- 3.22 The consultation paper appears to have identified the range of practical solutions.
- 3.23 **Question 7: Do you agree that there is potential in a set of solutions linked to providing greater confidence to support the required investment in gas supply and flexibility, and that there is unlikely to be a single solution?**
- 3.24 Multiple solutions will be required across both the supply and demand sides, and in the electricity sector.
- 3.25 **Question 8: What are the most important next steps to ensure that gas can support security of supply in the electricity market and that major gas users have sufficient certainty/transparency about gas supply for their operations during the transition?**
- 3.26 Develop a capacity incentive for storage of natural gas and refill storage at Ahuroa.
- 3.27 Additional gas storage capacity should be developed if this can be done faster than other 'battery supply' options.
- 3.28 Determine how long Methanex can continue to use natural gas based on remaining gas reserve capacity without affecting existing thermal power, industrial and commercial requirements. Set an end date for Methanex natural gas use and communicate this to the wider market. Set out updated forecasts for remaining gas field life and volumes so businesses can plan for transition to other fuels.
- 3.29 New regulations should be developed that will support the continued maintenance of the gas pipework network.

4.0 FURTHER INFORMATION AND OPPORTUNITY TO DISCUSS OUR SUBMISSION

- 4.1 Should the Gas Industry Company require clarification of the points raised in our submission, or additional information, please contact **Martin Lynch** (Hamilton City Council's Energy Consultant) on 07 838 6521 or 021 501 637, email martin.lynch@hcc.govt.nz in the first instance.
- 4.2 Hamilton City Council staff would welcome the opportunity to discuss the content of our submission with the Gas industry Company in more detail.

Yours faithfully



Richard Briggs
CHIEF EXECUTIVE