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Dear Andrew

Firstgas Group contribution to the GIC's gas market settings investigation

Firstgas Group welcomes the opportunity to comment on the Gas Industry Company's (GIC) consultation document "*Gas Market Settings Investigation*" released in May 2021. We divide our submission into three parts:

- Summary of key submission points
- Our views on the current gas market settings
- Recommended areas of focus for the GIC's final report to the Minister of Energy and Resources.

Summary of key points

Firstgas Group appreciates the GIC's open approach to this market investigation. Through its engagement with a broad range of stakeholders, the GIC has produced a thorough consultation document that captures the issues facing the gas industry in supporting the country's transition to net zero carbon emissions. The consultation document also outlines a range of potential solutions and interventions that could make the transition path clearer and better facilitate the investment required.

We agree with the consultation document's conclusion that the "market, commercial and regulatory settings for gas for most part work well and are manageable".¹ However, we acknowledge that there are some areas where improvements could be made to better reflect the changes observed in the market and the changes to come:

- There are clear linkages between the gas and electricity markets and carefully managing the transition to a low emissions economy will be essential to ensuring security of energy supply and managing affordability for New Zealand consumers.
- Natural gas production constraints are causing commercial instability, impacting businesses across the North Island that use gas and impacting electricity prices nationwide.
- Access to information about the changing gas market conditions remains an issue, impacting on the commercial decisions of gas participants.
- The gas industry faces considerable policy uncertainty. The sector is awaiting the Government's response to the Climate Change Commission's final advice, alongside the Commerce Commission's upcoming Default Price-Quality Path (DPP) reset and the Input Methodologies (IMs) review for gas pipeline businesses.

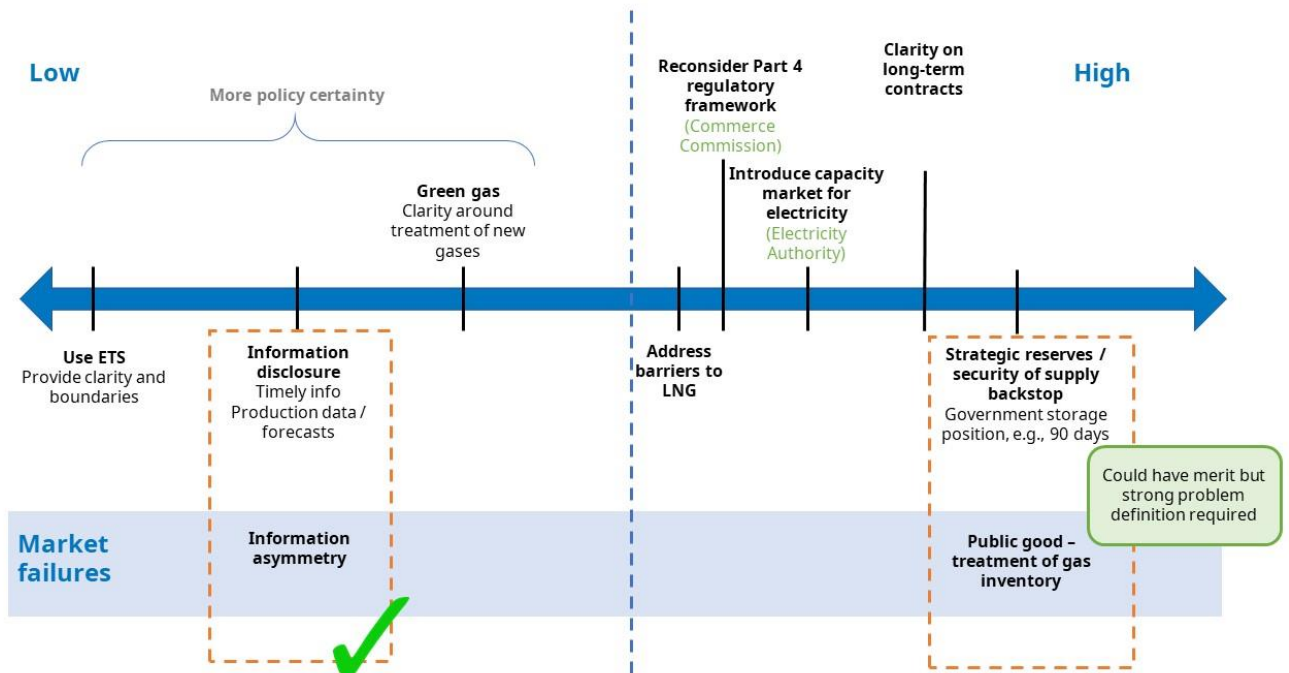
¹ Page 1, *Gas market settings investigation: consultation paper*, Gas Industry Company, May 2021.



We recommend that before the GIC moves to proposing solutions to these issues, that a clear problem definition is established.

To help the GIC assess the options for inclusion in its final report to the Minister, we recommend that the GIC considers the level of regulatory invention required and links any proposed interventions to the market failure that is addressed. The framework outlined in Figure 1 sets out selected options / solutions on the spectrum of intervention, with the “least regrets” options on the left-hand side. We have also noted where other regulatory agencies have clear authority for some of the proposed options.

Figure 1: Assessment of possible interventions in gas market



There are two areas where we recommend that the GIC undertake further investigation (shown in the dashed boxes in Figure 1):

1. **Information disclosure** (least regrets option, addressing information asymmetry): As noted in prior submissions,² we support, in principle, a regulated information disclosure regime and believe it would build confidence in a well-functioning and transparent gas market. We consider that the events of the past 12 months highlight the need for better information on expected production levels at major gas fields and better information on available demand response if production levels fall short of expectations.
2. **Strategic reserves of natural gas for security of supply** (high level of intervention required, addressing the potential for gas inventories to have public good features): A more significant market intervention would be for the Government to hold a strategic reserve of natural gas that would be made available on prescribed terms. This option would provide a backstop when there are actual or perceived energy shortages, could utilise the option of underground gas

² Draft Statement of Proposal: Gas Production and Storage Facility Outage Information, Firstgas submission to the GIC, 4 March 2021, <https://firstgas.co.nz/wp-content/uploads/FG-Submission-on-SoP-for-Production-Storage-Outage-Information.pdf>, and Information disclosure: Problem assessment, Firstgas submission to the GIC, 9 December 2019, https://firstgas.co.nz/wp-content/uploads/Firstgas-submission_GIC-Information-disclosure-problem-assessment.pdf



storage or LNG imports, and would explicitly address the price impacts that gas supply constraints can have in New Zealand's energy markets.

We also recommend that the GIC's final report to the Minister outlines the importance of a clear framework and Government oversight of the introduction of zero carbon fuels into the gas market. We consider that the GIC is well placed to take on this role as it is already undertaking work in this area.

In addition, there are other workstreams underway by other government agencies that have the potential to assist settings in the gas market: refinements to the Emissions Trading Scheme (ETS), the upcoming DPP reset and IMs review by the Commerce Commission, and the development of an energy strategy by the Ministry for Business, Innovation and Employment (MBIE). We recommend that the GIC's final report to the Minister evaluates how these processes could assist in facilitating the investment required for gas to support New Zealand's energy transition.

Our views on current gas market settings

We agree with the consultation document's conclusion that the "market, commercial and regulatory settings for gas for most part work well and are manageable".¹ Notwithstanding, there are some areas of the market where improvements would be beneficial and would aid the transition to a zero emissions economy. We outline these areas below.

1. Linkages with electricity market and impact on security of supply / affordability

The consultation document clearly set out the linkages between the gas and electricity markets and demonstrates how supply constraints in the gas sector have (and may continue to) impact the electricity sector and the electricity prices that consumers face.

In our view gas availability clearly has an impact on electricity security and affordability and will continue to do so for some years to come. The report lays out the level of supply required to support ongoing electricity generation needs, and policymakers need to carefully consider how confidence can be built that the required investment will occur. We are heartened by recent investment activity at existing gas producing fields and in deals between gas users (such as Methanex and Genesis Energy) to ensure that gas is directed towards electricity generation requirements when needed.

2. Supply constraints causing commercial instability

We agree with the GIC and Minister of Energy and Resources' statements that security of gas supply is a major constraint on the functionality of the market. In recent times, gas production at major fields has declined faster than expected, creating shortages and price rises. This has impacted on businesses' ability to contract and secure gas for their operations.

We consider that the gas market appears to have worked well in signalling the need for investment in near term production. However, this investment does require time to bring the gas to market. There have been public reports of plans to increase production at major production sites, including Mangahewa, Maui, Pohokura, and Kupe, though it is not yet known how successful these campaigns will be.³

The sector faces a difficult situation, where gas users need certainty of supply to put long term purchase agreements in place. Respectively, gas producers also need certainty of long-term purchase agreements in place to make proper investment to increase gas production. Our view is that striking the right price for long-term contracts is inherently challenging given the uncertainty of the results of the supply programmes described above and the policy shifts described below (under point 4).

³ NZ Gas – May 2021, Enerlytica.



3. Access to information about the market remains an issue for participants

We agree with the GIC that access to information is a concern for energy market participants. Historically, the focus of information disclosure has been on gas reserves and production outages. However, our engagement with gas users (large and small) highlights that there is a real lack of information and understanding of the security of New Zealand's gas supply, in particular the ability to produce enough gas to balance expected demand. This leads to consumers of all types and sizes being less willing to connect to gas due to concerns that remaining reserves and production will not meet their future needs.

Of the areas highlighted by the GIC, the one area of particular concern to Firstgas Group is the lack of information on forecast of gas production.⁴ The last 12 months have highlighted the importance of gas production estimates for understanding near to medium term energy security. For example, with the Pohokura decline, regular public production estimates would not have changed the underlying picture of accelerated production decline, but they would have ensured that market participants should have been aware of the issue at the same time and able to respond appropriately (potentially helping to mitigate the market impacts through their decisions).

4. Policy uncertainty facing the gas sector

One of the greatest issues facing the gas sector is increased policy uncertainty, given the Government's focus on reducing carbon emissions. There are a considerable number of work programmes underway across multiple government departments and independent agencies, including (but not limited to):

- The release of the Climate Change Commission's final advice in May 2021. The Government now has till the end of the year to respond to this advice, set the first three emissions budgets out to 2035, and release the first emissions reduction plan. Government departments, such as the Ministry of Transport and Ministry for the Environment, are already out consulting on proposed emission reduction plans for their sectors.
- The Government's proposed reform of the *Resource Management Act*, and the Ministry for the Environment's proposed introduction of National Environmental Standards and / or National Policy Statements to phase fossil fuels out of process heat.
- The continued refinement to the New Zealand Emissions Trading Scheme (ETS), through both Parliament and by the Ministry for the Environment.
- Reviews of the *Crown Mineral Act*, including recent amendments related to infrastructure decommissioning.⁵

Alongside this policy work, the Commerce Commission is commencing the reset of the Default Price Quality Path (DPP) for regulated gas pipeline businesses for the next five years (2022 – 2027) and must complete a review of the underlying Input Methodologies (IMs) by December 2023. By themselves, each of these workstreams would be a significant undertaking for the gas sector. In unison, impending decisions across all these areas creates significant uncertainty for the sector and the businesses and consumers that we serve.

Recommended areas of focus for the GIC final report to the Minister

As part of its report back to the Minister of Energy and Resources, the GIC intends to propose a work programme to help ensure that the gas sector can play its part in the energy transition. The consultation paper sets out several actions or solution that could make up this work programme.

⁴ Number 9, section 4.1.2, page 23, GIC consultation document.

⁵ *Crown Minerals (Decommissioning and Other Matters) Amendment Bill Introduced*, New Zealand Petroleum and Minerals, 24 June 2021, NZPAM website <https://www.nzpam.govt.nz/about/news/crown-minerals-decommissioning-and-other-matters-amendment-bill-introduced/>



Firstgas Group recommends that before the GIC move to proposing solutions or a work programme, that a clear problem definition is established. This is the key first step in a robust policy process, which should then be followed by the identification of all possible options and interventions to address the underlying problem. While the GIC's paper has identified several issues within the gas sector, we do not believe that a formal problem definition has been confirmed.

Alongside a clear problem definition, we recommend that the GIC consider and categorise the different options based on the level of regulatory intervention that they would entail. This is an important step as the magnitude of any solution or market intervention should ideally be commensurate with the scale of the identified problem / market failure that the GIC is seeking to address. We have set out an indicative framework in Figure 1 above, that maps the different options along a scale, from low level of government intervention up to a high degree of Government intervention and direction. We have also sought to outline the type of market failure we consider is being addressed through these options.

Recommendation one: Focus on informatic disclosure

While it would be premature without a clear problem definition to advocate for high-intervention options, there are some relatively low-level intervention, "no regret" options that could be advanced in the meantime. For these reasons, Firstgas recommend that the GIC prioritise its work on information disclosure.

Firstgas Group supports, in principle, a regulated information disclosure regime. We believe that this would address the underlying information asymmetry in the market and would enable all market participants to make better informed commercial decisions. Our Flexgas business already has experience as a participant in the industry-led Upstream Disclosure Code and we consider that there are a number of learnings from this voluntary code that could be incorporated into a regulated disclosure regime.⁶

We recommend that the GIC focus primarily on measures to improve the disclosure of gas production and forecast gas production. The gas Statement of Opportunities under Part 15D of the National Gas Rules⁷ in Australia provides an example of what improved disclosure might look like. Under the Australian regime, gas producers are required to give forecasts of production volumes, undeveloped reserved and contingent resources. This information allows expected costs of production to be estimated for both existing reserves and contingent resources. Overall, this provides an enhanced view of likely future gas availability and costs, that we consider would better support the efficient use of gas and a competitive gas market.

We also recommend that efforts are made to ensure that disclosed information is released to the market in a timely way. Currently, we understand that information disclosed by producers at the end of each year is only publicly released around the middle of the following year. While sufficient care should be taken to review and verify the disclosures, the timely release of information is essential to its reliability in informing market decisions.

Recommendation two: Investigation into strategic reserves of gas to provide security of supply

We are aware that security of supply is a concern for industry and policymakers, with the Minister of Energy and Resources specifically noting the effect of supply constraints on the electricity market and industrial users in her letter to the GIC. While we do not want to pre-judge the outcome of the GIC's problem analysis and definition work, we consider that there may be merit in beginning to identify

⁶ *Draft Statement of Proposal: Gas Production and Storage Facility Outage Information*, Firstgas submission to the GIC, 4 March 2021, <https://firstgas.co.nz/wp-content/uploads/FG-Submission-on-SoP-for-Production-Storage-Outage-Information.pdf>

⁷ Australian statement of opportunity - <https://www.aemo.com.au/Gas/National-planning-and-forecasting/Gas-Statement-of-Opportunities>



possible options that could help to strengthen security of supply. One option that we think deserves attention is the concept of “strategic reserves” of gas.

This option would provide a backstop when there are potential energy shortages and reserves could be accessed when a need was deemed necessary to supplement electricity generation. It could follow a similar approach to that used for oil security in New Zealand, where we currently hold 90-day oil stock to prevent against disruption to international energy supplies.⁸ The use of these strategic reserves could be made available to the market based on triggers such as when electricity prices were over a set price (too high), or when the capacity of the hydroelectric dams was below a set point.

As the GIC outlined in the consultation document, there is scope for significant investment into gas storage and we consider that gas storage could be an integral part of this recommendation. Gas storage currently provides a cost-effective energy storage option and has the potential to also store zero carbon fuels as these come to market. Similarly, we believe that imported LNG could be part of New Zealand’s future energy mix where the use of gas is focused on high value, uncertain / variable volume requirements.

The value of clear Government support for and oversight of zero carbon fuels

We recommend that the GIC’s final report to the Minister outline the importance of a clear framework and Government oversight of the deployment of zero carbon fuels into the gas market.

Firstgas Group believes that zero carbon fuels such as green hydrogen and biofuels can play a key part in decarbonising our economy in a timely and affordable manner. Deployment of these fuels can maximise New Zealand’s existing gas infrastructure and can often be used in businesses’ existing gas plant and appliances. We have a considerable work programme underway to explore the potential for both hydrogen and biogas, with the release of our Hydrogen feasibility study in March 2021⁹ and the upcoming release of our biofuels report in partnership with Beca, Fonterra, Lion, and the Energy Efficiency and Conservation Authority (EECA).¹⁰

We consider that the successful deployment of zero carbon fuels will require Government support, oversight, and involvement. It will be important that a clear framework for zero carbon fuels is established – whether this be an adaption of existing legislation and rules, or the creation of new statutes and regimes to guide this new market. It is also important that Government look to remove any regulatory barriers such as local planning regulations that do not account for the entry of biogas and green hydrogen, and enable the introduction of green gas certification schemes, so customers have confidence in the products they are sourcing.¹¹

Firstgas Group considers that the GIC is well placed to provide regulatory guidance and take on the oversight role for zero carbon gases. The GIC is already undertaking work in this area and engages with several other government agencies who also have an interest in zero carbon gases, for example MBIE and Worksafe.

Supporting work programmes that will aid the gas market

There are also other workstreams being progressed by other government agencies that will improve settings in the gas market. We provide an overview of these workstreams in Table 1 below.

⁸ A summary of this requirement is set out on the Ministry for Business, Innovation and Employment website here: <https://www.mbie.govt.nz/building-and-energy/energy-and-natural-resources/energy-generation-and-markets/liquid-fuel-market/oil-security-in-new-zealand/>

⁹ *Bringing Zero Carbon Gas to Aotearoa: Hydrogen Feasibility Study – Summary Report*, Firstgas Group, 29 March 2021, <https://gasischanging.co.nz/our-path-to-zero-carbon-gas/hydrogen-trial-results/>

¹⁰ Further information is available on our website: www.gasischanging.co.nz

¹¹ For example, section 9A.3.2.1 of the Tauranga City Council Plan has explicit rules for ‘natural gas’. This rule would need to be adapted to account for the entry of biogas and green hydrogen, - <https://cityplan.tauranga.govt.nz/9-hazardous-substances-contaminated-land/9a-purpose-hazardous-substances/9a2-activity-status-rules>



Table 1: Existing work programmes that will aid gas market

Work programme	Description
<p>Improvements to the ETS</p>	<p>Firstgas Group supports enabling wider use of the ETS. We consider that the ETS should work as the key economic lever for carbon abatement control.</p> <p>We also support reassessing of boundaries of the ETS. Widening the scope of the ETS to include carbon capture and storage would enable businesses an additional option to further lower their emissions, assisting New Zealand's reach its net zero emissions target by 2050.</p>
<p>Review of Part 4 regulations for gas pipeline businesses (Commerce Commission)</p>	<p>As outlined above, the Commerce Commission is preparing for the next DPP reset for regulated gas pipeline businesses for 2022 – 2027 and undertaking a review of the underlying IMs for gas, electricity, and airports. As part of this process, the Commerce Commission recently sought feedback from stakeholders on whether the regulations are “fit for purpose” and what the emerging issues are in relation to the energy transition.¹²</p> <p>In our submission to the Commission,¹³ we outlined how the existing regulatory rules do not suit the changing environment that the gas sector is now facing. We recommended that the upcoming DPP reset needed to focus on ensuring three key outcomes:</p> <ol style="list-style-type: none"> 1. Reducing the risk of future price escalation and economic asset stranding 2. Continuing to provide sufficient incentives to invest to maintain reliable gas infrastructure 3. Preserving the option of using gas infrastructure for zero carbon gases in the future. <p>Firstgas is concerned that given the tight timeframes for the gas DPP reset, the uncertainty around Government's decisions on climate change and the misaligned timings with the IMs review (in combination with Commerce Commission resourcing), there is a likelihood that the Commerce Commission may seek to roll-over the current regulatory settings for the next five years. We believe this would be a missed opportunity and would be detrimental to both regulated gas businesses and the customers that we serve. We encourage the GIC to continue to engage with the Commerce Commission to support its work, to ensure we have regulatory regime that is fit for purpose for the energy transition.</p>
<p>Development of a national energy strategy (MBIE)</p>	<p>Firstgas supports the development of an energy strategy for New Zealand. We believe an energy strategy would provide guidance and clarity for the gas sector, and would ensure the linkages between different energy markets, such as gas and electricity, are well considered in the transition to a low emissions economy.</p> <p>Firstgas would ideally like the energy strategy to address the following areas:</p> <ul style="list-style-type: none"> • The development of a dry year and peaking policy. • Clear guidance on the role of gas in 2050. <p>We encourage the GIC to engage with MBIE during the formation of the energy strategy to ensure that gas is well addressed, and that the strategy sets a clear direction for the sector (i.e., signposts for changes, key milestones).</p>



Contact details

Firstgas Group would welcome the opportunity to discuss any of the points raised in our submission, to assist the GIC in its preparation of the final report to the Ministry of Energy and Resources. To arrange this meeting or if you have any questions, please contact me on 027 472 7798 or via email at karen.collins@firstgasgroup.co.nz.

Yours sincerely

Karen Collins

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¹² *Open letter—ensuring our energy and airports regulation is fit for purpose*, Commerce Commission, 29 April 2021, https://comcom.govt.nz/_data/assets/pdf_file/0022/253561/Open-letter-Ensuring-our-energy-and-airports-regulation-is-fit-for-purpose-29-April-2021.pdf.

¹³ *Firstgas response to open letter on fit for purpose regulation*, Firstgas submission to the Commerce Commission, 28 May 2021, https://firstgas.co.nz/wp-content/uploads/Firstgas-submission_ComCom-open-letter_28-May-2021_FINAL.pdf