



COVERSHEET

Ministers	Hon Simeon Brown Hon Shane Jones	Portfolios	Energy Resources
Title of Cabinet paper	Gas Security Response Group: Report back to Cabinet	Date to be published	17 July 2024

List of documents that have been proactively released			
Date	Title	Author	
May 2024	Gas Security Response Group: Report back to Cabinet	Office of the Minister for Energy	
		Office of the Minister for Resources	
29 May 2024	Gas Security Response Group: Update	Cabinet Office	
	ECO-24-MIN-0091 Minute		

Information redacted

YES / NO (please select)

Any information redacted in this document is redacted in accordance with MBIE's policy on Proactive Release and is labelled with the reason for redaction. This may include information that would be redacted if this information was requested under Official Information Act 1982. Where this is the case, the reasons for withholding information are listed below. Where information has been withheld, no public interest has been identified that would outweigh the reasons for withholding it.

Some information has been withheld for the reasons of Confidential advice to Government, Commercial information and Negotiations.

© Crown Copyright, Creative Commons Attribution 4.0 International (CC BY 4.0)

In Confidence

Office of the Minister for Energy

Office of the Minister for Resources

Cabinet Economic Policy Committee

Gas Security Response Group: Report back to Cabinet

Proposal

To report back on the work of the Gas Security Response Group (the Group) that the Ministry of Business, Innovation and Employment (MBIE) has convened in response to an emerging issue with gas security of supply.

Relation to government priorities

2 This is a routine report back as directed by Cabinet.

Executive summary

- On 6 May 2024, we informed Cabinet that there is an emerging immediate issue with gas security of supply. Cabinet agreed that:
 - 3.1 MBIE would set up the Group to identify and respond to any issues around gas security of supply at the direction of Cabinet.
 - We would report back to Cabinet with an update on progress by Monday 27 May 2024. This paper provides that report back.

The Group has met twice since the 6 May Cabinet meeting

- The Group met for the first time on Friday 10 May 2024, and was tasked with:
 - 4.1 verifying the immediate supply and demand information to make sure we have a true picture of the problem,
 - 4.2 identifying opportunities or workstreams to improve gas supply or reduce gas demand over the short, medium and long term.
- The Group agreed to provide gas supply forecast data and demand data for the next 12 months. Members were also requested to generate potential opportunities or workstreams to improve gas supply or reduce gas demand, which MBIE would then report back to Ministers.
- The Group met again on 17 May 2024 to review the aggregate data group members had provided, which confirmed there was a supply shortage, and discuss potential responses.

Key points emerging from the Group's discussions

- 7 The key points emerging from the Group's discussions include:
 - 7.1 Critical services such as hospitals and schools are very unlikely to have their supply reduced as they use relatively small amounts of gas, but they may face higher prices. In the first instance any gas shortage would likely be managed through demand reduction by large industrial consumers (e.g. Methanex). There is no need at this stage for the Government to consider rationing of gas.¹
 - 7.2 The demand reduction the market will need to provide is likely to mean a change to how gas is priced at times of scarcity, meaning some gas users will have to pay more for their energy.
 - 7.3 There is no action Government can take that would have an immediate impact on gas supply, this will be dealt with by the market through demand reduction. However, it is essential to act now to put longer term actions in place to avoid having a repeat of this situation or a worse situation in future.
 - 7.4 The Government can take actions now to improve investment conditions upstream to bring more domestic gas supply online in future.
 - 7.5 The group suggested it was important not to supress price signals for gas, as doing so could discourage investment.

Proposed actions for the next 6 months

8	Confidential advice to Government

2

¹ The Gas Governance (Critical Contingency Management) Regulations 2008 provide a mechanism for rationing of gas when a critical contingency is declared....

² https://www.mbie.govt.nz/dmsdocument/27262-lng-import-and-options-to-increase-indigenous-gas-market-capacity-and-flexibility-in-new-zealand-march-2023-pdf

- In addition, the Government already has a large work programme underway that is aimed at addressing investor confidence. [The Minister for Resources presented a paper to the Cabinet Economic Policy Committee on 22 May 2024 seeking approval to overturn the exploration ban and other changes to the Crown Minerals Act, including changes to the decommissioning regime.]
- Minister Brown has instructed officials to prepare a consultation document on a proposed approach for carbon capture and storage. This document will be published in July 2024 with the intention for Cabinet to make in principal decisions in September 2024.
- We are also investigating how to enable renewable gases. Current estimated biogas in New Zealand is 4.9 PJ/year, with a greater potential depending on availability of organic waste and agricultural residue as feedstock and proximity to the gas distribution network³.
- The market settings will also need to ensure there are payment mechanisms in place that support upstream investment.
- We propose that the Group remain convened as a forum for discussing potential issues and managing progress on key actions. Officials are also in the process of expanding the membership by inviting Fonterra, New Zealand Steel, Ballance and Oji to ensure greater representation of major gas users.

Background

- New Zealand has a closed gas system with no ability to supplement supply through imports. As a result, supply needs to match demand. If supply cannot meet demand, demand must reduce.
- Gas supply has been tight for some time, but recent forecasts from the Gas Industry Company (GIC) (the co-regulator) suggests it is getting tighter than we had thought, faster than we had thought.
- On 6 May 2024, we informed Cabinet that there is an emerging immediate issue with gas security of supply. Cabinet agreed that MBIE would set up the Gas Security Response Group and we would report back to Cabinet with an update on progress by Monday 27 May 2024.
- 17 The Gas Security Response Group met for the first time on Friday 10 May 2024 and was tasked with:
 - 17.1 verifying the immediate supply and demand information to make sure we have a true picture of the problem,
 - identifying opportunities or workstreams to improve gas supply or reduce gas demand over the short, medium and long term.

-

³ https://www.mbie.govt.nz/dmsdocument/27267-gas-transition-plan-biogas-research-report-february-2023-pdf

Tightness in gas supply

The Group brings together 14 members across government entities, upstream producers, downstream retailers and principal consumers.

Government entities	Upstream producers	Downstream retailers and major consumers
MBIE (Chair and secretariat)	OMVTodd Energy	MethanexContact Energy
Department of Prime minister and Cabinet (DPMC)	Greymouth	• Genesis
• GIC	Beach Energy	Nova Mercury NZ
• Electricity Authority (EA)		Meridian Energy

Declining estimates for future gas supply

- 19 Tightness in gas supply is not a surprise given the declining trend over the decade. However, recent forecasts from the GIC published in its March Quarterly Report⁴ suggest it could be getting tighter than we had thought, faster than we had thought and that insufficient gas is available to meet all contracted demand. The report showed that 2023 gas supply is around 12 per cent lower than forecast. Using the first quarter of 2024 as a baseline GIC estimated 2024 production would be 28 per cent lower than the last forecast.
- Reticulated gas is only available in the North Island of New Zealand, so the tightness in gas supply does not directly impact the South Island.

We have experienced and managed tight gas supply before

- We have experienced tight gas supply before. The most recent significant event was in 2021when New Zealand experienced a constrained gas and electricity market. This tightness was driven by a decline in hydro storage due to lower than usual rainfall and exacerbated by lower than anticipated production at the Pohokura gas field. The Pohokura reduction meant Contact Energy did not receive all the gas it had contracted. Similar to the current situation, some industrial customers had difficulty renewing their gas supply contracts and prices significantly increased.
- The situation in 2021 was managed by demand reduction, which involved large industrial users decreasing their consumption. Overall gas volumes were higher in 2021, meaning there was greater flexibility to curtail industrial consumption.

⁴ https://www.gasindustry.co.nz/assets/DMSDocumentsOld/quarterly-reports/Quarterly-Report-March-2024.pdf

No critical services experienced a reduction in gas supply as a result of the tightness in the gas market in 2021.

Impact of tight gas supply causing issues contracting for gas

- Most of New Zealand's gas is traded via long-term contracts. Commercial Information
- We have also heard from companies who are coming to the end of contracts that they are having difficulty renewing their gas supply contracts, with prices increasing and contract terms markedly shorter.
- All the large industrials we have spoken to reported that there would be a reduction in their output with lower gas supplies. In the short term, this is likely to be seen in marginal loss of production. But if this persists it could lead to a material reduction in these businesses ability to generate economic activity. An estimation of these impacts on production would depend on the amount of gas reduction each business had to make.
- The most significant impact of the tight gas supply has been Methanex, which uses around 40 per cent of New Zealand's gas. It has reduced production by shutting one of its two production facilities in March 2024 after one of the major gas fields had a planned outage for maintenance. This is the first time Methanex has had to do this for a planned outage.
- On top of high prices, large industrials and electricity generators may struggle to receive the volumes of gas they have contracted for and may have to reduce production⁵. Large industrial users are the users most likely to see their supply reduced.
- Gas is a crucial input into a number of industrial processes. Limited gas supply resulting in a reduction in operation or closure of these industries is of concern for our national resilience. Producing essential products domestically is important for supply chain security, and increasingly so given the current turbulent trade environment.

Negotiations		

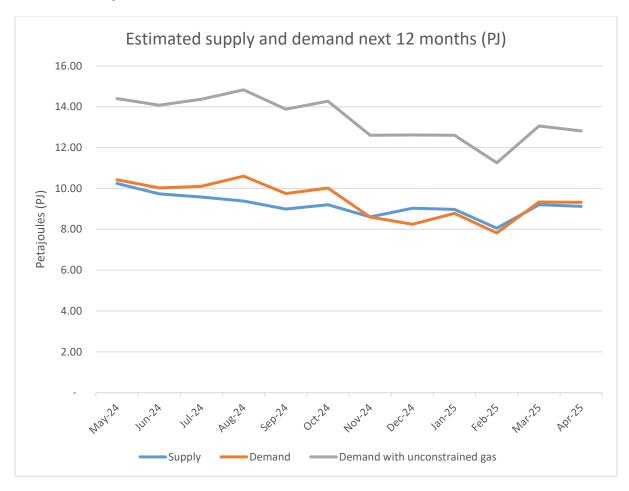
Commercial Information

Negotiations

Gas supply and demand data provided to GIC

GIC has collated data from the gas suppliers, gas retailers, and major users to develop a picture of the supply and demand across the next 12 months. This data is consistent with recent estimates of the likely supply in 2024 being around 120 petajoules which is 12 per cent below the most recent forecast.

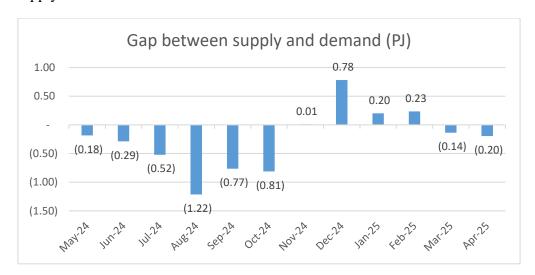
We have already seen a reduction in demand but more is needed to meet shortfalls



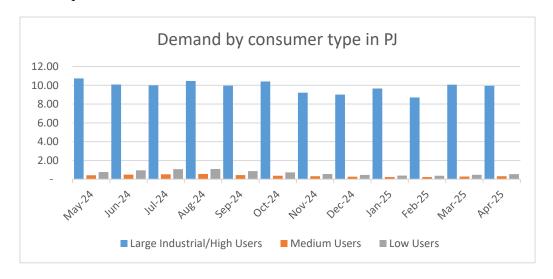
- The above graph uses the data collected by GIC to estimate expected gas supply and demand over the next 12 months. It also uses data collected from gas users to show what the total demand for gas would be if supply was not limited (i.e. if large industrial uses could operate at maximum capacity).
- There has already been a significant demand reduction, amounting to around 4 petajoules per month. This reduction has almost exclusively been from large industrial gas users reducing their production activity, which will have a commensurate economic cost. While supply largely matches demand, which is to be expected in a closed gas system, the graph shows a shortfall over the next six months, even with the

existing demand reduction. A further reduction in demand beyond the approximate 4 petajoules per month is needed in the next six months to match lower supply.

The graph below sets out the difference between supply and demand each month in petajoules. A number below the zero line (in brackets) means demand is higher than supply for that month.



Commercial and residential users (including schools and hospitals) are almost certainly not going to be affected due to the small amount of gas they use. The graph below breaks demand down by consumer type. Large industrial and high users are those that use more than 10 terajoules⁶ per year, medium users are between 10 terajoules and 250 gigajoules per year and include larger commercial operations and some large apartment blocks. Low uses are below 250 gigajoules per year and are made up of households and smaller businesses.



The supply situation we are seeing is likely a result of an overall reduction in investment from the upstream sector, exacerbated by recent drilling results falling below expectations. The low return from recent investment is likely to further reduce investment confidence.

-

⁶ 1 Petajoule equals 1000 Terajoules and 1 Terajoule equals 1000 Gigajoules.

Gas Security Response Group report back – issues/opportunities and proposed actions

The Group was directed to report back to MBIE with issues/opportunities and proposed actions. A table with the eight proposed actions is provided at Appendix One.

Cost-of-living Implications

The current situation is putting pressure on gas prices for large customers and cost increases may be passed on to consumers. There are potentially significant cost-of-living implications in the event of a gas supply shortage. Lowering of production or closure of large industrial businesses can result in job losses and broader implications for the domestic economy.

Financial Implications

41 Not applicable.

Consultation

This paper was developed in consultation with GIC as co-regulator.

Communications

We intend to communicate as appropriate.

Proactive Release

We intend to release the Cabinet paper proactively in part, within 30 business days.

Recommendations

The Minister for Energy and the Minister for Resources recommends that the Committee:

- note MBIE has set up the Gas Security Response Group to identify and respond to any issues around gas security of supply at the direction of Cabinet.
- 2 note the Gas Security Response Group met for the first time on Friday 10 May 2024 and was tasked with:
 - verifying the immediate supply and demand information to make sure we have a true picture of the problem,
 - 2.2 identifying opportunities or workstreams to improve gas supply or reduce gas demand over the short, medium and long term.
- note GIC collated data from the gas suppliers, gas retailers, and major users to develop a picture of the supply and demand across the next 12 months. This data is consistent with recent estimates of the likely supply in 2024 being around 120 petajoules, which is 12 per cent below the most recent forecast.

- 4 note gas users who are coming to the end of contracts are having difficulty recontracting for gas, with prices increasing and contract terms markedly shorter.
- 5 note critical services such as hospitals and schools will not be required to have their supply reduced as their demand is too small, Negotiations
- 6 note any gas shortage would need to be managed in the short term through demand reduction by large industrial consumers.
- 7 note it is essential to act now to put longer term actions in place to avoid having a repeat of this situation or a worse situation in future. Proposed actions include:

Confidential advice to Government	

- 8 note the Minister for Resources took a paper to Cabinet on 22 May 2024 taking forward a suite of amendments to the Crown Minerals Act 1991 intended to increase investment in our existing gas fields and explore new fields.
- 9 note officials are in the process of expanding the Group's membership by inviting Fonterra, New Zealand Steel, Ballance and Oji to ensure greater representation of major gas users.
- Confidential advice to Government

Authorised for lodgement

Hon Simeon Brown

Minister for Energy

Hon Shane Jones

Minister for Resources

Appendix One: Gas Security Response Group report back – issues/opportunities and proposed actions

Confidential advice to Government			

Confidential advice to Government		