12 August 2024

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Minister of Resources
Associate Minister of Energy

cc: Hon Simeon Brown
Minister of Energy

Key messages:

- subject to the right regulatory incentives and conditions, the preferred and most likely option to meet New Zealand's natural gas demand in the short to medium term is the appraisal and development of our indigenous resources
- the long-run price of indigenous gas is likely to be cheaper than LNG imports, it just needs the Government to execute on its package of initiatives with urgency
- due to the risk uncertainty and timing inherent in bringing new reserves to market, the Government could investigate the potential for foreign gas imports as a backstop

LNG imports perspectives note

Introduction

1. On 6 August, 2024, you requested that we distil a sectoral view on the viability of foreign gas imports as a solution to unmet demand in New Zealand's gas and electricity markets. This short note provides you with some initial, high-level observations on this issue.

2. Due to the short time available to provide this feedback we have not conducted any detailed, quantitative analysis. What follows is a qualitative view only.

3. Our initial assessment is that the importation of foreign gas is problematic, and it would be prudent for officials to gain an independent understanding of the fully loaded cost of LNG imports. This includes the necessary port upgrades such as dredging, as well as modifications to existing marine infrastructure such as the

wharf and mooring systems. Additional quayside infrastructure (loading arms, gantry, and the supporting utilities including fire protection, air and electrical systems, etc) also needs to be included in the costs.

4. Other costs include floating storage regassification unit ('FSRU') lease and operating costs, and the connection into the high-pressure gas transmission system, will be in addition to the receiving facilities. It is important to remember the total cost of supply is not just the spot price of landed LNG.

High-level remarks

5. Importing foreign gas is not the preferred option as we have – subject to the right commercial and regulatory conditions – untapped indigenous natural gas potential in New Zealand.

6. The best solution for short and medium-term gas supply is continued investment in existing domestic gas fields. A project to develop the import infrastructure, at the necessary rates and volumes, is expected to take several years to scope, engineer, procure, and construct.

7. If the Government is going to take *any action* to support the gas sector, its default must be to first urgently support development of the indigenous natural gas production. We remained concerned that the previously tabled solution to grow New Zealand's reserves and the legislative timetable and process does not appear to be proceeding with the necessary urgency given the magnitude of the problems that have emerged. The state of the domestic gas sector has been well known and signalled for a number of years.

Pricing risks

8. Given the low volumes New Zealand would require, relative to major importers such as Japan, Korea, and Taiwan we would expect cargoes to be sourced from the LNG spot market.

9. Current spot prices for September delivery currently sit at about US$13/MMBtu (~NZ$22/MMBtu). Shipping, infrastructure costs, and carbon pricing will add further to the cost of imported gas. Therefore, we expect foreign gas to be the most expensive gas.

Is importing gas inconsistent with revitalising the domestic gas production?

10. We believe that the higher cost of imported gas could act as further encouragement to find and develop indigenous gas reserves in the medium to long term. The long run price of natural gas is likely to be lower than the import price, underpinning our preference.

Other implications of importing foreign gas

11. Importing gas potentially exposes New Zealand to some undesirable outcomes including:

    a. the project costs associated with the development of a FSRU are not trivial, as outlined in Appendix One attached;

b. the lock in of high pricing due to exposure to international gas pricing;

c. exposure to international supply chains, which increases the geopolitical risks to gas supply; and

d. potential to undermine the goals of the NZ ETS scheme and pathway to net zero with imported LNG likely to be from higher emission sources and not subject to carbon pricing.

12. An additional risk is any idle assets developed to meet a very short-term, temporary need are also likely to require government support. Facilities will be idle due to intermittent use of an LNG import terminal during supply shortage periods, such as higher winter demand or periods of low rainfall/lower wind. It is difficult to see a clear business case justifying the economic investment for intermittently used terminals without this support.

Foreign gas imports as a backstop

13. The quickest way of getting natural gas into the system is likely to be through our existing natural gas producers. Given the inherent risks associated with the appraisal of natural gas it may, however, be prudent to have the ability to import foreign gas as a backstop option, should its economics justify such investment.

14. We note the development and execution of import infrastructure will face a similar set of sovereign risk and social license issues as faced by other fossil fuel related developments such as the exploration for natural gas and the development of gas-fired power plants.

15. Should the Government consider there is any need to encourage the importation of foreign gas, it should as an absolute matter of priority, first move with urgency to pass the proposed amendments to the Crown Minerals Act. Of equal importance is the need to address any outstanding issues with respect to providing for the appraisal and production of indigenous natural gas through the necessary regulatory and approvals pathways.

Conclusion

16. It is our strong preference to find and develop New Zealand's domestic 'home-grown' gas reserves.

17. The nature of oil and gas exploration, appraisal and development means there is no such thing as a certain outcome. It could be prudent to develop foreign gas import facilities, but priority and urgency should first be given to the production of our indigenous resources.

Appendix 1 – Floating Storage Regassification Unit Projects: Indicative Project Costs

The table below highlights the cost of recent FSRU projects.

The range of costs and capacities indicates no correlation between cost and capacity, suggesting project context and suitability of existing infrastructure are significant contributing factors to cost. This will be no different for New Zealand, and further highlights the uncertainty in forecasting the landed price of LNG in New Zealand.

Terminal Name	Country	Capacity (Mtpa)	Capacity (Bcm/y)	Capacity (PJ/year)[1]	Start Year	Cost USD	Cost NZD[2]
Krk FSRU	Croatia	1.91	2.6	98.8	2021	$255	$425
Jawa Satu FSRU	Indonesia	2.4	3.26	123.88	2021	$350	$585
Wilhelmshaven FSRU	Germany	5.7	7.75	294.5	2023	$491	$819
Inkoo FSRU	Finland	3.68	5	190	2023	$501	$837
Eemshaven FSRU	Netherlands	5.88	8	304	2022	$545	$910
Hong Kong FSRU	Hong Kong	1.2	1.63	61.94	2023	$1,000	$1,670
Brunsbüttel FSRU	Germany	3.68	5	190	2023	$1,090	$1,820

[1] Assumes 38PJ to 1Bcm.

[2] Assumes an exchange rate of 1.67 NZ$ / US$1

Project data available at https://globalenergymonitor.org/projects/global-gas-infrastructure-tracker