MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

BRIEFING

Refining NZ strategic review – fuel supply implications

Date:	20 April 2020	**Priority:**	Medium
Security classification:		**Tracking number:**	3034 19-20

Action sought		
	Action sought	**Deadline**
Hon Dr Megan Woods **Minister of Energy and Resources**	**Note** the advice in the briefing.	27 April 2020

Contact for telephone discussion (if required)				
Name	**Position**	**Telephone**		**1st contact**
Andrew Hume	Policy Director, Energy and Resource Markets	04 901 1474	s 9(2)(a)	✓
Gareth Wilson	Principal Advisor	04 460 1375	s 9(2)(a)	

The following departments/agencies have been consulted

Minister's office to complete:

- ☐ Approved
- ☐ Declined
- ☐ Noted
- ☐ Needs change
- ☐ Seen
- ☐ Overtaken by Events
- ☐ See Minister's Notes
- ☐ Withdrawn

Comments

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Purpose

This briefing provides our preliminary views on the fuel supply impacts if Refining NZ were to cease its refinery operations and convert its Marsden Point facility to a fuel import terminal.

Recommended action

The Ministry of Business, Innovation and Employment (MBIE) recommends that you:

a **Note** our preliminary views on the impact on fuel supply if Refining NZ were to cease refinery operations and convert is Marsden Point facilities to an import fuels terminal.

Noted

b **Agree** to write to Refining NZ and invite it to engage initially with MBIE on its strategic review.

Agreed

Justine Cannon
Manager, Energy Markets Policy
Building, Resources and Markets, MBIE

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Hon Dr Megan Woods
Minister of Energy and Resources

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Refining NZ is undertaking a strategic review of its business

1. Refining NZ announced on 15 April 2020 that it was commencing a strategic review to determine the optimal business model and capital structure for its assets that will maximise "through the cycle" returns to shareholders and deliver secure, competitive fuel supply to New Zealand.

2. Announcing the review, Chairman, Simon Allen said: "Refining NZ has quickly responded to the current COVID-19 situation but is challenged by structural conditions resulting in low refining margins globally and oversupply in the Asia region". In short, Refining NZ is currently under severe financial pressure due to low refining margins and there is a risk that refining may no longer be viable.

3. The strategic review will assess:

   a. opportunities to improve the competitiveness of refining operations

   b. options to separate the refining and infrastructure assets

   c. options to convert to a fuel import business model, and

   d. the capital structure required to maximise value for shareholders.

4. Refining NZ intends to engage with Government through the strategic review process and discuss the options under consideration, with regard to:

   a. security of fuel supply for New Zealand

   b. the strategic importance maintaining refining capability and optionality for fuel supply in New Zealand

   c. the contribution of Refining NZ to the Northland economy (through economic activity and high-paid and high-skilled jobs, and

   d. the role Refining NZ's skills, capabilities and assets may play in a future transition to lower carbon fuels.

5. In a memo to you and other ministers on 15 April, Refining NZ said it will initially engage with MBIE on these matters and would value the opportunity to brief ministers directly at the appropriate time. We have reached out to Refining NZ but it is not yet ready to engage substantively on the matters identified above.

6. In the meantime, this briefing responds to your request for initial advice on the first two matters - security of fuel supply and strategic importance maintaining refining capability. We have not yet considered the contribution of the refinery to the regional or national economy or the role it may play in a transition to a lower carbon fuels.

7. This advice draws on a report from consultants Hale & Twomey, attached as Annex One, which summarises the key issues at a high level. We commissioned the report in March and it was prepared within a week.

How would loss of refining operations affect fuel supply?

8. Refining NZ operates the only fuels refinery in New Zealand and supplies 65-70 per cent of the country's fuel demand for the main petroleum products (petrol, jet fuel and diesel).

9. As well as refinery processing, Refining NZ owns and operates a key part of New Zealand's fuel infrastructure. It is the key supply route for supply into Northland, Auckland and the northern Waikato regions. Should refinery processing cease the Marsden Point facility would

be transitioned to a major import terminal so those regions could still be supplied. The main change required would be converting storage so that larger volumes of finished products could be held in the facility.

10. According to Hale and Twomey, making the Marsden Point facility a fuels terminal would have the following expected effects on fuel supply in New Zealand:

    a. net reduction in physical inventories of crude and products (expected to be 25-30 per cent), but an increase in product inventories

    b. loss of the coastal tanker operation but increase in import tankers delivering fuels to all of the port terminals around New Zealand

    c. loss of ability in New Zealand to correct (re-process) significantly off-specification product

    d. need to import low-sulphur jet for transport to Auckland Airport via the refinery to Auckland pipeline (RAP)

    e. loss of ability to process domestic crude (which is valuable if New Zealand were unable to import fuels for some reason), and

    f. higher cost of compliance with IEA stock-holding requirement.

Impact on fuel supply costs and fuel prices

11. We consider the loss of refining operations at Marsden Point would not materially affect the price of fuels sold in New Zealand. Fuels are currently sold at “import parity price”, and that would continue to be the case if 100 per cent of fuels were imported.

12. Hale and Twomey’s view is that ceasing refining operations would increase distribution costs and/or reduce supply chain efficiency due to a change in the coastal shipping task. While the distribution of fuels to the upper North Island would be unchanged, delivering all fuels to port terminals in other regions by import tankers would likely be less efficient than current shipping operations involving two coastal tankers distributing fuel from Marsden Point. This loss of efficiency might lead to additional investment in port terminal storage capacity and/or greater use of trucking between regions to maintain current levels of supply reliability.

13. Two other effects identified by Hale and Twomey could also increase costs for the fuel companies that currently use the Marsden Point Refinery (loss of ability to re-process an off-specification shipment and the need to import low-sulphur jet fuel for delivery to Auckland Airport through the RAP).

14. Fuel companies currently using the Marsden Point Refinery (BP, Mobil and Z Energy) are expected to consider such impacts on costs and efficiency when assessing the merits of New Zealand-based refining of imported crude versus importing refined fuels from lower cost Asian refineries.

Impact on resilience to supply disruptions

15. Our preliminary view is that importing only refined fuels would generally improve our resilience to domestic fuel disruption scenarios because, at any given time, there would be more useable fuel stored in New Zealand and more useable fuel in transit by sea.

16. One particular resilience improvement is that New Zealand would no longer be vulnerable to a costly fuel supply disruption resulting from an unplanned outage of the Marsden Point Refinery. Economic analysis of disruption scenarios suggests a 6 week unplanned outage of the Marsden Point Refinery could result in a loss of nearly $2.2 billion or 0.8% of GDP.[1] This

[1] Economics of Fuel Supply Disruptions and Mitigations, Market Economics, 24 May 2019.

is currently considered the most significant fuel disruption scenario for New Zealand on a probability-weighted basis.

17. On the other hand, Refining NZ and its former Chief Executive Mike Fuge have expressed a view that a domestic refinery provides greater global supply chain diversity than importing only refined products. A domestic refinery also enables production of fuel from domestic crude and condensate (normally exported because the Marsden Point refinery can process crudes of lower quality/cost), providing some resilience should New Zealand lose any ability to import fuels refined elsewhere.

18. Importing only refined fuels could perhaps increase the risk of a supply disruption resulting from an event, such as extreme weather, affecting a region from which we import fuels (e.g. a large tropical cyclone in South East Asia). While alternative product imports might be sourced from refineries in other regions, this might take some time to put in place.

19. We intend to engage with Refining NZ and the fuel industry to better understand the risks associated with importing refined fuels versus importing crude, and whether any loss of resilience to global supply disruptions outweighs the expected increase in resilience to domestic disruptions.

Impact on cost of compliance with IEA stock-holding obligations

20. As noted, the loss of refining in New Zealand would likely result in an overall reduction in total inventories of 25-30 per cent. This is essentially because we would no longer hold 'refinery stocks' - crude stock associated with refinery operations. New Zealand would need to replace that stock in order to remain compliant with IEA stock-holding obligations.

21. This impact is a feature of the IEA's stock-holding accounting rules. While the total refinery stock remains largely the same whether that refining occurs in New Zealand or in another country, the IEA's accounting rules attribute refinery stocks to the country in which they are held.

22. Under our current stock-holding policy, the cheapest way to maintain compliance with the IEA requirement is for the Government to purchase 'oil tickets' (we currently meet about one third of our total obligation in this manner). The cost of additional oil stock tickets is estimated to be in the range of NZ$6.5-12.0 million/year, based on the range of ticket prices secured in recent tenders.

23. The costs of meeting IEA obligations are recovered by a levy on fuels, ultimately paid for by fuel users. The additional levy needed to recover the additional costs estimated above would be less than half a cent per litre.

Next steps

24. We have contacted Refining NZ and will report back to you regularly on the progress of any discussions on the strategic review once they commence.

25. The purpose of any discussions with Refining NZ is to come to a better shared understanding of the costs and benefits of the options available. We will not take any positions at this early stage in order to avoid prejudicing future discussions with ministers.

26. We recommend you write to Refining NZ, to thank them for the briefing they provided on 15 April, invite early engagement with MBIE on the strategic review, and indicate you look forward to direct engagement in due course.

Annex One: Report by Hale and Twomey “Refining NZ: Impact of Conversion to Fuels Terminal”

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