MINISTRY OF BUSINESS, INNOVATION & EMPLOYMENT
HĪKINA WHAKATUTUKI

BRIEFING

Onshore fuel stockholding policy and fuel supply resilience

Date:	5 May 2022	**Priority:**	Medium
Security classification:	In Confidence	**Tracking number:**	2122-4006

Action sought		
	Action sought	**Deadline**
Hon Dr Megan Woods **Minister of Energy and Resources**	Agree to provide feedback on the recommendations in this briefing	16 May 2022

Contact for telephone discussion (if required)				
Name	**Position**	**Telephone**		**1st contact**
Sharon Corbett	Policy Director, Energy and Resource Markets		Privacy of natural persons	✓
Gareth Wilson	Principal Advisor		Privacy of natural persons	

The following departments/agencies have been consulted
N/A

Minister's office to complete:

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- ☐ Withdrawn

Comments

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Purpose

The purpose of this briefing is to brief you on the results of consultation on onshore fuel stockholding policy options and a potential package of measures to improve fuel supply resilience.

Executive summary

After consultation on stockholding options and considering other relevant information, we propose a package of measures to improve New Zealand's fuel supply resilience, comprising:

a. More granular disclosure and better monitoring of fuel stocks, including stock on water.

c. Obligations on fuel wholesalers to maintain current average commercial stock levels for diesel, petrol and jet fuel (including relevant biofuel blendstocks), to limit any deterioration in stockholding over time.

d. Government procurement of 60 million litres (or more) of reserve diesel stocks, equivalent to about 7 days of cover at 2021 consumption levels, by entering into a long-term lease agreement for new diesel storage capacity (e.g. at Marsden Point, using re-purposed crude tanks), and tendering periodically for reserve diesel stock to be held in the leased storage tanks.

e. Continued procurement of offshore stocks, as required, to ensure compliance with International Energy Agency (IEA) obligation to hold at least 90 days of net import demand.

f. An amended statutory purpose for the fuel levy to enable financial support for investments that promote fuel resilience, including the diesel reserve stock procurement above (the current levy has a limited purpose of meeting the reasonable costs of IEA compliance).

g. Review the fuel levy regulations to ensure appropriate alignment between those who benefit from fuel resilience expenditure and who pay for it.

This proposal aims to strike a balance between increasing our fuel supply resilience while limiting the cost impact on consumers, particularly in light of the current inflationary environment. In terms of resilience, if rationed to essential services using 25 per cent of normal diesel demand, the commercial and reserve diesel cover together would equate to about 100-120 days. Meanwhile we estimate that the annual cost of procuring 60 million litres of reserve diesel stock could be recovered by the current Petroleum or Engine Fuel Monitoring Levy of 0.5 cents/litre.

Subject to your feedback on this proposed package we will prepare a Cabinet paper and regulatory impact assessment to be considered in early June 2022.

Recommended action

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

a **Note** that we have consulted on fuel stockholding policy options and considered the submissions received along with information from previous assessments of fuel supply resilience.

Noted

b **Agree** to provide feedback on our recommended approach to fuel stockholding and fuel supply resilience outlined in this paper.

Agree / Disagree

c **Agree** that we will prepare a Cabinet paper and Regulatory Impact Assessment reflecting the approach in this paper subject to your feedback, to be considered by the Economic Development Committee (DEV) in early June 2022.

Agree / Disagree

Sharon Corbett
Policy Director
Building, Resources and Markets, MBIE

05 / 05 / 2022

Hon Dr Megan Woods
Minister of Energy and Resources

..... / ..... / .....

Background and introduction

The refinery closure is not expected to have a significant impact on fuel security

1. In September 2021 Cabinet considered a paper on the implications of a permanent closure of the oil refinery at Marsden Point. The paper focused on fuel security but also noted the potential implications for various refining by-products (like sulphur), regional employment, and future green fuel development.

2. Cabinet decided there was not a strong case for the Government to intervene to stop or postpone the closure of the refinery but agreed that officials should investigate options to increase minimum levels of fuel stock held in New Zealand [CBC-21-MIN-0101 refers].

3. Cabinet's decision included consideration of advice from independent fuel industry experts Hale & Twomey that the refinery closure would not have a major impact on fuel security because:

    a. much of the stock that is no longer held was required to operate the refinery and the related distribution system (coastal shipping) so was not immediately available to respond to disruption events;

    b. stock held on water is of a similar volume as with the refinery, and being 100% finished product provides a very flexible response measure to disruptions; and

    c. in most domestic disruption events, the resupply constraint is set by availability of tank trucks and drivers and the different supply method has little impact on this.

We have recently consulted on options to increase domestic stockholding

4. The Hale & Twomey 2020 report[1] assessed that expected commercial fuel stock levels after closure of the refinery would provide adequate fuel security due to the speed and flexibility of global fuel markets to back-fill disrupted supplies. However, Hale & Twomey also noted that, despite the robustness of international supply chains, many countries do maintain stock levels well above commercial levels given the high impact of a disruption were it to eventuate.

5. In December 2021 Cabinet approved the release of a consultation paper in January 2022 on the level of onshore stocks New Zealand should hold, and how the desired level could be achieved.

6. This briefing sets out our recommendations following the consultation and draws on previous independent advice from Hale & Twomey and recommendations from the Auckland Fuel Supply Disruption Inquiry.

Previous recommendations on stockholding and fuel supply resilience

Hale & Twomey's recommendations in 2020

7. The 2020 Hale & Twomey report made the following recommendations in relation to stock holding and fuel supply resilience:

    a. Improve the quality of stock reporting from fuel companies and closely monitor stock levels.

[1] In 2020, following Refining NZ's strategic review, we commissioned an independent report from Hale & Twomey on fuel security and fuel stockholding costs and benefits (https://www.mbie.govt.nz/dmsdocument/15257-fuel-security-and-fuel-stockholding-costs-and-benefits-2020)

b. Should there be any concern about deteriorating stock levels, consider implementing a minimum stock obligation at around the current minimum operating level for finished stocks. Care will be required to ensure any stock obligation avoids penalising individual companies based on their supply method and avoids market distortions.

c. Should Government believe holding additional stock is warranted, then using a ticket tender or stock agency approach would be more economic and less distortionary than requiring importers to hold a higher level of minimum stock.

d. Review the New Zealand fuel specifications to ensure the specifications remain aligned, as much as possible, with the fuels available in the region.

e. Implement an annual review of supply resilience (including the minimum stocks held over time) and the diversity of supply, and as part of that, consider if importers should be required to provide an annual representation letter setting out their current supply diversity, their actual supply performance over the last 12 months, and highlighting any concerns or improvements that can be made for the following year.

8. Hale & Twomey also made the following recommendations, which address fuel distribution risks rather than import disruption risks:

a. Work with the fuel industry to implement the recommendations from the Auckland Fuel Supply Disruption Inquiry, particularly the provision of appropriate jet fuel storage in the Auckland region once jet fuel consumption returns to previous levels.

b. Work with the fuel industry to establish a replacement emergency response option in light of the closure and removal of the fuel terminal at Wynyard Wharf in Auckland (e.g. a mobile tanker loading facility as proposed by Refining NZ).

Relevant findings from the Auckland Fuel Supply Disruption Inquiry and other studies

9. The Inquiry's recommendations in 2019 fell into three categories:

a. Improve the protection of fuel pipelines and other nationally critical infrastructure from risks arising from third party activities, including through regulation or national direction instruments under the Resource Management Act and new legislation.

b. Improve fuel emergency planning arrangements, including by updating the National Fuel Plan and supporting emergency planning activities.

c. Improve the incentives on the owners of Auckland Airport's jet fuel supply infrastructure to invest to meet minimum fuel supply resilience standards and intervene if investment deadlines are not met.

10. Constitutional conventions

However, the Inquiry's other findings and recommendations about emergency planning and investment in storage have influenced our thinking about fuel stockholding and related fuel supply resilience measures.

11. In particular, the Inquiry found that Government has insufficient information about stocks and storage capacity to maintain effective oversight, both during emergencies and in advance of an emergency. MBIE has worked with the industry and other agencies since the Inquiry to improve fuel emergency planning but continues to have limited visibility of fuel stocks and storage capacity, particularly at a regional level.

12. The Inquiry found that jet fuel resilience to Auckland Airport is inadequate in terms of an alternative route (including backup), storage capacity close to the airport, and input capacity of supply into the airport. The industry has since undertaken planning work to improve jet fuel supply resilience, but much of that work has been on hold since the borders were closed in March 2020. Planning activity is expected to resume as borders reopen, but some uncertainty remains about commercial incentives to address the outstanding gaps. Auckland Airport and airlines remained concerned about future jet fuel supply resilience.

13. The Inquiry found that ground fuel supply resilience in the Auckland region was adequate, but Hale & Twomey consider this is now more at risk due to the closure of Wynyard Wharf terminal facilities (which helped avoid ground fuel shortages during the 2017 Refinery to Auckland Pipeline (RAP) outage). The industry has considered disruption mitigation measures, such as investing temporary mobile facilities to load fuel into road tankers directly from a ship berthed in any port, but these have not been progressed beyond preliminary feasibility studies.

14. While the Inquiry's scope was limited to Auckland fuel supply resilience, various other assessments and disaster response exercises (e.g. Exercise Tangaroa 2016) have highlighted the vulnerability of fuel distribution to seismic and other hazards than can damage port infrastructure and/or close key transport routes. Studies generally identify the resilience value of regional storage and/or backup facilities that could be used to maintain at least partial service when normal fuel supply service is disrupted. However, the fuel supply industry generally has limited incentive to invest in or maintain such assets, that might rarely be used.

Outcome of consultation on onshore fuel stockholding options

15. The January 2022 discussion paper sought feedback on the level of onshore stocks New Zealand should hold, and how the desired level could be achieved.

    a. Stockholding level options ranged from 'no increase above current commercial levels' (estimated to be about 20 days of consumption on average) up to a level similar to that required by European Union members (60 days of consumption).

    b. Options to achieve the desired stockholding level included Government procurement of reserve stocks and a regulated minimum stockholding obligation (MSO) on fuel wholesalers. In a third option the Government could also invest in or procure other fuel emergency mitigation measures, such as mobile fuel truck loading facilities that could assist with fuel supply in a regional fuel emergency.

16. Key points made in submissions include:

    a. Impact on fuel prices and consumer costs;

        - Costs to the industry of holding higher stock levels would be higher than estimated in the consultation paper. These additional costs could raise fuel prices materially.

        - If the Government requires fuel wholesalers to meet minimum stockholding levels similar to those proposed in Australia (24 days of cover for petrol and jet fuel and 28 days of cover for diesel), they may need to build more fuel tanks. Some indicated the upfront capital costs could be in the order of Commercial Information (depending on location, land access and other factors). Alternatively, without additional tankage, the industry would face additional operational costs (potentially more than Commercial Information a year for a major fuel importer) due to additional port calls and demurrage costs.

- Average commercial fuel stocks are typically less than 50 per cent of tank capacity, which is the optimum when balancing operating costs with supply reliability. Minimum commercial stock levels can be much lower than the average, with the difference between average and minimum being greater for a small participant compared with a large participant.

- Holding higher stocks (average or minimum) with existing storage capacity would require more frequent imports with smaller cargoes, with correspondingly higher per unit operating costs.

- An obligation to increase stock levels would incentivise wholesalers to invest in new storage capacity, most likely new tankage at existing bulk terminals requiring new resource consents and land acquisition. Capital for such investment would compete with investment incentivised by the biofuels obligation and new tanks could quickly become economically stranded because ground fuel sales volumes are forecast to decline.

- Some submitters did not express a view on the level of stockholding, but noted that an increase in stockholdings would likely require increased investment in infrastructure with flow on costs through the supply chain,"This would result in increased prices of goods for consumers, when they are already facing significant inflationary pressures". Many other submitters emphasised the need to balance resilience with cost.

b. A stockholding obligation requires clear provisions around how the obligation will apply and how it will be relaxed or subject to exemptions (e.g. if storage facilities are damaged or unavailable due to maintenance). Such design details will require a further round of development and consultation.

c. Domestic disruption risk versus import disruption risk;

    - Several submitters supported greater resilience but considered that resilience to local fuel distribution disruptions (e.g. pipeline failure) was equally if not more important than resilience to fuel import disruption.

    - Airlines emphasised the importance of jet fuel distribution resilience, noting the experience in 2017 when jet fuel was rationed at Auckland Airport for nine days. They supported a minimum stockholding obligation at current commercial levels, and considered there is not a strong economic case for higher levels.

d. Focus on different fuels;

    - Ia Ara Aotearoa Transporting New Zealand emphasised the importance of diesel to the economy, while airlines and airports emphasised the importance of jet fuel. Submissions included little discussion of petrol or marine fuels supply resilience.

e. Counting 'stock on water' (in transit to New Zealand)

    - Fuel industry submissions considered global supply chains to be flexible and robust, and noted that on average there is almost as much stock on water in transit to NZ as there is onshore in bulk storage (at least 17 days). This implies that average days of cover are actually about twice the level reported in the consultation paper.

    - Stock in transit is considered very reliable once a ship has departed its port of loading, and should be counted towards any stockholding obligation.

f. Impact on competition and market distortions;

i. All fuel industry participants, including independent distributors, expressed concerns about the potential adverse impact of a stockholding obligation on wholesale and retail competition. This is due to several factors. One is that a large wholesaler would be able to meet an obligation more easily than a small wholesaler with only one import terminal. Another factor is that wholesale market shares are not consistent with bulk storage market shares. As a result, costs would not fall evenly across the industry and would generally have a negative impact on competition by raising costs and/or limiting choices for new entrants and independent suppliers.

Our recommendations for a fuel resilience package

17. Having considered submissions on the January 2022 consultation paper and the earlier independent advice, we propose a package of measures to promote better management of fuel supply risks, including disruption to fuel imports and the distribution of fuel within New Zealand (e.g. pipeline outages).

18. Our recommendation is a package comprising the following measures:

a. More **disclosure and better monitoring of fuel stocks**, including regular reporting of:

i. stock information for each fuel at each bulk storage facility

ii. operational storage capacity at each bulk storage facility

iii. information about stock on water, including expected time to discharge in New Zealand

iv. information about product import sources (refineries) and any back-up or contingency supply arrangements.

b. **Obligations on fuel wholesalers to maintain current average commercial stock levels** for diesel, petrol and jet fuel (including relevant biofuel blendstocks). All stocks held in bulk storage facilities would count towards a company's obligations, measured as monthly averages (stock levels are routinely recorded on a daily basis). Stock on water would not count toward a company's obligation, but statistics on aggregate levels of 'stock on water' would be maintained.

c. **Government procurement of 60 million litres or more of reserve diesel stocks** with costs recovered by the fuel levy. 60 ML of diesel stocks is equivalent to about 7 days of cover at 2021 consumption levels. This measure is estimated to cost in the order of Negotiations representing around Negotiations if recovered by a levy on petrol and diesel (or Negotiations if recovered by a levy only on diesel). The recommended procurement process includes:

i. entering into a long term lease agreement Negotiations for new diesel storage capacity Negotiations, and

ii. tendering periodically for reserve diesel stock to be held in the leased storage tank(s), by way of an onshore reserve stock contract similar to the offshore stock contracts currently in place with several international oil companies.

d. **Continued procurement of offshore stocks**, as required, to ensure compliance with IEA obligation to hold at least 90 days of net import demand. The amount of offshore stocks to be procured at any time will depend on the total volume of onshore stocks, including those held pursuant to the minimum stockholding obligation and any reserve onshore stocks procured under the method above.

e. **An amended statutory purpose for the fuel levy** to enable financial support for investments that promote fuel distribution resilience (the current levy has a limited purpose of meeting reasonable costs of IEA compliance). This would enable the Government to support investment in measures such as mobile fuel storage capacity or facilities in vulnerable regions, where a 'fuel resilience case' can be made. The scope of the levy could also help fund emergency planning activities, including regular emergency response exercises and regional studies of fuel resilience gaps and options to address them.

f. **Review the fuel levy regulations** to ensure appropriate alignment between those who benefit from fuel resilience expenditure and who pay for it (e.g. is it appropriate for petrol consumers to pay for reserve diesel stocks).

19. Regarding Hale and Twomey's suggestion about aligning the fuel specifications in New Zealand with others in the region as much as possible, we are undertaking a review of the specifications and will provide you with a separate briefing on this later this month. Fuel security and affordability, as well as international trends in vehicle emission standards, are key considerations of the review.

The recommended package could address a range of issues

20. The recommended measures address various issues identified by previous reviews of fuel supply resilience including:

a. Inadequate visibility over fuel stocks and flows at a granular level. While MBIE collects monthly fuel stock and sales information from the industry, to support its IEA reporting obligations, the information is at a national level rather than by region or bulk storage facility.

b. Limited visibility over fuel import supply arrangements, including the quantity of stock on water in transit to New Zealand, the refineries from which imports are sourced and the diversity of supply options and backup options available to fuel importers.

c. Whether stockholding should be increased as insurance against possible import supply failure in light of uncertainty about the future resilience of global fuel markets.

d. Risk of disruption to the distribution of fuels around New Zealand from hazards or events including natural disasters (e.g. flood, earthquake), infrastructure failure (e.g. pipeline or terminal failure) or industrial action.

e. Limited commercial incentives for the fuel industry to invest in reserve bulk storage capacity in light of declining fuel sales volumes, particularly petrol, as vehicle fleets transition to electric and lower emissions fuels.

f. Limited commercial incentives for the fuel industry to invest in some categories of 'back-up' distribution infrastructure, such as mobile ship-to-shore tanker loading equipment, iso-containers for storing and transporting fuel by rail or container truck, or reserve storage in regions vulnerable to long-duration road closures.

g. Competing pressures for infrastructure investment to meet the biofuels obligation, such as facilities to enable blending of ethanol and biodiesel where more cost-effective than drop-in biofuels.

h. Differences between domestic fuel specification regulations and those in regional markets, which limits options for fuel importers to secure alternative supplies in a domestic shortage (e.g. to divert an Australian shipment in the event of a local supply disruption).

i. Evolving market impacts and uncertainties resulting from the refinery closure, loss of the coastal shipping service, demise of the majors' 'borrow and loan' system, the impending biofuels obligation, and recent regulation to promote retail market competition (e.g. terminal gate pricing).

The stockholding proposals aim to minimise costs to consumers…

21. As set out above, we recommend:

    a. placing an obligation on fuel wholesalers[2] to maintain current average commercial stock levels, plus

    b. Government procurement of reserve diesel stocks with costs recovered by the fuel levy (with no increase in the levy amount).

22. This proposal aims to strike a balance between increasing our fuel supply resilience while limiting the cost impact on consumers, particularly in light of the current inflationary environment.

23. In terms of the level of resilience, we recommend Government procurement of 5-10 days reserve diesel cover, because diesel is the most critical fuel for maintaining economic and socially important activities and therefore the most valuable to insure. Put another way, non-essential petrol use is a relatively large portion of total use, and therefore readily rationed in an emergency, but non-essential use of diesel is a relatively smaller proportion of total use, and therefore harder to ration in an emergency. While any fuel rationing would impose some economic costs, we consider the costs of reserve stocks for other fuels would exceed the benefits.[3]

24. We do not recommend procurement of reserve jet fuel stocks at this stage. However, we note that Z Energy, bp and Mobil are still planning to increase jet fuel stockholding at or near Auckland Airport when they have more confidence about future jet fuel demand growth following the resumption and growth of long-haul flights. Free and frank opinions

25. Similarly, we do not recommend reserve stocks or stockholding obligations for marine fuels (marine diesel, light fuel oil, heavy fuel oil), in part because marine fuel markets are subject to significant change as a result of regulated quality standards for sulphur content. However, as for jet fuel, our recommended package would create a framework for future stockholding obligations and/or procurement of stocks to address any identified gap in marine fuel supply resilience.

26. While 5-10 days of reserve diesel cover might seem rather small compared with commercial stock cover of about 20 days, if rationed to essential services using 25 per cent of normal diesel demand, the commercial and reserve diesel cover together would equate to about 100-120 days.

27. Negotiations

[2] The obligated wholesalers/importers would be Z Energy, bp, Mobil, Gull and Timaru Oil Services.
[3] The Australian Government estimated that critical services make up about 16 per cent of normal diesel demand, 4 per cent of petrol demand, and 6 per cent of jet fuel demand in Australia. We think these proportions are likely to be similar in New Zealand.

Negotiations

28. We estimate that the annual cost of procuring 60 ML of reserve diesel stock could be recovered by the current fixed levy component of 0.5 cents/litre, without affecting the ability to procure offshore stock tickets for the foreseeable future.

29. In contrast, imposing minimum levels of fuel stock on the industry in excess of current commercial minimums would impose material costs on the industry, which would flow through into higher fuel prices. While increased costs might be offset somewhat by a reduction in the fuel levy, it is unlikely that a reduction in fuel levy would offset the increase in the industry's costs passed on to fuel consumers. In other words we consider that Government procurement of reserve storage in bulk is more cost-effective than achieving a similar stock level via regulatory obligation on the industry.

…and avoid distorting competition

30. The stockholding proposals – with extra resilience provided via Government procurement – also aim to minimise market distortions. It would be challenging to impose regulatory obligations on individual fuel importers or wholesalers to meet a higher aggregate minimum stock level without distorting commercial incentives and opportunities for smaller participants to invest, grow market share, and support retail market competition.

31. In contrast, it should be relatively straightforward to impose stock obligations at levels close to existing average levels with minimal distortion. Such obligations would serve to maintain the supply security implicit in current commercial stock levels and would safeguard any deterioration in that security over time. Deteriorating fuel security due to 'disorderly' exit of some fuel supply infrastructure could otherwise result from the diminishing market for liquid fuels (especially petrol) due to electrification of vehicles in the decades ahead.[4]

32. Fuel in storage must be turned over regularly to maintain quality standards. Negotiations

33. Should there be a desire to hold reserve stock, we believe the most cost effective and least distortionary method is to procure it directly, Negotiations and then by procuring the stock to hold in the leased tank(s) or by entering into reserve stock contracts with industry participants like those currently used for offshore reserve stocks.

To mitigate the possibility of legal challenge, we also recommend amending the statutory purpose for the fuel levy

34. The existing fuel levy, the Petroleum or Engine Fuel Monitoring Levy, may be used for the purpose of meeting the reasonable costs of complying with the IEA 90 day obligation. Legal professional privilege

[4] For example, a bulk storage operator might choose not to refurbish or replace damaged or retired tankage, if the future market size does not support such lumpy commercial investments.

35. Our policy view is that the existing levy may be used to fund onshore stocks, despite there being lower cost stocks available offshore. Our view reflects the possibility that offshore reserve stocks may not be able to be brought to New Zealand in an emergency, which would defeat the purpose of the IEA agreement. However, the legal risk cannot be dismissed and we therefore consider it prudent to amend the relevant primary legislation to clarify that the levy may be used to fund onshore stocks even if more costly than offshore stocks.

36. As above, a change to the levy purpose could also enable the levy to be used in the future, as required, for other investments that promote fuel distribution resilience. This could include, for example, investment in facilities in vulnerable regions where a 'fuel resilience case' can be made.

Some stakeholders continue to advocate for retention of refinery

37. Some stakeholders continue to call for Government intervention to preserve refining capability or re-start refining operations at Marsden Point as the preferred option to improve fuel supply resilience. Simon Terry of the Sustainability Council of NZ wrote to you about this on 14 April 2022 and this briefing includes our advice on his proposal. We have appended a draft response for your consideration.

38. The 14 April letter from the Sustainability Council, like previous representations, starts with a view that a significant and long-lasting fuel import disruption is a credible event that would have severe economic and welfare impacts because almost all services including food production and distribution would stop once fuel stocks were exhausted. The Sustainability Council considers that such a significant risk must be adequately insured against, and the question is what form of insurance would be best.

39. The Sustainability Council previously advocated for Government intervention to keep the refinery operating, for a period, on the basis that that approach would be the most cost-effective form of insurance against a 'closed border' event. Now that the refinery has closed down, the Sustainability Council proposes investigating an arrangement whereby the refinery is mothballed and a skeleton crew kept to maintain it and restart it in a crisis.

40. The Sustainability Council does not claim to know the technical feasibility of mothballing the refinery but thinks the costs could be considerably lower than the alternative of investing in significant fuel storage capacity and filling it with reserve fuel stock.

41. We accept that maintaining a mothballed refinery (if technically feasible) could potentially be lower cost than holding very large volumes of reserve stocks. However, it is not clear that mothballing the refinery would be lower cost than maintaining an operating refinery, which was the option considered and rejected by Cabinet in September 2021. Moreover, as per our recent advice (2122-3319 refers) there are limited security of supply benefits to retaining the refinery. In particular we advised that:

    a. The refinery could likely not be used to perpetually produce refined fuels using only Taranaki crude.

    b. As discussed in the February advice [2122-2872 refers] if the Refinery supplemented imported crude with domestic crude for refining, it would only add an extra 2.6 days of cover to meet New Zealand's normal fuel demand, assuming that we had 15 days of imported crude stocks on the water

    c. Fuel industry and independent expert advice is that a 100 per cent fuel import model will be more resilient to domestic disruption scenarios than retaining a domestic refinery, as there will no longer be a 'single point of failure risk' associated with refining.

42. We have considered whether the 'closed border' risk has changed since Cabinet considered it in September 2021, for example in light of the Russian invasion of Ukraine and the evolving geopolitical environment in the Asia-Pacific region. As previously advised, we do not consider the 'closed border' risk has changed materially since 2021.

43. In short, we consider Cabinet's decision in September remains a reasonable one on the basis that the risk of a closed border, while non-zero, does not warrant the level of insurance advocated by the Sustainability Council, whether in the form of an operating refinery, a mothballed refinery, or a very large increase in onshore fuel stockholding.

Next steps

44. Subject to your feedback on this briefing, we will prepare a paper for you to submit to DEV in early June 2022. Our recommended package of measures requires both primary and secondary legislation. We are developing a regulatory impact assessment to support Cabinet decisions needed for the primary legislation. A second paper and regulatory impact assessment would be required for subsequent Cabinet decisions on matters of detail to be prescribed in regulations.

45. Subject to your feedback on this briefing, we think primary legislation will be required to:

    a. Establish a power to make regulations prescribing the details of minimum stockholding obligations on fuel wholesalers, including:

        i. the target level of stockholding for particular fuels

        ii. definitions of obligated parties and fuels

        iii. methods of demonstrating compliance

        iv. provisions for granting exemptions, suspension and termination of obligations

        v. information to be provided for monitoring purposes, and

        vi. penalties for non-compliance.

    b. Expand the purpose of the fuel levy (or levies) and establish or amend a power to make levy regulations so that fuel levies can fund or recover costs of:

        i. procurement of onshore reserve stocks, including storage capacity

        ii. investigation and procurement of other fuel resilience infrastructure or facilities, on a case by case basis, such as equipment to be used in an emergency (e.g. portable truck loading equipment), and

        iii. administration costs of departmental fuel resilience activities, including undertaking regular emergency exercises with industry.

46. Cabinet agreement will also be required to procure 60 ML or more of onshore reserve diesel stocks. This procurement could proceed in stages, to promote value for money, with the first stage potentially including an invitation for expressions of interest. Negotiations

Timeframes for legislation and procurement of reserve diesel stock

47. We estimate that primary legislation noted above could be drafted and approved for introduction by the end of 2022, subject to obtaining relevant Cabinet decisions in mid-2022. A Bill could be introduced and passed during 2023. Regulations could be largely developed in parallel.

48. Negotiations We estimate the work could be completed within 6-12 months after entering into a contract. Up to 24 months might be realistic if there are resource constraints. A tender for diesel stock to be held in the repurposed tank(s) could be undertaken in parallel with tank repurposing. In short, we estimate the lead time to procure 60 ML of onshore stocks could be 12-24 months from date of Cabinet decision.

Costs and funding

49. The total cost of holding onshore diesel stocks will not be known with confidence until the proposed procurement process is complete. However, we estimate that 60 ML of diesel could cost in the order of Negotiations This cost could be fully funded by the existing fuel levy, which we estimate will have an accumulated surplus of more than $50 million at the end of June 2022, increasing by around $20-25 million each year.

50. However, as noted above, we consider it prudent to clarify the statutory purpose of the levy, through legislation, before using it to fund significant volumes of onshore reserve stock, given the potential legal risk. In other words, we propose that Cabinet agree to fund the initial procurement of 60 ML of onshore diesel stocks, and to recover all of the costs through the levy subject to the enactment of legislation. That is, the legislation would explicitly enable the levy to recover specified costs incurred after, say, 1 January 2023 (being a date on which the Government might enter into a tank lease agreement).

Amending the fuel levy rate

51. The existing fuel levy is used to fund the Government's IEA stockholding costs, among other things. It has a 'fixed component', set in regulations, and a 'variable component' that may be set by notice in the Gazette.[5] The fixed component of the fuel levy applies to petrol and diesel at the rate of 0.5 cents per litre, which is higher than necessary (based on latest forecasts) to recover the IEA offshore stockholding costs incurred to date and expected in the future. Therefore, if the levy remains limited to funding offshore stocks, there is a case to reduce the levy rate to prevent further accumulation of surplus funds (above the estimate at 30 June 2022 of circa $50 million).

52. However, any use of levy funds to procure onshore stocks, as proposed, will have the effect of reducing the accumulated levy surplus, and could potentially move the surplus into deficit over time. If 60 ML of onshore diesel stocks were to be procured from 2023, at an annual cost of Negotiations we estimate the levy surplus would remain stable at around $70 million. Spending more on onshore stocks or other types of resilience expenditure would reduce the surplus over time.

[5] The Petroleum or Engine Fuel Monitoring Levy also funds a portion of EECA's costs relating to sustainable transport energy, MBIE's costs of monitoring and enforcing fuel specification regulations, and MBIE's costs of monitoring oil stocks and preparing associated statistical information. EECA's costs are recovered through the 'variable component' and the other costs are recovered through the 'fixed component'.

53. We recommend maintaining the current levy rate at this time noting that it could potentially be reduced in the future when there is more certain information about the costs of procuring onshore reserve stocks or supporting other fuel resilience projects, subject to Cabinet decisions. If Cabinet does not agree to procure onshore diesel stocks, or use the levy to fund such stocks, we recommend reducing the levy rate by Negotiations to reduce the accumulated surplus.

Departmental consultation

54. We have not consulted with other agencies on the contents of this briefing but will do so once you have confirmed the direction and next steps you wish to take.

55. Free and frank opinions

Annexes

Annex One: Estimated costs of onshore stockholding

Annex Two: Draft response to letter from Sustainability Trust

Annex One: Estimated costs of stockholding (commercially sensitive)

56. Various estimates of storage cost are set out below and summarised in Table 1.

Capital costs of new and repurposed tanks

57. Channel Infrastructure disclosed in a 2021 investor presentation that it has contracted 100 ML of private storage at Marsden Point, requiring estimated capital investment of $45 to $50 million. This gives a unit capital cost upper estimate of **$0.50/litre**.

58. Commercial Information

59. Commercial Information

Hale & Twomey's estimate of annual stockholding cost

60. Hale & Twomey's 2020 report on stockholding costs and benefits estimated a cost range of **$0.11 to $0.22/litre/year** if utilising spare storage capacity in existing tanks and up to **$0.25/litre/year** if investment in new storage capacity is required. H&T's cost estimates include both the cost of holding inventory and a 'lease' of storage capacity.

Commercial Information

Mobil's estimate of annual storage capacity cost

62. Mobil, in its submission, agreed the industry has about 20 days of cover across all the fuels, but noted this level cover is not evenly split across all products and suppliers. Therefore, an on-shore stockholding obligation based on current average levels would come at a cost because it would will require some market participants to convert tanks or lease spare storage from competitors.

Commercial Information

Commercial Information

Negotiations

Negotiations

Negotiations

Annex Two: Draft response to letter from Sustainability Trust

Simon Terry
Executive Director
Sustainability Trust

Dear Simon

Thank you for your letter of 14 April 2022 regarding least cost delivery of fuel security.

You noted there are a range of options to promote fuel security at least cost, and one option is an arrangement to hold the Marsden Point refinery in a mothballed state with a skeleton crew, so it could be reactivated in an emergency. You suggested that if the mothballing option is still feasible, it could potentially provide an increment in resilience at lower unit cost than investing in new tanks to hold reserve fuel stocks at a level providing comparable security.

As you know, last year Cabinet considered options to retain an operating refinery, on a temporary basis, and decided there was not a strong case to do so. That decision was informed by an assessment that the refinery contributed relatively little to fuel security. Cabinet understood that an operational refinery could provide some resilience to a major fuel import disruption by producing some fuel from Taranaki crude oil, but only in very modest quantities and at high operating risk.

Officials have not investigated the refinery mothballing option in detail. However, I can advise that Refining NZ was clear, when engaging with the Government during its strategic review, that mothballing is not a feasible option. Officials sought independent advice on this and were advised that while some other refineries facing closure have chosen to mothball facilities initially, once mothballed it is rare to see refineries restarting. I expect it would be even more rare to see a mothballed refinery restarting at short notice, in an emergency, and in an unusual and risky start-stop mode of operation, processing only light crudes when it was designed to process heavy crudes.

As you know the Government is currently reviewing fuel stockholding policy options and other fuel resilience measures in light of the closure of the refinery. I am not in a position to confirm what the policy decisions will be, but I expect decisions in the near future. I appreciate your continued interest in this important topic and I thank you again for writing.

Yours sincerely

Hon Dr Megan Woods

Minister of Energy and Resources