



## COVERSHEET

<b>Minister</b>	Hon Dr Megan Woods	<b>Portfolio</b>	Energy and Resources
<b>Title of Cabinet paper</b>	Fuel supply resilience without a domestic oil refinery	<b>Date to be published</b>	2 November 2021

### List of documents that have been proactively released

<b>Date</b>	<b>Title</b>	<b>Author</b>
September 2021	Fuel supply resilience without a domestic oil refinery	Office of the Minister of Energy and Resources
15 September 2021	Fuel supply resilience without a domestic oil refinery CBC-21-MIN-0101	Cabinet Office

### Information redacted

**YES / NO** [select one]

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Some information has been withheld for the following reasons:

- Commercial information
- Confidentiality
- Confidential advice to Government
- National security

[In Confidence]

Office of the Minister of Energy and Resources

Chair, Cabinet Economic Development Committee

## **Fuel supply resilience without a domestic oil refinery**

### **Proposal**

1. This paper sets out my proposed response to Refining NZ's planned closure of its oil refinery at Marsden Point. Subject to a final decision by Refining NZ, due by 30 September 2021, oil refining operations are expected to cease between March and June 2022, after which 100 per cent of refined fuels will be imported. I propose to progress development of options to ensure domestic fuel stock levels remain adequate, as a means of supporting fuel supply resilience, as New Zealand transitions away from fossil fuels.
2. There does not appear to be a clear case for maintaining refinery operations for fuel resilience reasons, except to address an exceptional 'no fuel imports' scenario. This is an unlikely scenario, but not entirely implausible, therefore I believe the option of maintaining refinery capacity warrants an active decision by Government.
3. I have considered an option to support Refining NZ to ensure the refinery continues operating for a period of time – perhaps five or 10 years – by limiting its exposure to volatile earnings. The Government could provide a loan or similar underwrite facility to support Refining NZ through the current period of low earnings (expected to persist for two to three years), with reasonable prospect of repayment if or when refining earnings return to adequate levels.
4. I do not believe there is a strong case to support continued refinery operations on fuel security grounds but I acknowledge there are broader considerations. I am therefore open to commencing discussions with Refining NZ on that option, should Cabinet invite me to do so, subject to availability of budget for a negotiating team with the necessary commercial and legal capability (up to \$1 million).

### **Relation to government priorities**

5. Reliable and resilient fuel supplies and transport systems are essential enablers for a productive, sustainable and inclusive economy, which is the central objective of the Government's Economic Plan.
6. Future uses of Refining NZ's Marsden Point site could facilitate New Zealand's transition to net zero emissions in view of its technical expertise and existing fuel infrastructure. Refining NZ has expressed an interest in developing capacity to produce sustainable aviation fuels (SAF) in the future, subject to policy and financial incentives for supporting such production.

### **Executive Summary**

7. Refining NZ is planning to convert its Marsden Point oil refinery to a fuels import terminal by mid-2022, subject to final decision by its board of directors before by 30 September 2021. The planned closure is a response to very challenging global refining market conditions, with significant surplus refining capacity following recent investment in new, large-scale, export refineries in the region that have better efficiency and lower emissions intensity. The drop in

global fuel demand triggered by COVID-19 and the expectation of a slow recovery, particularly jet fuel, has further exacerbated the oversupply in the global refining market.

8. Refining NZ is not alone in facing these challenging conditions. Australia had seven operating refineries in 2010, of which only two now remain operating – supported by an Australian Government assistance package of up to A\$2.3 billion.
9. Closure of the refinery raises a number of questions about fuel supply security, impact on jobs and the Northland economy, a potential transitional role for the refinery in assisting the development of a large-scale domestic biofuels production industry, and implications for meeting the Government’s first emissions reduction budget.
10. While Refining NZ has not sought a subsidy or other assistance to maintain its oil refining operations, some parties have suggested delaying the refinery’s closure by five or 10 years. This could avoid potential negative impacts on fuel security and buy time to progress options that would enable skilled workers at the refinery to help kick-start a biofuels industry. It would also allow time to investigate whether any parts of the Marsden Point refinery could be repurposed for sustainable biofuels production at lower cost than building new production plant. My focus has been fuel security but other considerations, including the regional economy, are important.
11. Industry and independent expert advice is that a refined fuel import supply chain can provide more supply source diversity (from multiple refineries in different regions), and is more resilient to most credible fuel disruption scenarios. There does not appear to be a clear case for maintaining refinery operations for fuel security reasons, except to address an exceptional ‘no fuel imports’ scenario. It is also unclear whether or how existing refinery assets could be used or repurposed for sustainable fuels production, at what cost, and in what timeframe. There are also challenges in securing sufficient supply of sustainable feedstock for biofuels production at a reasonable cost.
12. I do not propose subsidising the refinery to keep it operating for 5 or 10 years because I consider the fuel import risk to be small, and I propose instead to progress options to ensure New Zealand has adequate fuel stocks in-country to offset any fuel import risk. I also consider the other adverse impacts of the planned closure are manageable and do not warrant measures that would, among other things, make it harder for us to meet the first emissions reduction budget. There are other work streams underway supporting rapid development of sustainable fuels production in New Zealand.
13. Options to ensure domestic fuel stock levels remain adequate as New Zealand transitions away from fossil fuels include Government procurement of domestic reserve stocks and imposing minimum stockholding obligations on fuel companies. Minimum stock levels could be set at current commercial levels or increased above current levels to offset a potential reduction in supply resilience when refining operations cease.
14. However, while the likelihood of a major fuel import disruption is small in the next 10-15 years, I acknowledge the consequences of such an event would be serious and this risk warrants careful consideration. On this basis, I am open to alternative views on the merits of commencing discussions with Refining NZ on options to ensure continued operation for five to 10 years.

## **Introduction**

15. Refining NZ plans to convert its Marsden Point oil refinery to a fuel import terminal. This is the culmination of a strategic review underway since April 2020 in response to very challenging global refining market conditions that may not improve for some years.
16. A structural change in refining markets arising from the increased supply of refined product and a lower than expected growth in demand for transport fuels in the Asia-Pacific region has resulted in very weak refining margins and uncertainty regarding future refining margins.

17. Even if refining market conditions improve, oil refining in New Zealand is expected to become unsustainable, around 2035, due to declining use of fossil fuels as New Zealand adopts electric vehicles and lower emission fuels, including drop-in biofuels.
18. In the years immediately before 2020, Refining NZ supplied about 65 to 70 per cent of New Zealand's total demand for refined fuels, and 100 per cent of its jet fuel. The balance was imported mainly from refineries in Singapore and South Korea. Under the plan, Refining NZ, renamed 'Channel Infrastructure', will utilise existing infrastructure at Marsden Point, including the Refinery to Auckland Pipeline (RAP), to receive, store, test and distribute transport fuels imported by its customers, primarily to the Northland and Auckland markets.
19. Refining NZ's shareholders voted in favour of the proposal on 6 August 2021. A final decision by Refining NZ's board is expected by 30 September 2021. Refining NZ expects to be operating as a fuel-import terminal by mid-2022, with full plant decommissioning and terminal upgrade works set to continue for a number of years.
20. Refining NZ's proposed conversion to an import terminal is not expected to have a material impact on fuel prices, because the fuel market is already at import price parity, but it has a number of potential adverse implications, including:
  - a. Regional economy: the refinery is a big contributor to the Northland economy; according to First Union the refinery sustains nearly 500 households in the region directly or indirectly. The current Refining NZ workforce of 300 is expected to reduce over the two years following commencement of import terminal operations to approximately 60 terminal, fuel testing, and corporate support office employees. Officials are engaging with stakeholders and iwi in the region to explore views on possible repurposing of the refinery and to further understand the concerns of the affected workforce. MBIE's Just Transition team is not currently resourced to engage in the region, but a number of agencies including MBIE, MSD and Te Arawhiti are working with Northland Inc on the impact of the changes.
  - b. Skilled workforce: closure of the refinery could result in the loss of skilled workers, which could make it harder to develop a biofuels industry in coming years. However, the materiality of any lost opportunity is questionable given the mobility of highly skilled process engineers and refinery operators. Refining NZ is interested in developing new businesses including the production and/or distribution of sustainable fuels. Advanced biofuels production is one option, but would be at least 5 to 7 years before workers are required to operate such a plant.
  - c. Potential co-production of biofuels: closure of the refinery may close off opportunities to use or re-purpose the refinery to produce biofuels alongside conventional fuels, which might be a low cost pathway to future large-scale biofuels production in New Zealand. There is considerable uncertainty at this time about the feasibility of biofuels production at Marsden Point relative to other options such as co-locating large-scale biofuel production plant with sawmills or other wood product industries close to feedstock sources.
  - d. Cost of compliance with the 90-day stockholding obligation under the International Energy Agreement (IEA): closure of the refinery will require expenditure of up to \$13 million per annum to procure more reserve stock (if procured offshore). The redundant crude tanks at Marsden Point could be converted to hold domestic reserve stocks, but at higher cost – in the order Commercial Information depending on the quantity.
  - e. Short term fuel security: given the planned refinery closure by mid-2022, many refinery workers are looking for new jobs and some have already ceased employment. While Refining NZ is endeavouring to manage this staffing risk Confidentiality there is an elevated risk that a critical loss of staff could force in an earlier closure of the refinery. Any closure with less than about six weeks' notice could result in fuel shortages of around 40 per cent before replacement fuel imports can be delivered.

The more notice given the shorter and shallower would be any fuel disruption. This disruption scenario may be contrasted with other refinery shutdown scenarios: a planned maintenance shutdown (typically occurs every year), a threat of industrial action with 14 days' notice, or an unplanned outage without any notice.

- f. Fuel security/insurance: loss of ability to refine domestic crude oil could leave New Zealand more exposed to the severe consequence of depleting all fuel stocks if unable to import any fuel for a sustained period. A disruption of this kind is considered unlikely in the next 10-15 years but cannot be discounted. A less severe global disruption (e.g. loss of 50 per cent of fuel imports for one month) is more credible, and is assessed to have relatively minor impact. For most other types of supply disruption, the loss of domestic refining is not expected to reduce supply reliability, and indeed the 100 percent import model is more resilient to domestic disruptions including the risk of unplanned refinery outages.
- g. Bitumen supply: Refining NZ stopped producing bitumen in January 2021 mainly due to economic factors as the manufacturing plant required capital investment. New Zealand has since been in a 100% bitumen import model, which has worked well to date to ensure sufficient bitumen supply is available in the country. Bitumen is primarily used for road construction and maintenance activities – central and local government combined represent 94% of the bitumen used in New Zealand. Waka Kotahi is currently investigating the bitumen supply market, including future sourcing options, with a focus on security of supply, transparent pricing, and open access to promote value for money in roading activities.
- h. Liquid CO<sub>2</sub> supply: Food-grade liquid carbon dioxide, used in the food and beverage sector and in some water treatment plant, is currently produced at the refinery and at the Kapuni gas processing plant in Taranaki. There are two national suppliers – BOC and Air Liquide. While there are other potential CO<sub>2</sub> sources, including imports, closure of the refinery will challenge the CO<sub>2</sub> supply chain – particularly a short lead time to make necessary investments or relocate plant. Options currently being explored include

Confidentiality

- 21. Of these expected impacts, I consider the potential reduction in resilience to a major global fuel market disruption to be the most significant despite the likelihood of a disruptive event being low. Options to address the fuel supply resilience issue include increasing domestic fuel stocks or encouraging Refining NZ to maintain refinery operations until New Zealand is no longer so dependent on imported fuels. This paper discusses my proposed response to the fuel resilience question, taking into account the other implications of a refinery closure.

#### **International context**

- 22. As noted above, the challenging global refining market conditions affecting Refining NZ's competitiveness are linked to significant surplus refining capacity following recent investment in more efficient, large-scale, export refineries. A fall in global fuel demand caused by COVID-19 has exacerbated the oversupply, which has triggered closures of older and smaller refineries globally.
- 23. Australia had seven operating refineries in 2010, of which only two now remain operating – supported by an Australian Government assistance package of up to A\$2.3 billion announced in May 2021. According to the US Energy Information Agency, the US had 129 oil refineries at the beginning of 2021, down from 135 a year earlier, with closures attributed to falling fuel demand and increasing interest in renewable diesel production.

## Implications for fuel supply resilience

24. MBIE commissioned advice on the fuel security implications of the proposal to close the Marsden Point refinery, and briefed me in June 2021. The consultant's report on the fuel security impacts and options to mitigate them was subsequently published on MBIE's website. Confidential advice to Government & National Security assessed the global and regional geo-political risks to a 100 per cent fuel supply chain Confidential advice to Govern.
25. Closure of the refinery would result in a significant reduction in stocks held in New Zealand, comprising the crude oil and intermediate product currently held as part of refinery operation. In total, stocks could reduce to less than 70 per cent of the previous level. Finished product inventories, however, are expected to average around 20 days of cover (i.e. stocks can meet about 20 days of normal demand), which is about two days higher than current average levels (with the refinery).
26. Closure of the refinery and loss of crude oil stocks will not have a major impact on fuel security under almost all disruption scenarios. Indeed, industry and independent expert advice is that a 100 per cent fuel import model is more resilient to domestic disruption scenarios than having a domestic refinery, because there is no longer a 'single point of failure risk' associated with refining, and because import shipments of refined fuels provide more flexibility to respond to local disruptions (shipments can be redirected to ports where they will be most useful for fuel distribution by road).
27. A refined product import supply chain will have different risks to a crude oil supply chain, but not necessarily greater risks. However, there may be some rare circumstances in which importing finished products presents a greater risk than importing and refining crude oil.

### **"Closed border" and other global supply disruption scenarios**

28. The loss of domestic refining could have more adverse outcomes in an unlikely, but potentially high consequence, event in which New Zealand becomes completely or significantly cut off from global fuel markets for an extended period. A risk assessment of global and regional crude oil and fuel supply disruptions, Confidential advice to Government & National Security found a low likelihood of an event resulting in extended loss of physical supply to New Zealand in the next 10-15 years. Nonetheless, while the likelihood of such an event is low, the economic and social cost could be significant.
29. An extended "closed border" event would have a severe impact whether or not New Zealand has a domestic refinery, but the impact could potentially be worse without a refinery. Having a domestic refinery could potentially enable the refining of at least some fuels from crude oil produced within New Zealand together with any imported crude oil that is available.
30. Domestic crude production is currently equivalent to about 20 per cent of New Zealand's total fuel demand, and is declining. While the refinery is configured to refine overseas crude oil, in an emergency the refinery could potentially refine domestic crude oil (from Taranaki) at some level, provided the "closed border" event does not also restrict other essential refining inputs.<sup>1</sup> Meeting even a fraction of normal fuel demand could enable at least some critical functions to be maintained (e.g. food distribution) even though most fuel use would be severely constrained.
31. Without a domestic refinery, in a closed border event New Zealand would need to ration its diesel stocks to maintain critical services for a limited period – perhaps a few months.
32. While officials have not specifically assessed the impact of an extended "closed border" scenario, they have considered the impact of a less severe scenario in which 50 per cent of

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<sup>1</sup> Refining NZ advises the Marsden Point refinery cannot produce fuels solely from light Taranaki crude oils without significant reconfiguration that would take years to plan and implement. This suggests the refinery could not be relied upon to provide resilience to the 'no fuel imports' disruption scenario, but would provide some resilience if suitable crude oils can still be imported.

product imports from North Asia or Singapore are halted completely for a period of one month. The assessment concluded that in-country inventories (around 20 days) together with about 17 days of stock en route to New Zealand and alternative supplies rapidly put in place from other regions (North America, Europe, Middle East or India) would be sufficient to manage this type of disruption with only minor localised service station stock-outs. Longer or more severe fuel import disruptions would have a more severe impacts on fuel supply.

33. A global fuel product supply disruption is similar to the crude oil disruption scenario New Zealand has always faced, except that product exporting countries (like South Korea and Singapore) are typically less dependent on fuel export income than are crude exporting countries, and may therefore be likely to prioritise domestic fuel security before allowing exports in a global oil disruption. That said, New Zealand's major product suppliers (and other countries likely to supply fuel in an emergency like the United States) are IEA members and are bound by that treaty to work together to share the impacts of a disruption that affects all or any members.

### **Options to avoid or mitigate a reduction in fuel supply resilience**

34. Options to avoid or mitigate the adverse impacts described above include:
  - a. Delay the refinery closure until New Zealand is less dependent on imported fossil fuels.
  - b. Ensure sufficient fuel stocks are held in New Zealand at all times to provide an adequate buffer against an extended global fuel supply disruption.
  - c. Accelerate the development of a domestic biofuels industry, and electrification of transport, to more rapidly reduce New Zealand's reliance on imported fossil fuels.
35. These options are not mutually exclusive, and the optimal response could involve one, two or all of them. For example, some stakeholders have suggested delaying the closure of the refinery by 10 years could provide sufficient time to investigate biofuel production options and commit to a development path to ensure production has reached material scale before the refinery closes.

### **Implications for emissions reduction objectives**

36. Closure of the Marsden Point refinery will have little impact on global emissions but will substantially reduce domestic emissions by between 0.75 and 1.2 million tonnes of carbon dioxide equivalent (Mt CO<sub>2</sub>-e) each year. Closure will reduce emissions by between 2.5 and 4.2 Mt CO<sub>2</sub>-e in the first emissions budget period, which equates roughly to 25 to 42 per cent of the required reductions in that period.
37. Any intervention to maintain oil refining Marsden Point would need to take into account the impact on emissions and the Government's domestic and international objective of achieving a smooth and managed transition away from fossil fuels.
38. New Zealand is a leading advocate internationally for fossil fuel subsidy reform on the global stage and is intensifying this advocacy in 2021 with initiatives such as the ongoing negotiations on the Agreement on Climate Change, Trade and Sustainability (ACCTS), and sustained efforts to advance the fossil fuel subsidy reform agenda in multilateral fora including the World Trade Organization (WTO).
39. Taking action to ensure New Zealand has access to liquid fossil fuels, including in scenarios where international borders are severely disrupted, may support a smooth and managed transition especially where the Government is also taking action to incentivise the development of renewables. Any action to support the continuation of fossil fuel refining should have a clear end-point and be recognised as a short to medium-term measure within in the longer term transition to renewables.

### **Refining NZ has interest in producing SAF but production could be some years away**

40. Separate work streams across government, including the biofuels mandate and the forestry industry transformation plan, have the potential to accelerate the development of a domestic biofuels industry. Refining NZ and Air New Zealand are also seeking government contribution to commissioning feasibility studies on the potential of developing domestic capacity in producing sustainable aviation fuels (SAF). I am considering their proposals [REDACTED]  
Confidential advice to Government [REDACTED]

41. Engagements with stakeholders and Te Uru Rākau's work on the forestry industry transformation plan indicates that Refining NZ's Refinery to Auckland Pipeline, proximity to Auckland, deep harbour and technical staff provide some advantages in developing SAF production at Marsden Point. However it is unclear whether or how existing refinery assets could be used or repurposed for sustainable fuels production, and at what cost. In addition, SAF production is some years away from becoming commercially feasible, [REDACTED]  
Confidential advice to Government [REDACTED] There are also challenges in securing sufficient supply of sustainable feedstock for SAF production at a reasonable cost.

### **Loan facility or subsidy to keep the refinery operating for up to 10 years**

42. Some commentators, including First Union representing affected workers, have called for the Government to support Refining NZ financially to keep the refinery open for a period of time – until refining becomes profitable again and/or until New Zealand has alternative transport fuels and is less dependent on imported fossil fuels. In principle, a loan facility could provide for Refining NZ to draw down when refining margins are below some threshold, could limit the amount of drawdown in any year, and could require repayment when refining margins exceed some threshold.
43. Refining NZ has not, to date, sought or proposed financial assistance to keep the refinery operating, but it may be open to any such discussions before making a final commitment to the conversion (i.e. before 30 September 2021).
44. Officials have advised me that that there does not appear to be a clear case for maintaining refinery operations for fuel resilience reasons, except to address an exceptional 'no fuel imports' scenario. This is an unlikely scenario, but not entirely implausible, therefore I believe the option of maintaining refinery capacity warrants an active decision by the Government.
45. First Union and others suggest an annual subsidy or loan equivalent to about one cent per litre on ground fuels sold (\$70–100 million per annum) could be sufficient, over the next few years, for Refining NZ to achieve its desired level and stability of earnings. This would be the cost of insurance against the closed border risk described above, and enable longer transition planning for affected staff. If and when refining margins recover after 2024, as is forecast by Refining NZ and independent advisers, then any financial support from Government could potentially be repaid over subsequent years.

### **Australia's recent fuel security package**

46. The subsidy option is broadly comparable with part of the Australian Government's recent fuel security package, which will keep open the two remaining oil refineries in Australia until 2027 with the option to extend to 2030. Under Australia's subsidy scheme, refiners only receive support in downtimes, not when they are profitable.
47. The Australian Government's support for domestic refining appears to be motivated by national security and 'sovereign capability' considerations. [REDACTED]  
Confidential advice to Government [REDACTED]



- 48. It is also notable that Australia's refining sector and related industry is significantly larger than New Zealand's. Australia had seven operating refineries in 2010. By December 2020, its remaining four refineries had announced plans to close or review their future viability. Two refineries confirmed their closure and in May 2021 the Australian Government agreed to pay up to A\$2.3 billion to keep the last two refineries open.
- 49. The two supported Australian refineries have a combined capacity approximately equal to Australia's domestic crude production, but a relatively small proportion of Australia's total fuel demand. It is therefore unlikely that New Zealand could be supplied from Australian refineries during a 'closed border' event in which both Australia and New Zealand are unable to import refined fuels.

**Increase domestic reserve fuel stocks**

- 50. Reserve fuel stocks are stocks over and above the stocks normally held for normal commercial operations. They can be held separately or together (co-mingled) with commercial stocks, but must be accounted for separately.
- 51. All IEA countries agree to hold oil or fuel stocks equivalent to at least 90 days of demand net of any oil production. For countries that are net importers, this agreement usually requires maintaining reserve stocks, and this is typically implemented through direct government procurement, procurement by a dedicated stockholding agency, a minimum stockholding obligation on fuel companies, or a combination of the above. Many countries have complementary or additional fuel stockholding policies, such as members of the European Union, which hold at least 60 days of gross fuel demand. New Zealand is, in many respects, an outlier among comparable countries because it does not maintain domestic fuel reserves.

**Government procurement of reserve stock**

- 52. New Zealand has, since 2007, used direct Government procurement of reserve stocks to make up the difference between commercial stock levels and the 90-day requirement. The quantity of reserve stock purchased in 2019/20 was equivalent to around 700 million litres of fuel, at a cost of more than \$20 million. Reserve stock costs are recovered by a levy on all petrol and diesel sold. The levy is currently set at 0.6 cents per litre, of which 0.455 cents is allocated to fund reserve stocks. Reserve stocks may be held in New Zealand or overseas, but to date no New Zealand held stock has been offered in the annual domestic reserve stock tender.
- 53. Following closure of the refinery, the reduction in crude oil stocks held as part of the refining process means New Zealand will need to procure more reserve stocks. If the additional reserve stocks are procured overseas, as has been the practice to date, the additional cost could be up to about \$13 million per annum. However stocks held overseas would not provide any fuel supply resilience if New Zealand were unable to import fuel - only domestic stocks can do that, albeit at higher cost.

54. Commercial Information [Redacted]

55. The cost of reserve stockholding is dominated by the holding cost of the fuel itself, but part of the cost can be considered a lease payment for the storage tanks. Commercial Information [Redacted]

56. Commercial Information [Redacted]

I understand tank conversions may take 12 to 18 months, which suggests reserve stocks of refined products could be held at Marsden Point from 2023.

#### Minimum stockholding obligation

57. As noted above, many countries ensure minimum levels of reserve stock are maintained by placing a minimum stockholding obligation on fuel companies, in proportion to their market share. Such obligations are usually tradeable between the obligated companies, which facilitates meeting the minimum total stock level at least overall cost to the industry and fuel consumers. Stockholding obligations can be specified separately for each type of fuel (diesel, petrol, jet fuel) and potentially for different locations (e.g. North Island and South Island).

#### How much reserve stock should be held?

58. The quantity of reserve stock, or the level of a minimum stockholding obligation, is a policy judgement to be made, taking into account the cost of reserve stock and the benefit of improved fuel supply resilience. While the cost of reserve stock can be readily estimated (or determined via a procurement process), the benefit is more challenging to estimate because both the likelihood and the consequence of a severe disruption cannot easily be quantified.
59. New Zealand has never experienced an event that prevented fuel imports, and there is no formula describing the likelihood of a future event in which New Zealand's IEA treaty partners would be unwilling or unable to assist in a fuel import emergency. Also, while the consequence of fully depleting all domestic fuel stocks would be severe (picture empty supermarket shelves), it is difficult to assess those consequences in terms of a financial cost-benefit analysis.
60. I therefore propose to develop the minimum stockholding obligation policy options further, with a view to consult interested parties on these options in the coming months. The possible minimum stockholding levels range from current commercial stock levels (i.e. no domestic reserves) to the levels observed in some other countries. Reserve stocks and minimum stockholding obligations are usually expressed in terms of "days of cover", which is the volume of stock divided by the daily demand for the relevant fuel product. I will report back to Cabinet on the policy options by the end of this year.

#### Summary of impacts

61. Closure of the Marsden Point refinery will result in:
- a. Loss of about 240 direct jobs and associated economic impact in Northland
  - b. Loss of corporate and income tax revenue (unquantified)
  - c. Increased cost of IEA 90-day stockholding compliance – up to \$13 million annually
  - d. Reduction in greenhouse gas emissions of between 0.75 and 1.2 Mt CO<sub>2</sub>-e annually.
62. Should the closure warrant a future decision to increase domestic fuel stock levels, to mitigate the impact of a major fuel import disruption, indicative costs could be up to [REDACTED]
- [REDACTED]
- Commercial Information

#### Next steps

63. I consider that the reduction in fuel supply resilience presented by loss of domestic refining warrants careful consideration by the Government.
64. In the medium term, the next 10 to 15 years, New Zealand's dependence of imported fossil fuels could be reduced through measures to accelerate the large-scale production of domestic biofuels (e.g. drop-in biodiesel and SAF) and the uptake of electric vehicles, especially for essential services like food distribution.

65. In the nearer term, the next five or 10 years, fuel import supply resilience could be improved by ensuring minimum levels of fuel stocks are held in New Zealand, especially diesel which is critical for maintaining essential services.
66. I consider there may be a case to increase the level of fuel stocks held in New Zealand, as a buffer against the risk of a significant global supply disruption. I propose to consult on options to increase domestic stock levels (i.e. what level of stock to hold) and options to ensure the desired fuel stock levels are maintained (whether by Government procurement or by way of a minimum stockholding obligation).
67. There may also be options to retain refining capacity in the short term. If Cabinet considers there is merit in exploring ways to retain refining operations for a period of time, the next step would be to open discussions with Refining NZ on potential loan or subsidy options. Subject to Cabinet approval and sufficient funding, a negotiating team with legal and commercial advisory roles could be established. If a satisfactory agreement were to be negotiated, I would return to Cabinet for approval.

### **Financial Implications**

68. None at this stage.
69. Any future decision to procure domestic fuel stocks could incur annual costs also in the order of Commercial Information. If these costs were recovered through the existing levy on petrol and diesel sales they could raise the levy in the order Commercial Information per litre Commercial Information. Any future decision to impose minimum stockholding obligations on fuel companies would not have a material fiscal impact, but the resulting costs incurred by fuel companies would likely be passed on to fuel users through fuel prices.

### **Legislative Implications**

70. None at this stage.
71. The Energy (Petroleum or Engine Fuel Monitoring Levy) Regulations 2015 are made under a provision that permits the recovery of reasonable costs of compliance with New Zealand's IEA obligation to maintain emergency reserves. The costs of procurement of domestic reserve fuel stocks could be recovered through the levy to the extent it is a reasonable cost of complying with the IEA reserves commitment.
72. Section 6 of the International Energy Agreement Act 1976 provides for ministerial directions to maintain fuel reserves. Confidential advice to Government  
[Redacted]

### **Impact Analysis**

73. None at this stage.

### **Regulatory Impact Statement**

74. A regulatory impact statement is not required.

## Climate Implications of Policy Assessment

75. The Ministry for the Environment has been consulted and confirms that the Climate Implications of Policy Assessment (CIPA) requirements do not apply to proposals relating to adequate stock holding, as the threshold for significance is not met. However, the CIPA requirements would apply to any proposal to delay the closure of the refinery as the threshold for significance would be met.

## Treaty of Waitangi and Treaty Partner considerations

76. A plan is in place to engage with Patuharakeke, as iwi with the closest marae to Marsden Point, and with other iwi in the area affected by activities in the harbour and wider employment impacts of the refinery's closure. I have met with Patuharakeke and have urged Refining NZ to include affected iwi in a social partnership approach to any considerations about the future uses of the Marsden Point site.
77. Patuharakeke has written to Minister Nash about the refinery's closure, noting that the land that Refining NZ sits upon is Poupouwhenua. Its confiscation in 1844 is a longstanding issue for Patuharakeke and a primary grievance listed in its Statement of Claim to the Waitangi Tribunal (WAI745).

78. Confidentiality & Confidential advice to Government

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## Communications

81. I do not propose to make proactive public comments about subsidising refining operations until final decisions are made on that option. I intend to make reactive comments to explain I am considering options to mitigate any resilience questions that arise from a closure of the refinery.

## Proactive Release

82. I propose to release a copy of this paper within 30 days with any redactions I consider appropriate under the Official Information Act 1982.

## Recommendations

The Minister of Energy and Resources recommends that the Committee:

1. **Note** that Refining NZ plans to convert its Marsden Point oil refinery to a fuel import terminal and expects to make a final decision by 30 September 2021.
2. **Note** that closure of the refinery is expected to have little impact on fuel supply resilience under most disruption scenarios, but it could reduce New Zealand's resilience to a low likelihood but high consequence event that leaves New Zealand with no ability to import fuels.
3. **Note** that options to mitigate any reduction in fuel resilience include increasing minimum levels of fuel stock held in New Zealand and/or subsidising Refining NZ to maintain refinery operations for a limited period.
4. **Note** that there is not a strong case on the basis of fuel security to maintain refinery operations but there are broader considerations.
5. **Agree** to investigate the option of increasing minimum levels of fuel stock held in New Zealand.
6. **Invite** the Minister of Energy and Resources to report back to Cabinet by 20 December 2021 for approval to release a consultation paper on minimum fuel stockholding obligations.

Authorised for lodgement

Hon Dr Megan Woods

Minister of Energy and Resources