More fuel storage needed now

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Refinery at Marsden Pt. Photo by Michael Cunningham.

Boosting fuel reserves could prevent social & economic disruption

In this opinion piece, Special Counsel for Buddle Findlay, Bassam Maghzal, advocates doubling New Zealand's minimum fuel stockholding levels.

Russia's invasion of Ukraine and its impact on fuel prices has highlighted New Zealand's ever-present vulnerability to global supply chain disruptions – and the Government should be giving serious consideration to building additional fuel storage infrastructure.

While this might go against New Zealand's pledge to move away from fossil fuels, any disruption to our oil supply during the transition to renewables stands to have major social and economic impacts. New Zealand needs to maintain energy security while it decarbonises its economy. These two objectives are not mutually exclusive.

Before Russia invaded Ukraine, Cabinet asked officials to investigate what level of minimum onshore fuel stockholdings should be. The catalyst was the impending closure of New Zealand's sole refining operations at Marsden Point to become a fuel import terminal only.

Back in January, MBIE asked for public feedback on imposing a minimum stockholding obligation on fuel wholesalers of 28 days of fuel cover for diesel, and 24 days for petrol and jet fuel to deal with a prolonged and severe fuel import disruption. This is the same as that proposed in Australia.

MBIE was attracted to this option because, assuming 50 per cent rationing, it would take 56 days before diesel stocks were depleted. Such an option would require only modest investments in fuel storage, with additional onshore fuel storage said to cost approximately NZ$22m a year. This would translate to price increases of roughly 0.2 cents per litre for petrol, 0.4 c/L for diesel, and 0.2c/L for jet fuel.

However, the proposed holding level is only a slight improvement on the status quo: eight days of reserve cover for diesel and four days of reserve cover for other transport fuels; fuel wholesale suppliers currently already hold onshore commercial stocks of approximately 20 days of cover for their commercial purposes.

Disruption danger

New Zealand remains heavily reliant on imported refined fuel - which makes up 40 per cent of our energy consumption, largely for the transport sector.

p. We don't mandate holding onshore reserve fuel stocks. So a severe import disruption could result in a prolonged national fuel shortage – warranting the rationing of available fuel to high priority uses (such as emergency services and food distribution).

Looking at other International Energy Agency (IEA) members, New Zealand is something of an outlier among comparable countries in not holding onshore reserve fuel stocks.

While the level of stockholding might be the same as Australia, the important difference is that the Australian government last year agreed to subsidise two of its domestic oil refinery operators to keep them from closing. The New Zealand government, on expert advice, opted not to take a similar route because it did not consider the fuel import risk to be large enough, instead finding it more attractive to have fuel stocks in-country to offset any fuel import risk.

Due to greater supply source diversity, there is some appeal in this option. However, some have argued that it would take just 1 c/L to maintain this onshore refining capability in New Zealand. That capacity to refine the crude oil we produce (which could meet approximately 15 per cent of our demand) could keep essential services in operation in case of a severe shock to the system.

Given this key difference between New Zealand and Australia, there is a case for New Zealand to hold many times more reserves than Australia. At the most rudimentary level, we have a longer supply line than Australia for our fuel which historically has mainly been imported from Singapore and South Korea.

We also need to consider exactly where we sit in the global supply pecking order. If the Covid-19 vaccine procurement taught us one thing, it is that the big nations will take what they need first (particularly if they produce it) before supply trickles down the global waiting list.

P If the Government settled on just doubling the current minimum stockholding level (40 days of cover for transport fuels in total - twice what the wholesale suppliers currently hold), the additional onshore fuel storage costs would be about NZ$80m a year (versus NZ$22m a year for the stockholding level the Government is proposing).

To put this difference in cost in context, a major disruption resulting in some fuel shortage for up to six weeks (before supply can be restored by new imports) could cost more than $2 billion or 0.8 per cent of GDP.