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1. About the Australian Trucking Association

The Australian Trucking Association is the peak body representing the 50,000 businesses and 200,000 people in the Australian trucking industry.

2. Summary of recommendations

Recommendation 1

The Australian Government should review the *Liquid Fuel Emergency Guidelines 2008* and section 47 of the *Liquid Fuel Emergency Act 1984* to ensure that trucking businesses cannot be sued for prioritising customers in line with government policy during a fuel security emergency.

Recommendation 2

The Australian Government should undertake and publish a detailed cost benefit analysis of introducing closer to real-time information monitoring of petroleum statistics.

Recommendation 3

The Australian Government should utilise the 10-year infrastructure pipeline, Roads of Strategic Importance program and the development of corridor strategies to deliver a national HPFV network, to move more freight with less fuel.

Recommendation 4

Governments should review and amend Australian Design Rules and in-service vehicle regulations to enable greater use of more fuel-efficient heavy vehicle solutions.

Recommendation 5

The Australian Government should encourage a positive investment environment for the take up of newer and alternative fuelled vehicles, and for investment in refuelling/recharging infrastructure.

Recommendation 6

The Australian Government should design and implement road user charging for electric vehicles and other vehicles which do not pay existing fuel duty, even if initial charges are set low to encourage uptake.

Recommendation 7

The Australian Government should design and implement a staged plan for development of a national fuel reserve, to strengthen Australia's liquid fuel security approach and reliance on competitive markets.

3. Importance of fuel security for road freight and the Australian economy

The Australian Trucking Association welcomes the commitment to conduct an in-depth review of our liquid fuel security, to ensure affordable and reliable energy.

The *Liquid Fuel Security Review – Interim Report* highlights the importance of liquid fuel to the transport sector, which represents 75 per cent of total liquid fuel demand.¹ The interim report also highlights that:

- 98 per cent of energy for the transport sector is sourced from liquid fuel,
- Demand for diesel has grown faster than the economy since 2009-10,
- 99 per cent of heavy freight vehicles use diesel, and
- The freight task is expected grow by 52 per cent between 2016 and 2036.²

Not only is the Australian freight task growing strongly, but road freight remains critical to Australian supply chains. The interim report finds that Australia is heavily reliant on trucking for distribution of liquid fuel.³ In addition to the distribution of fuel, trucking is critical to moving Australia's freight task more broadly.

The Productivity Commission has found that only 10 to 15 per cent of the freight task is considered to be contestable across both rail and road.⁴ For non-bulk domestic freight, more than 75 per cent is carried on Australian roads.⁵ Without trucks, there is no supply chain.

Liquid fuel is critical to trucking, which is critical for the economy. Liquid fuel security is a vital national economic issue.

The interim report found that in December 2018 Australia had 18 consumption days of petrol and 22 consumption days of diesel in stock. Regional variations were significant, with 10 days in Victoria, 22 days in Western Australia and 28 in South Australia.⁶ Consumption days counts stock based on how many days they will last under normal demand.⁷

The report indicates that regions more reliant on shipping or with less demand are more reliant on holding higher levels of stock.⁸ Additionally, the report should consider the presence of local industries, such as mining, which are likely to increase the stock levels reported for that region without making the stock more widely available. These are significant issues in regions such as the Northern Territory and Western Australia. Ensuring fuel security on a regional basis is of vital importance.

Australia's domestic oil production represents about 0.3 per cent of world oil production. It should however not be dismissed, with oil exports worth \$5.2 billion to the Australian economy in 2017-18. The report finds that condensate produced in Australia could be processed by local refineries in an emergency, but it is not commercially viable in normal circumstances. It would also only represent approximately 25 per cent of our total consumption of liquid fuel.⁹

It should also be considered, as part of our fuel security response, that most of Australia's oil production is concentrated off the northern coast of Western Australia. It would need to be transported to a local refinery to contribute to supply during a disruption.

¹ Australian Government, April 2019, *Liquid Fuel Security Review – Interim Report*, 15.

² *Ibid*, 15.

³ *Ibid*, 32.

⁴ Productivity Commission, December 2006, [Road and Rail Freight Infrastructure Pricing](#), XXIX.

⁵ Australian Government, 2014, *Trends: Infrastructure and Transport to 2030*, as quoted by Volvo Group Australia, 2016, *Professional Truck Shortage*

⁶ Australian Government, April 2019, *Liquid Fuel Security Review – Interim Report*, 30.

⁷ *Ibid*, 2.

⁸ *Ibid*, 5, 30.

⁹ *Ibid*, 24, 25.

Australia has international obligations to hold 90 days of equivalent emergency stock of net imports as a member of the International Energy Agency (IEA). Australia is the only IEA country which is a net importer and solely relies on industry to meet its 90-day stockholding obligation.¹⁰

Australia does not meet this obligation, holding 53 IEA days of stock in November 2018.¹¹ For most of 2012 and from 2013 onwards Australia has been below the 90-day obligation.¹² Including fuel already loaded in ports of other IEA countries or on route to Australia would give Australia up to 80 days of net imports. These stocks are owned by Australian companies and destined for Australian ports.¹³

4. Reviewing and amending the *Liquid Fuel Emergency Act*

At the national level, a fuel shortage emergency is handled under the *Liquid Fuel Emergency Act 1984* and associated guidelines, determinations and agreements. This framework is identified in the National Oil Supplies Emergency Committee (NOSEC) guidance note of June 2012.

As articulated by NOSEC, this framework seeks to ensure that during a liquid fuel shortage available fuel supply is managed and allocated to minimise the economic impacts of the shortage on fuel users and customers. An important part of this framework is under section 11 of the Act, and the ability of the minister and government to designate essential users who may receive priority access to fuel in a shortage emergency.

In 2015 the ATA undertook a fuel security exercise to assist in the understanding of Australia's fuel supply chain, the measures that could be taken in a liquid fuel supply emergency, and the issues that businesses and industry associations could face in such a situation. The exercise was designed with regard to the Australian Government's Disaster Resilient Managing Exercises guidance, guidance on emergency and training techniques, and whilst it was not a statement of government policy the design of the exercise paid close attention to the plausible and available options to government in a fuel shortage emergency. The exercise asked participants to identify how a fictitious trucking business would respond to a fuel shortage emergency and a simulated reduction in fuel supplies.

The exercise demonstrated that trucking businesses would face legal uncertainty if expected by government to prioritise the delivery of particular goods (such as food, for example). Delivery contracts in the trucking industry do not typically allow for the delay or non-delivery of a contracted job as a result of a fuel shortage, or as a result of the issue of guidance by the government to prioritise a particular type of delivery for the health, safety or welfare of the wider community.

During the fuel security exercise some participants elected to prioritise essential deliveries and to face legal questions after the crisis, whilst others were concerned that they could be exposed to litigation after the emergency ended without government support.

The exercise demonstrated that in a fuel shortage emergency, it cannot be assumed that industry would have the commercial ability to implement the Government's priorities. The *Liquid Fuel Emergency Guidelines 2008* and the *Liquid Fuel Emergency Act 1984* do not provide industry with legal support. Section 47 of the Act only provides exemption from suit to relevant fuel industry corporations and relevant persons. Trucking businesses which are reliant on fuel, critical actors in the economic supply chain, and potentially vital to the delivery of the Government's priorities in a fuel shortage emergency do not receive a similar protection.

The ATA's contract checklist for trucking businesses includes advice to trucking operators to check proposed agreements for protection if there is an unexpected event that prevents operators from completing the agreement, including for fuel shortage. But if Government expects trucking

¹⁰ International Energy Agency, 2018, [Australia 2018 Review](#), 51.

¹¹ Australian Government, April 2019, [Liquid Fuel Security Review – Interim Report](#), 32.

¹² International Energy Agency, 2018, [Australia 2018 Review](#), 52.

¹³ Australian Government, April 2019, [Liquid Fuel Security Review – Interim Report](#), 2.

businesses to carry out its policies during an emergency, then it should provide them with the necessary legal protections.

The ATA welcomes the intent as stated by the interim report that this legislation will be reviewed. The review should ensure that trucking businesses cannot be sued for prioritising customers in line with government policy during a fuel security emergency.

Additionally, the NOSEC guidance note recommends that businesses which are liquid fuel users should develop a continuity plan to continue operating for 30 days on either a 10, 30 or 50 per cent reduction in their fuel use and supply management.

It cannot be assumed that this relatively unknown guidance is achievable by industry. Australia's trucking industry consists of over 51,000 businesses as of June 2018, of which 53 per cent are non-employing owner drivers. Another 45 per cent are also small businesses with 19 or fewer employees.¹⁴ For 98 per cent of the industry which are small businesses, this guidance note is impractical at best. It is also hard to reduce fuel use by 50 per cent for a business with one truck, apart from parking the vehicle and not supplying Australian businesses and consumers.

Recommendation 1

The Australian Government should review the *Liquid Fuel Emergency Guidelines 2008* and section 47 of the *Liquid Fuel Emergency Act 1984* to ensure that trucking businesses cannot be sued for prioritising customers in line with government policy during a fuel security emergency.

5. Transparency of Australia's fuel stocks and the impact of smaller disruptions

In the 2016 Budget, the Australian Government provided funding (\$23.8 million over four years) to return Australia to compliance with international obligations to hold 90 days of oil stocks, which included:

- Implementation of mandatory reporting for petroleum statistics from 1 January 2018.
- Purchase of international oil tickets from July 2018 to enable Australia to contribute its share to future IEA collective action.
- From 2020, a plan to build the necessary oil stocks (both physical and tickets) to return to compliance with holding 90 days worth of oil imports by 2026.

The ATA supported the implementation of mandatory reporting for petroleum statistics and passage of the relevant legislation by the Commonwealth Parliament, due to concerns with the growth in non-reporting of petroleum statistics, which reduced data coverage of what fuel is held in Australia.

The interim report identifies the 2017 reforms to implement mandatory reporting as an important first step towards improving the Government's understanding of the liquid fuel market.¹⁵ It also finds that closer to real-time information would enable better identification of short-term issues with supply due to the six-week time lag with mandatory reporting.

Elsewhere in the interim report, the impact of smaller and regional fuel disruptions is said to not impact fuel users.¹⁶ It highlights the varying stock levels across Australian regions and that supply risks during disruption vary across regions. The report states that if alternative supply can be found in these regional disruptions, or the disruption is resolved within the time that can be covered by stocks, there is no impact.

¹⁴ Australian Bureau of Statistics, February 2019, [8165.0 Counts of Australian Businesses, including Entries and Exits, June 2014 to June 2018](#).

¹⁵ Australian Government, April 2019, *Liquid Fuel Security Review – Interim Report*, 39.

¹⁶ *Ibid*, 5.

This understates the impact on fuel users in the trucking industry. **Regional fuel disruptions, even when alternative supply is found, have a significant impact on trucking businesses.** The practical experience of trucking operators who have dealt with such disruptions is that it increases the cost of fuel by 4 to 5 cents per litre (which across larger volumes is significant), but the primary difficulty is in sourcing the alternative supply. That operators have been able to secure supply does not mean that there is no impact.

The interim report also notes that the Department of the Environment and Energy is, for the first time, developing a model of the fuel market and its supply chains. Whilst this work should continue, the Government needs to more closely consider the real-world impact of disruptions before classifying them as having no impact on fuel users.

Considering the impact of these short-term issues with supply, the potential for closer to real-time information monitoring should be more closely considered. The interim report identifies that this would enable both Government and industry to identify short-term supply issues, providing suppliers with the earliest possible opportunity to manage potential disruptions. With the impact a disruption can have and the critical role that transport performs in the wider economy this should be more closely considered.

Recommendation 2

The Australian Government should undertake and publish a detailed cost benefit analysis of introducing closer to real-time information monitoring of petroleum statistics.

6. Improving fuel efficiency for heavy vehicles

The interim report finds that petrol use has levelled off due to some light vehicle users switching to diesel-fuelled cars and improving fuel efficiencies in petrol vehicles which allow vehicles to drive further on each litre of fuel.¹⁷ As a result, petrol use has remained constant since the early 2000s despite more cars and Australians driving further as a nation.¹⁸

With the importance of improving fuel efficiency for petrol vehicles and the reliance of the Australian economy on road transport and of heavy vehicles on diesel use, it is disappointing that improving the fuel efficiency and productivity of heavy vehicles does not even rate a mention in the interim report. Whilst alternative fuels and technology (such as hydrogen and electric vehicles) may present opportunities in the future for reducing the reliance on liquid fuel, improving heavy vehicle efficiency and productivity will also be required due to the significant role that diesel vehicles will continue to perform in our economy.

Increasing the use of high productivity freight vehicles (HPFV) would be a significant reform that would allow industry to improve fuel efficiency. With projected significant increases in road freight, this reform approach would provide an achievable plan to move more freight with less fuel.

High productivity vehicles have the capability of reducing the number of potential truck trips per tonne of payload movement (moving more freight on fewer trucks), thus reducing the fuel required and as a consequence improve the fuel efficiency of industry. These benefits are illustrated in the comparison at Table 1 of semi-trailer, B-double, and A-double combinations. The higher productivity combinations (B-double and A-double) are able to move a higher payload with less fuel.

¹⁷ Ibid, 3.

¹⁸ Ibid, 15.

Comparison of key road freight delivery configurations				
	Semi Trailer	B-double	A-double	
GCM (tonne) GML	43.0	63.0	147%	185%
Maximum Combination Length (metres)	19.0	26.0	137%	192%
Payload (tonne)	24.0	38.8	162%	203%
Trips per 1,000 tonnes of payload moved	42	26	62%	50%
ESA's per 1,000 tonnes of payload moved	304	224	74%	74%
Fuel required per 1,000 km lead	100%	82%		
Driver requirement	100%	62%		

Table 1: Comparison of key road freight delivery configurations (Source: ATA, [Truck Impact Chart](#), 2nd edition)

The Australian Government should adopt a leadership position in increasing the use of high productivity freight vehicles, as it would contribute to Government objectives in improving Australia’s fuel security, improving fuel efficiency and reducing emissions, reduce the growth in trucks on our roads, and contribute to a vital boost in productivity in our economy.

To enable this more fuel-efficient approach to moving Australia’s freight task, leadership is required from the Australian Government to deliver a national HPFV network. This network should provide:

- As of right access for modern HPFV combinations that do not require individual permits for each trip,
- Access to major and important freight routes,
- Adequate rest area and coupling/de-coupling bay facilities,
- Integration with local land use planning to integrate the network with industrial and logistics land, protect current and future road corridors and enable the 24-7 operation of the network, and
- Upgraded bridges and other infrastructure constraints to enable use of the network.

The Australian Government already has the policy mechanisms to deliver this network. The 10-year infrastructure funding pipeline, Roads of Strategic Importance program and the commitment to fund corridor strategies to guide road funding on some of these corridors provide a framework by which the Government can:

- Set HPFV access objectives on important road corridors,
- Identify infrastructure gaps to delivering these objectives and development an investment plan to upgrade the corridor, and
- Set a long term, stable funding commitment to upgrade these routes.

With an appropriate commitment and leadership by the Australian Government, delivery of a national HPFV network will be able to move more freight with less fuel.

Additionally, the fuel efficiency of heavy vehicles can be improved through amending vehicle design rules to allow vehicle technologies which improve fuel economy. For example, aerodynamic devices such as airtabs would allow heavy vehicles to increase fuel economy by up to 6 per cent. However, current Australian Design Rules (ADR) prevent their use due to width requirements. Similarly, the use of single wide tyres would provide reductions in fuel use.

Recommendation 3

The Australian Government should utilise the 10-year infrastructure pipeline, Roads of Strategic Importance program and the development of corridor strategies to deliver a national HPFV network, to move more freight with less fuel.

Recommendation 4

Governments should review and amend Australian Design Rules and in-service vehicle regulations to enable greater use of more fuel-efficient heavy vehicle solutions.

7. Alternative fuels and technology

Opportunities for fuel switching and demand reduction for the transport sector, through the introduction and development of alternative fuels and emerging technology are cited by the interim report as potential policy options.

Ultimately the policy approach to alternative fuels and technology for road transport should:

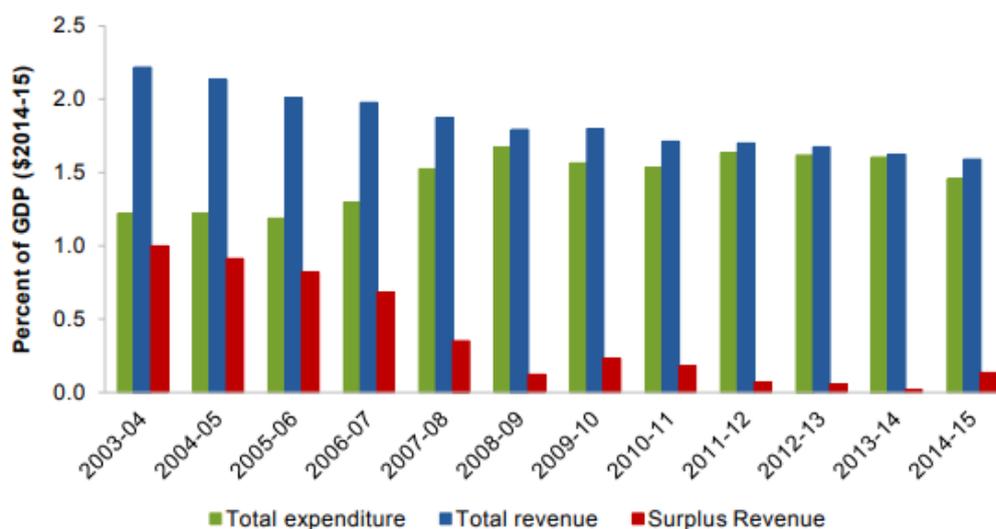
- Recognise that the overall and heavy reliance of road freight on diesel is expected to remain high,¹⁹
- Prioritise increasing the efficiency and productivity of heavy vehicles (through measures such as a national HPFV network),
- Regulate transport modes (including road) to be as efficient as possible,
- Provide a positive investment environment for alternative fuel infrastructure and vehicles, including recharging equipment and reduced vehicle taxes, and
- Ensure the road user charging systems incorporate all vehicle types.

For alternative fuel and technology options (such as hydrogen and electric vehicles) to become a realistic option for trucking operators, suitable and affordable recharging/refuelling infrastructure will be required, along with policies that encourage investment in newer vehicles. Removing barriers to new vehicle investment, such as state government stamp duties, would encourage investment in newer vehicles.

Additionally, fuel duty which makes up part of fuel prices provides important government revenue, some of which is reinvested in roads and transport infrastructure.²⁰ This forms part of the Budget's general revenue, that is, fuel duty is not specifically allocated back into transport infrastructure.²¹ It does however provide governments with increased ability to fund transport and other government services.

However, the relative decline in fuel duty is driving a structural decline in road related revenue compared to expenditure, as illustrated in figures 1 and 2.

Figure 1: Road-related revenue and expenditure (Real revenues and expenditure to GDP)



^a Aggregated over all levels of government. ^b Includes work done for and by the public sector.

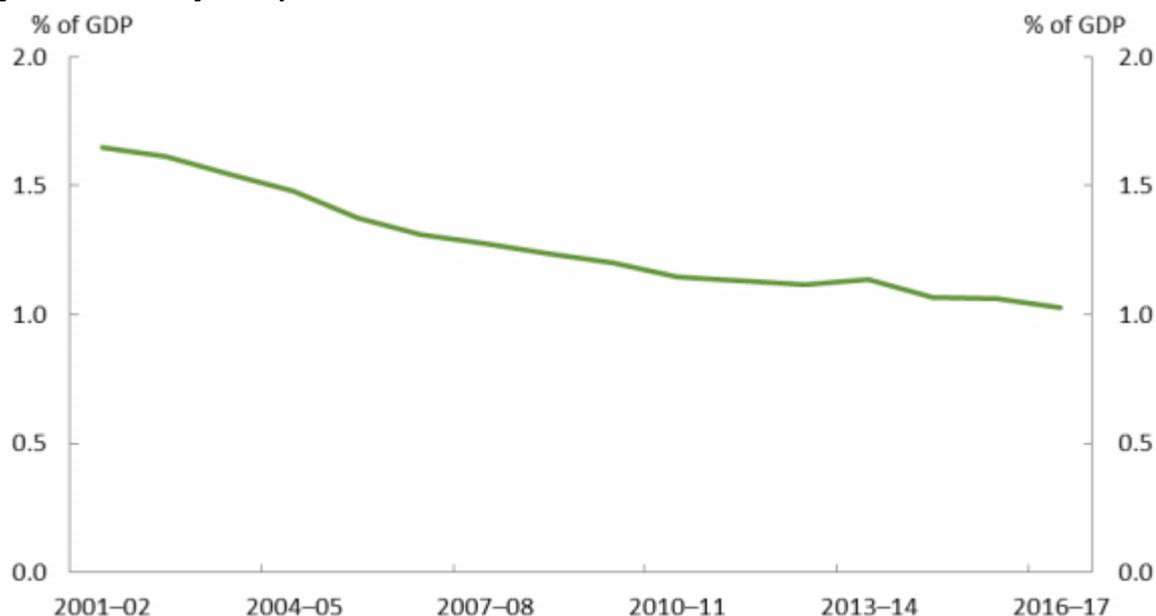
Source: [Productivity Commission](#) (2017)

¹⁹ Australian Government, April 2019, Liquid Fuel Security Review – Interim Report, 15.

²⁰ Ibid, 37.

²¹ While all Commonwealth revenue goes into consolidated revenue, the *Fuel Indexation (Road Funding) Special Account Act 2015* established a special account for additional revenue raised from the reintroduction of fuel indexation to be used for road infrastructure funding. The account is credited after the net revenue collected has been calculated. [Explanatory Memorandum](#), House of Representatives. This process is entirely cosmetic.

Figure 2: Fuel duty receipts



Note: Data includes excise and excise-equivalent duty.

Source: ATO, ABS, Final Budget Outcomes 2015-16 and 2016-17, and PBO analysis.

Source: [Parliamentary Budget Office](#) (2018)

The decline in fuel duty receipts has been driven by a decline in petrol duty, with diesel duty overtaking petrol duty as the largest contributor to fuel duty revenue in 2008-09.²²

Governments need to plan and implement road user charging for alternative fuels and electric vehicles, to ensure the revenue sustainability of transport infrastructure and broader government budgets. This charging mechanism could be set at lower levels initially to encourage uptake, but design and implementation of the mechanism needs to be a priority reform. This process will be more achievable whilst vehicle numbers remain a smaller portion of the vehicle fleet.

Ultimately, any plan to accelerate the change to alternative fuels and technology without implementing road user charging structure for those vehicles will simply be a plan to blow a hole in the sustainable funding of transport and other services.

Recommendation 5

The Australian Government should encourage a positive investment environment for the take up of newer and alternative fuelled vehicles, and for investment in refuelling/recharging infrastructure.

Recommendation 6

The Australian Government should design and implement road user charging for electric vehicles and other vehicles which do not pay existing fuel duty, even if initial charges are set low to encourage uptake.

²² Deloitte, 2013, [Road Pricing and Transport Infrastructure Funding: Reform Pathways for Australia](#), 8.

8. Investing in a national fuel reserve

The interim report provides a limited assessment of the potential for the Australian Government to hold physical fuel stocks as a part of its fuel security approach. It identifies that Australia has implemented an approach that has historically relied on market mechanisms and flexible international supply chains to manage fuel security risks. The approach assumes that a competitive market will guarantee reliable and affordable supply.²³

With Australia's competitive fuel prices by international standards and the increased flexibility and diversity in international supply chains as identified by the interim report, this approach has a number of benefits that should not be discarded lightly.

It is also worth noting that in terms of our international requirement to hold 90 days worth of stock, that Australia has the equivalent of 9 days of stock in international ports and 20 days enroute to Australia.²⁴

However, the IEA reported that despite having access to a long oil supply chain, Australia is vulnerable to unexpected changes in Asian regional demand patterns and to any disruptions of the main supplies from the Middle East, on which Asia and Australia are dependent. Australia's long supply chains provide additional time to respond to a supply shock, but low stock levels limit the options for addressing a disruption or responding to fluctuations in domestic demand.²⁵

The fuel security interim report identifies that other nations which rely on competitive markets, such as the United States, Japan and European countries, also take additional measures of holding stocks and market monitoring.²⁶ The report suggests that this approach contributes to the higher cost of fuel in these countries,²⁷ although it also points out that the largest stockholding is held in the United States²⁸ but that the United States is also one of the few countries to have lower prices than Australia.²⁹

Ultimately, the option of the Australian Government holding physical stock as part of our fuel security should not be dismissed by pointing to a broad statement about costs. More detailed assessment is needed, considering the vital economic importance of road freight and fuel security.

The ATA notes that a 2012 report, prepared for the Australian Government, estimated a levy of between 1.2 to 2.2 cents per litre would cover the then estimated cost of holding enough stock to return to international compliance.³⁰ The ultimate cost depends on a number of factors including the amount of international oil tickets and physical stock which is held.

Ultimately, a staged plan (that for Australian Government purposes could consider the level of stock enroute) would present a sensible, moderate policy option that would serve to strengthen the existing policy approach to liquid fuel security.

A national fuel reserve should include a number of mechanisms for holding physical stock. This could include incentives for transport businesses to hold stock above what is required for a just in time business model, which would provide a diverse option for holding stock across varying regions, better equipping Australia to respond to regional disruptions. ATA member association, Western Roads Federation, is a strong advocate of the potential for this approach.

Including physical stocks, in the form of a national fuel reserve, would also be consistent with similar international approaches to fuel security.

²³ Australian Government, April 2019, Liquid Fuel Security Review – Interim Report, 6.

²⁴ Ibid, 31.

²⁵ International Energy Agency, 2018, [Australia 2018 Review](#), 52.

²⁶ Australian Government, April 2019, Liquid Fuel Security Review – Interim Report, 6.

²⁷ Ibid, 40.

²⁸ Ibid, 40.

²⁹ Ibid, 6.

³⁰ Hale and Twomey, July 2012, [National Energy Security Assessment Identified Issues: Australia's International Energy Oil Obligation](#), iii.

Recommendation 7

The Australian Government should design and implement a staged plan for development of a national fuel reserve, to strengthen Australia's liquid fuel security approach and reliance on competitive markets.

9. Pricing fuel and upcoming supply issues

The interim report identifies two potential causes of increases to fuel prices within the next five years:

- A potential gap in production, identified by the IEA, where global demand will surpass supply.³¹
- New international shipping regulations to reduce sulfur emissions, which is expected to cause a spike in diesel demand around 2020 as the regulations come into effect.³²

At the same time, it is reported that the reliance of the Australian economy on road transport means that our demand for fuel relative to price is inelastic. That is, Australia continues to buy similar volumes of fuel even as prices increase.³³ **If both of the predicted short-term supply issues are to eventuate, it will impose a significant cost on the Australian economy within the next five years.**

³¹ Australian Government, April 2019, Liquid Fuel Security Review – Interim Report, 37.

³² Ibid, 15.

³³ Ibid, 36.