

Maritime Union of Australia

Submission to

**Senate Standing Committee on Rural and Regional
Affairs and Transport**

Inquiry into

**Australia's transport energy resilience and
sustainability**

14 November, 2014

This response has been prepared and submitted
on the basis that it is a public document.

Submitted by email: RRAT.Sen@aph.gov.au

Paddy Crumlin,
National Secretary,
Maritime Union of Australia
365 Sussex St, Level 2,
Sydney, NSW, 2000

Website: www.mua.org.au

1. Introduction

- 1.1. The Maritime Union of Australia (MUA) represents over 15,000 workers in the shipping, stevedoring, port services, offshore oil and gas and diving sectors of the Australian maritime industry.
- 1.2. Members of the MUA work in a range of occupations across all facets of the maritime sector including on coastal cargo vessels (dry bulk cargo, liquid bulk cargo, refrigerated cargo, project cargo, container cargo, general cargo) as well as passenger vessels, towage vessels, salvage vessels, dredges, ferries, cruise ships, recreational dive tourism vessels and in stevedoring and ports. In the offshore oil and gas industry, MUA members work in a variety of occupations on vessels which support offshore oil and gas exploration e.g. on drilling rigs, seismic vessels; in offshore oil and gas construction projects including construction barges, pipe-layers, cable-layers, rock-dumpers, dredges, accommodation vessels, support vessels; and during offshore oil and gas production, on Floating Production Storage and Offtake Tankers (FPSOs), FSOs and support vessels. MUA members work on LNG tankers engaged in international Liquefied Natural Gas (LNG) transportation. The MUA is a member of the International Transport Workers Federation (ITF) which is the peak global union federation for over 700 unions representing over 4.5 million transport and logistics workers worldwide.

2. Summary

- 2.1. This submission demonstrates the risks to Australian fuel security and environmental safety posed by our reliance on international-flag tankers chartered on the spot market for delivery of our liquid fuel supplies. Since 2004, international-flag tankers have been detained 122 times by the Australian Maritime Safety Authority (AMSA) for serious safety issues. The five Australian-crewed and managed tankers operating on long-term contracts have never been detained once in 36 years of service.
- 2.2. The submission also outlines risks to Australian fuel security which have not been considered by government assessments to date, including recent threats made by Al-Qaeda and the risk posed by relying on international-flag tankers for our fuel imports, ships which have no obligation to assist Australia in the event of a fuel emergency.
- 2.3. This submission draws the attention of Senators to the fuel-security implications of weakening the *Coastal Trading (Revitalising Australian Shipping) Act 2012*, which Minister Truss has foreshadowed legislating in late 2014 or early 2015.
- 2.4. This submission recommends:
 1. **To ensure adequate fuel security and environmental protection, the Australian government should mandate that companies importing fuel to Australia and carrying fuel domestically in Australia only contract Australian-flag ships to carry their cargos. These ships could be partly on the Australian International Shipping Register and partly on the Australian General Register to provide companies additional flexibility.**

- 2. That the Senate Standing Committee on Rural and Regional Affairs and Transport conduct a further inquiry into the related issue of gas supply, gas price, gas reserves, and rural and regional development in gas-producing areas.**

Contents

3. Government energy policy	3
4. Australian fuel security is declining	4
5. Shipping safety standards are declining	6
6. Case study: Vitol and the Tandara Spirit.....	11
7. The shipping supply chain is out of our hands	12
8. Increasing fuel safety and security through Australian shipping	16
9. Gas supply, price, reserves, and rural and regional development in gas-producing areas.....	17

3. Government energy policy

- 3.1. The MUA has made a similar submission to the Department of Industry consultation on the Energy White Paper.
- 3.2. We are concerned that in the Green Paper draft of the White Paper the first objective appears to be 'Attracting energy resources investment', inevitably for export.
- 3.3. We believe that the primary aim of government energy policy should be to ensure that Australians have access to secure and affordable energy supplies. These supplies should be generated with a view to the long-term security of the planet and the impact of climate change on our atmosphere. We urge the Senate Committee to make a statement to this effect, which ties into point b. of the Committee's Terms of Reference.
- 3.4. There are several critical energy issues which Australia is facing, issues which must be addressed by the Government:
 - The looming gas shortage and price increases in eastern Australia and especially NSW due to a huge increase in gas exports and no gas reservation or pricing policy.¹
 - The diminished fuel security caused by closure of **all** the petroleum refineries in NSW and the ACT. From September 2014 **all** fuel supplies for transport, aviation, industry and mining in NSW and the ACT will depend on international-flag tankers importing fuel to only three ports (Sydney, Port Botany, and Newcastle). One mid-size fuel tanker carries the equivalent of 1,000 truck tankers so replacement supplies cannot be transported from other states in the event of a disruption to these ports or ships.
 - The dramatic 46% decline in Australian fuel reserves since 2009, reserves which have become even more important since our reliance on imports has increased.
 - The significant increases in retail electricity prices, which have increased at a rate four times higher than CPI between 1995 and 2012, and are projected to continue to

¹ BIS Shrapnel, *The Economic Impact of LNG Exports on Manufacturing and the Economy – How should we respond to the looming crisis?*, September 2014.

increase.² Combined with an expected tripling of gas prices in two to three years, this will cause significant cost-of-living pressures on ordinary Australians, as well as Australian manufacturers.

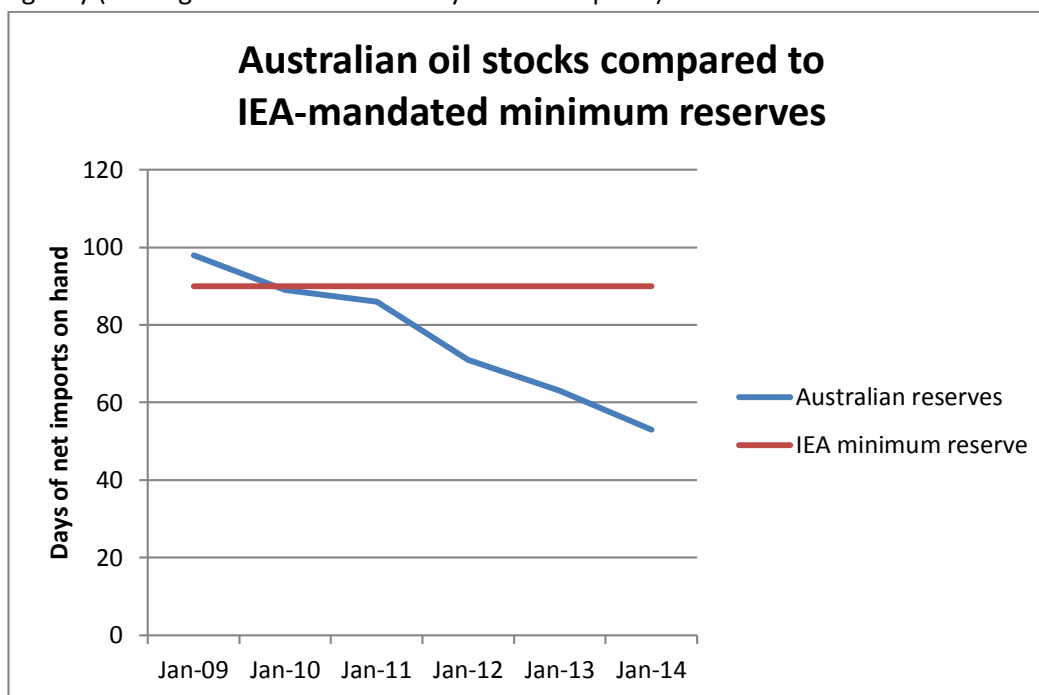
- 3.5. We are concerned that the government does not appear to be offering a solution to any of these issues, issues that will affect all Australians. It is frustrating that while the evidence shows that the privatisation and deregulation of the electricity market has led to much higher prices for consumers (despite promises to the contrary), the government continues to repeat the same mantra when it comes to liquid fuels and gas supply.

4. Australian fuel security is declining

- 4.1. The MUA welcomes this Senate inquiry and applauds the initiative of the Committee and Senators who have arranged for it to take place.
- 4.2. The MUA supports the concerns about fuel security raised by the NRMA in their February 2014 Energy White Paper Issues Paper submission, and their November 2014 Green Paper submission. We support their call for a Transport Energy Plan for Australia. We wish to add the following points.
- 4.3. Liquid fuel supply is dependent on the capacity of existing local transport networks and supply chains. The closure of Australian refineries particularly affects NSW and the ACT, where as of September 2014 there are no operational refineries. Ships are now critical to all fuel supplies for transport, aviation, industry and mining in NSW and the ACT. All fuel will depend on international-flag tankers importing fuel to only three ports (Sydney, Port Botany, and Newcastle).
- 4.4. One fuel tanker (MR size) carries the equivalent fuel of 1,000 truck tankers so it is simply not possible to transport replacement supplies by road from refineries in Brisbane or Melbourne in the event of a disruption to these ports or ships.
- 4.5. The precarious nature of Australia's liquid fuel supply is further increased by the dramatic 46% decline in the International Energy Agency (IEA)-recorded Australian fuel reserves since 2009 (Figure 1). Australia has not met the IEA's 90-day minimum of stocks on hand since 2009. In 2009, Australia held 98 days of net imports according to the IEA's method of calculation - far lower than the reserves held by the US, UK, Germany and Japan, but on par with Greece, France, New Zealand, Luxembourg, Spain and Turkey. In 2014, reserves have fallen to only 53 days of net imports, far lower than any other IEA member (the next lowest is Luxembourg at 90 days).

² David Richardson, *Electricity and privatisation: What happened to those promises?*, The Australia Institute Technical Brief No. 22, April 2013.

Figure 1: Australian oil stocks on hand in days of net imports, according to the International Energy Agency (Closing Oil Stock Levels in Days of Net Imports).



Source: www.iea.org/netimports/

- 4.6. However, the IEA method of counting reserves is over-estimates the real quantities of stocks available for use. The Bureau of Resource and Energy Economics says that Australia had 20 days of automotive gasoline, 17 days of diesel, and 18 days of aviation turbine fuel on hand at the end of August 2014.³ The NRMA has made the following estimates of the fuel stocks available for ordinary people:
- 3 days of fuel supplies at petrol stations;
 - 3 days of hospital pharmacy supplies;
 - 7 days of retail pharmacy supplies;
 - 7 days of chilled and frozen foods stocks; and
 - 9 days of dry goods stocks.⁴
- 4.7. The decline in fuel reserves should be of concern given that domestic fuel demand is increasing, while domestic production is decreasing.
- 4.8. One reason for the declining stock levels may be the restructuring of the Australian fuel companies – not only the closure of refineries, but the entry of new fuel trading companies. The IEA explains that “the Australian government relies on the normal stockholding practices of the domestic oil industry to meet its 90-day net import obligation as a member of the IEA.”⁵ Yet as the domestic oil industry changes, companies may be changing their storage

³ Bureau of Resource and Energy Economics, Australian Petroleum Statistics, Issue no.217, August 2014, Table 7.

⁴ NRMA Motoring & Services Response to the Australian Government Energy White Paper Issues Paper 2014, p.1.

⁵ www.iea.org/netimports/

policies and practices. It is a significant risk that the Australian government provides no regulation of these reserves.

5. Shipping is becoming more important to our fuel security, but safety standards are declining

- 5.1. The reduction in domestic refineries, reduction in fuel reserves, increasing fuel use and increasing reliance on just-in-time imports means that Australia's reliance on shipping for its fuel supplies has increased significantly.
- 5.2. Although Australia has been reliant on imported crude oil for its refineries for a long period of time, the fuel stocks held inside the country were greater at that time and the operation of domestic refineries gave companies more flexibility.
- 5.3. Australian fuel supplies rely on domestic shipping, to re-distribute fuel between land transport hubs, and on international shipping, to import fuel.
- 5.4. Most domestic shipping is carried out by five Australian-crewed tankers on long-term charter to BP, Caltex and Vitol/Viva (previously Shell). These ships are the *Alexander Spirit* and *Hugli Spirit* (Caltex), the *British Loyalty* and *British Fidelity* (BP), and the *Tandara Spirit* (Shell/Vitol). These five tankers carry 4-5 million tonnes of refined product around the Australian coast each year. The direct control that fuel companies have over these tankers offers an important level of flexibility, in both the transportation and temporary storage of refined fuel products.
- 5.5. These five Australian-crewed tankers are scrupulously maintained and have *never* been detained by the Australian Maritime Safety Authority's (AMSA) Port State Control safety inspections over a combined 36 years of service and 95 ship inspections (Table 1). Australian crews are long-serving seafarers that are multi-skilled with the highest attention to detail and standards of ship maintenance.

Table 1: Australian-crewed petroleum tankers on long term contracts to Australian oil companies.

	Operating since	Flag	Crew	Port State Control inspections	Detentions
British Loyalty	2004	Isle of Man (long term charter in Australia)	Australian	32	0
British Fidelity	2004	Isle of Man (long term charter in Australia)	Australian	22	0
Hugli Spirit	2005	Bahamas (long term charter in Australia)	Australian	15	0
Alexander Spirit	2007	Bahamas (long term charter in Australia)	Australian	14	0
Tandara Spirit	2008	Marshall I (long term charter in Australia)	Australian	12	0
Total				95	0

Source: IHS Fairplay 'Sea-web' commercial ship database, listing for each ship.

- 5.6. International petroleum imports, and an increasing amount of domestic shipping, are undertaken on international-flag and crewed tankers. In contrast to the excellent record of the Australian-crewed ships, international-flag tankers have been found to have hundreds of deficiencies that are so serious that they are detained an average of 12 times per year by AMSA's Port State Control safety inspectors (Table 2).
- 5.7. Detentions by AMSA inspectors hold a ship in port until it can demonstrate that the required improvements have been made. They are a harsh measure that AMSA does not undertake lightly. In most cases, ships with deficiencies are given notices to improve and allowed to proceed according to their schedule. AMSA explains that ships are only detained: 'to ensure that the ship will not sail until it can proceed to sea without presenting a danger to the ship or persons on board, or without presenting an unreasonable threat of harm to the marine environment, whether or not such action will affect the normal schedule of the departure of the ship'.⁶
- 5.8. AMSA further explains that detentions take place when they find 'serious deterioration of the hull structure, overloading, defective equipment such as lifesaving, radio, and fire-fighting appliances, poor operational practices and poor conditions [which] may cause a ship to be considered as unseaworthy or substandard'.⁷ In 2013, most ships were detained because of deficiencies found in their International Safety Management compliance, fire safety, lifesaving appliances, pollution prevention, and emergency systems.⁸

⁶ Australian Maritime Safety Authority, *Port State Control 2010 Report Australia*, p. 18.

⁷ Australian Maritime Safety Authority, *Port State Control 2010 Report Australia*, p. 18.

⁸ Australian Maritime Safety Authority, *Port State Control 2013 Report Australia*, Table 8.

- 5.9. Since 2004, international-flagged and crewed tankers have been detained by AMSA 122 times, in contrast to no detentions at all for the Australian-crewed tankers (Table 2).

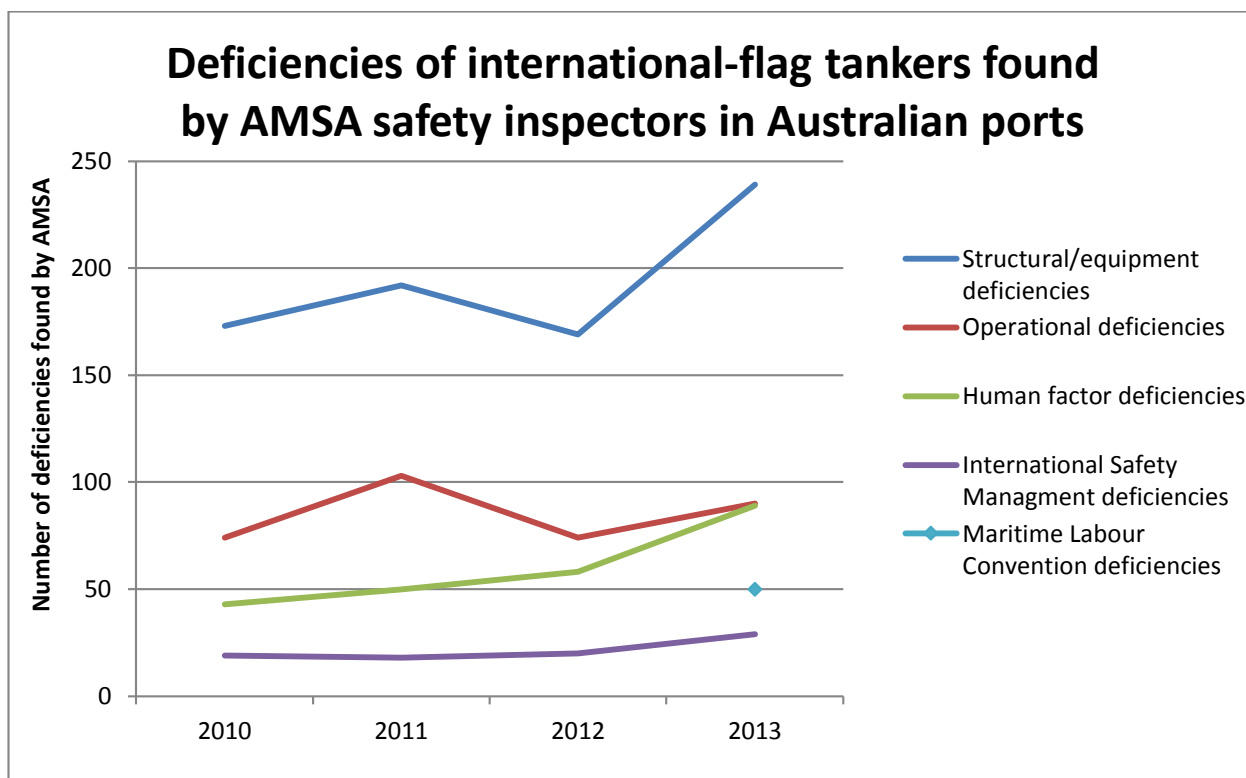
Table 2: AMSA Port State Control detentions of international-flag tankers in Australian ports.

	Detentions of international-flag tankers per year
2004	8
2005	11
2006	7
2007	16
2008	14
2009	13
2010	11
2011	17
2012	12
2013	13
TOTAL	122
AVERAGE PER YEAR	12.2

Source: Australian Maritime Safety Authority, *Port State Control Report 2004-2013*. Table 9 in each annual report. 'Tankers' includes 'chemical tankers', 'oil tankers', 'Noxious Liquid Substance tankers', and 'Tankers not otherwise specified'. All of these types of tankers are engaged in carrying refined petroleum products.

- 5.10. The total number of deficiencies found by AMSA safety inspectors on international-flag tankers in Australian ports tankers has increased 45% over the past 4 years (not including the new category of 'Maritime Labour Convention deficiencies' added in 2013). There were a total of 497 deficiencies found in 2013, up from 309 in 2010 (Figure 2). There are a particularly high and increasing number of what AMSA describes as 'structural/equipment deficiencies' on tankers visiting Australia.

Figure 2: Deficiencies on international-flag tankers found by AMSA safety inspectors in Australian ports.



Source: Australian Maritime Safety Authority, *Port State Control Report 2010-2013*. Table 7 in each annual report. 'Tankers' includes 'chemical tankers', 'oil tankers', 'Noxious Liquid Substance tankers', and 'Tankers not otherwise specified'. All of these types of tankers are engaged in carrying refined petroleum products.

- 5.11. AMSA reported that international-flag 'Noxious Liquid Substances Tankers' (which would include refined product tankers) were the 2nd most likely type of ship to be detained in 2013.
- 5.12. AMSA says that for the international-flag ships 'the relatively high proportion of detainable deficiencies attributable to the International Safety Management category continues to remain a major cause of concern as it indicates that the management of ships is not as effective as desired'.⁹
- 5.13. The deficiencies that AMSA has identified on international-flag ships are only part of the problem. AMSA was only able to inspect 54% of the international ships that visited Australia in 2013.¹⁰
- 5.14. An increasing quantity of coastal refined petroleum cargos are being carried by international-flag ships with poorer safety records (Table 3). Multinational fuel companies operating in Australia have been reducing their use of Australian crews and Australian-flag ships for cargos loaded and discharged in Australia, despite their excellent safety record. For example, in 2011, Shell removed the Australian crew from the tanker the *Araluen Spirit*, and sold the ship.

⁹ Australian Maritime Safety Authority, *Port State Control 2013 Report Australia*, p. 14.

¹⁰ Australian Maritime Safety Authority, *Port State Control 2013 Report Australia*, p. 3.

Shell continued to import growing volumes of refined fuel, but used international-flagged crews and ships instead.

5.15. Disturbingly, at least two other multinational oil companies plan to end their long-term tanker contracts and remove the Australian crew from at least two Australian tankers:

- BP, who operate the *British Fidelity*, and
- Vitol (a Swiss oil trading company who recently purchased Shell's refinery business in Australia), who operate the *Tandara Spirit* (more details below).

5.16. There has already been a 47% increase in domestic voyages by international-flag ships and a 67% increase in the tonnage of refined petroleum these ships carry from 2011-12 to 2013 (Table 3).¹¹

Table 3: Increase in international flagged and crewed tankers carrying refined petroleum in domestic trades. These are only voyages loading and discharging in Australia and travelling interstate. These figures do not include intra-state voyages and tankers hopping from port to port delivering international imports.

International-flag ships on domestic voyages carrying refined petroleum	2011-12	2013
Number of domestic voyages	152	223
Tonnes of refined petroleum	1,150,707	1,924,628

Source: 2011-12 figures are from a database of Single Voyage Permits and Continuing Voyage Permits supplied to the MUA by the Department of Infrastructure and Transport. 2013 figures are from an analysis of a Temporary Licence Voyage Reports available at: www.infrastructure.gov.au/maritime/business/coastal_trading/licencing/voyage_reports.aspx.

5.17. Minister Truss has, on several occasions, indicated that intends to make significant changes to the *Coastal Trading (Revitalising Australian Shipping) Act 2012*. A Review of the Act was carried out earlier in 2014, and legislation may be introduced later in 2014 or in early 2015. A weakening of this act would further undermine the current Australian-crewed tankers and encourage companies to replace them with international-flagged and crewed tankers. In turn, this would further weaken Australia's already-fragile fuel security.

5.18. Australia's increasing reliance on international flagged and crewed ships, which have a demonstrably poorer safety record, for domestic petroleum deliveries and international petroleum imports, is an accident waiting to happen.

¹¹ Note that the definition of 'domestic voyage' means that the cargo must be loaded and discharged in Australia. A ship importing an international cargo in multiple ports is considered to be on an international voyages even if it is travelling between Australian ports.

6. Case study: Vitol and the Tandara Spirit

- 6.1. Vitol is a Swiss oil trading company who say they are the world's largest independent oil trading company. They purchased Shell's refinery business in Australia in August 2014, and trade under the name 'Viva Energy Australia'. They are now the operators of the Geelong refinery and have stated their intention to keep the refinery open, a decision the MUA welcomes.
- 6.2. However, we have serious concerns about their record in shipping. On 6 November, the crew of the *Tandara Spirit* were notified that Vitol would not be renewing the *Tandara Spirit*'s contract, and the ship would shortly be bound for Singapore. The matter is currently in dispute in the Fair Work Commission.
- 6.3. We note the outstanding safety record of the *Tandara Spirit*, which has been inspected 11 times by AMSA and once in New Zealand. The only deficiencies ever noted during that time were four, mainly to do with certificates and paperwork, in the very first inspection that took place shortly after the ship was launched in 2008. The ship has never been detained.
- 6.4. This outstanding record of the *Tandara Spirit* is in contrast with many of the ship spot-chartering decisions that Vitol has recently made. Vitol chartered the *Vinalines Galaxy* to load a cargo of fuel in Singapore to discharge in Geelong, and then to load further cargo in Geelong to carry to Adelaide. The domestic cargo was loaded on 8 November. It was a cargo that the *Tandara Spirit* was originally supposed to carry, and which the *Tandara Spirit* could carry. The *Vinalines Galaxy* is a Vietnamese flag ship that is only 7 years old, but it has already been detained twice, in Russia and Korea. Safety inspectors around the world have found 89 deficiencies on this ship – including in China, Saudi Arabia, Korea, Guam, the USA, and Russia. Every time AMSA safety inspectors have looked at this ship, they have found deficiencies – including with the ships fire safety, pollution prevention, and safety of navigation.¹² AMSA statistics clearly show that Vietnamese flag ships have a poor safety record, but Vitol are nonetheless chartering them into Australian waters.
- 6.5. The *Vinalines Galaxy* was inspected by International Transport Workers' Federation inspectors at its discharge location in Geelong on 14 November. They found that the crew were being paid approximately \$2 per hour.
- 6.6. At the end of October 2014, Vitol had the *Neverland Dream* import crude oil to its Geelong refinery. AMSA came to inspect the ship and detained it on the spot because they did not have the minimum number of crew on board according to the ship's Minimum Safe Manning certificate. That ship is Italian flag, another registry that AMSA rates as having a high level of detentions and deficiencies.
- 6.7. Earlier in October 2014, Vitol used the Panama-flag *Golden Taka* to carry petroleum from Geelong to Brisbane and Townsville, through the Great Barrier Reef. That ship has also been

¹² IHS Fairplay 'Sea-web' commercial ship database, listing for the *Vinalines Galaxy*.

previously detained by AMSA in Melbourne, and inspectors have consistently found fire safety deficiencies on that ship, in Townsville, Brisbane, Melbourne, and China.

- 6.8. Vitol claims that there are not sufficient domestic cargos to justify keeping the *Tandara Spirit* in Australia until the end of its charter on January 31, 2015, or to extend the ship's charter. However, the MUA have identified 16 Temporary Licences from the Department of Infrastructure and Regional Development that Vitol has applied for to carry domestic cargos loading at the Geelong refinery to be carried to other Australian ports, between 5 November and 5 February. This is more than enough cargo to keep the *Tandara Spirit* employed and safely carrying petroleum cargos around the coast of Australia.
- 6.9. It appears that Vitol wants to end the *Tandara Spirit*'s charter as a cost-cutting exercise. The result is a transfer of petroleum cargos from safe ships on long-term charter with stable crew in decent jobs, to a merry-go-round of hundreds of ships with poor safety records, no long-term relationship with Australian maritime safety authorities, and crews paid \$2 per hour. This benefits no one but Vitol's owners.
- 6.10. The loss of the *Tandara Spirit* could have a flow-on effect in undermining confidence in the Australian tanker fleet, and contribute to the loss of the four remaining tankers.
- 6.11. Finally, it should be noted that the 'Ultimate Holding Company' of Viva Energy Australia listed with ASIC is 'Vitol Investment Partnership Limited', registered in Jersey. Jersey is a well-known financial secrecy jurisdiction. The main reasons that companies are registered in Jersey is to avoid paying taxes in the countries they operate in and/or to obfuscate their financial dealings. While not illegal, this is unfortunate. Vitol are reportedly significant tax avoiders in the UK.¹³

7. Shipping is becoming more important to our fuel security, but the supply chain is out of our hands

- 7.1. The Australian Institute of Petroleum (AIP) has been keen to assure the Australian public that the fuel supply chain is secure.¹⁴ However, it must be remembered that the key members of the AIP are the multinational companies such as BP, Shell and Caltex/Chevron that have been closing Australian fuel refineries. The reason these companies have been doing this is that they can get a greater return on their investments in other areas of their business, such as crude oil exploration and production. They would rather not invest in the maintenance required to retain Australia's refining infrastructure. Companies also say that fuel is produced more cheaply in the Asian mega-refineries than in Australia.

¹³ Jim Armitage, The Tory donor whose firm is one of Britain's biggest tax avoiders - with HMRC's blessing, *The Independent*, 23 July 2014.

¹⁴ Australian Institute of Petroleum, *Maintaining supply security and reliability for liquid fuels in Australia*.

- 7.2. The Australian Institute of Petroleum and a report completed for the Department of Resources, Energy and Tourism (DRET) argue that the international supply chain now required to supply Australia's fuel needs is secure because the stock of fuel on ships gives companies additional flexibility to deal with any potential problems.¹⁵
- 7.3. The DRET report purported to examine threats to Australia's fuel security, and concluded as follows:

"Two scenarios were developed to consider how the shipping market would respond in a supply chain disruption.

- In the case of domestic refinery disruption, it is likely to be timely product supply rather than ship availability that will impact the resupply options.
- While a scenario can be contemplated which redirects cargoes committed to the Australian supply chain, the practical, commercial, legal and reputational issues associated with such an act would present a significant challenge to a company taking action of that kind.

In reality it is difficult to envisage a scenario in which shipping is not available and historically we cannot point to an event which saw the collapse of the petroleum tanker market. Supply disruption affecting tankers is far more likely to arise as a result of other components in the supply chain (e.g. disruption to liquidity in the banking system, geopolitical events)."¹⁶

- 7.4. However, there are several plausible energy security problems that the DRET report did not consider. These are outlined below.
- 7.5. Previous assessments of energy security argued that the diverse sources of refined petroleum provided security. However, 43% of Australia's imported petroleum came from Singapore in 2013-14 (10,487.6 ML out of the total 24,493.5 ML of refined petroleum imports). Singapore supplies twice as much fuel to Australia as Japan or Korea.¹⁷
- 7.6. It has recently emerged that: 'Al Qaeda has urged jihadists to attack oil tankers in two maritime hotspots that supply Australia with up to 70 per cent of its petrol. In the first issue of its English language propaganda magazine *Resurgence*, the terror group identifies the "energy umbilical cord" sustaining western economies and describes fuel pipelines and shipping lanes as the "Achilles heel of western economies dependent on oil from the Muslim world". The magazine includes a map of shipping "choke points" it says are ripe for sabotage

¹⁵ Australian Institute of Petroleum, *Maintaining supply security and reliability for liquid fuels in Australia*, and Hale and Twomey, 2013, *Australia's Maritime Petroleum Supply Chain*, report prepared for the Dept of Resources, Energy and Tourism, 27 June 2013.

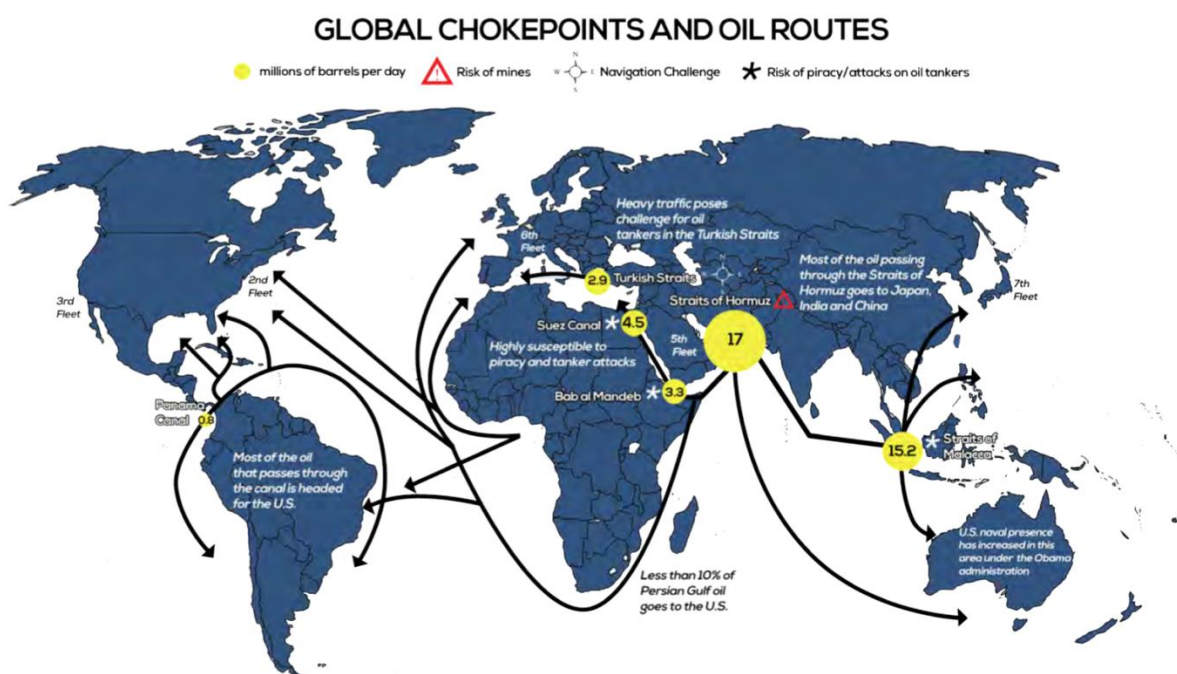
¹⁶ Hale and Twomey, 2013, *Australia's Maritime Petroleum Supply Chain*, report prepared for the Dept of Resources, Energy and Tourism, 27 June 2013, p. i.

¹⁷ Bureau of Resource and Energy Economics, Australian Petroleum Statistics, Issue no.217, August 2014, Table 4B.

and a diagram of the fuel routes between the Persian Gulf, Singapore and Australia.¹⁸ (Figure 3).

- 7.7. In the event of any security issue in Singapore, the largest source of Australian fuel imports, we could try to source replacement fuel from Japan or Korea. However, it is a longer voyage to Australia from these countries and replacement supplies may not be available.

Figure 3: Diagram of petroleum shipping routes from Al-Qaeda magazine, highlighting vulnerable areas.



- 7.8. The DRET report on the security of Australia's maritime supply chain showed that most imports of refined petroleum are done using the shipping spot market, with the ship contracted to carry the cargo only 2-3 weeks before the cargo is loaded.¹⁹ Tankers operating on the spot market are all international-flag, international-owned and international-managed ships that operate internationally. They shift from one contract to another, and hold multiple contracts in any one year.
- 7.9. In the event of a fuel emergency in Australia, Australian companies and/or the Australian government would need to be able to direct and re-direct ships to the necessary load and discharge ports in order to address the emergency. The problem they would encounter is that all the international-flag tankers they use for international imports have no obligation to assist the Australian government or Australian companies, particularly if this meant changing

¹⁸ Heath Aston, Al Qaeda threatens Australian fuel supplies, *Sydney Morning Herald*, November 1, 2014.

¹⁹ Hale and Twomey, 2013, *Australia's Maritime Petroleum Supply Chain*, report prepared for the Dept of Resources, Energy and Tourism, 27 June 2013, p. 19, 25.

the terms of their contract (which on the spot market, is only for one voyage). These tankers could easily be directed by their owners or managers to fulfil other contracts outside Australia if these owners or managers preferred.

- 7.10. If the nature of the Australian fuel emergency was such that shipowners had to put their ship at some risk to travel to Australia, the international owners and managers of the tankers on the spot market could easily choose to avoid this risk and seek contracts elsewhere. Tankers are multi-million dollars pieces of advanced machinery, and owners are under no obligation to put their investments at risk.
- 7.11. The use of the tanker spot market means that different international-flag ships are used on each voyage to Australia. This means that AMSA's safety inspectors are on a constant treadmill of inspecting a large number of ships that are new to Australian ports, and there is no incentive for ships to consistently improve and maintain ships to the high standards that AMSA expect. One indication of this high turnover of ships is that 89 different international-flag tankers were used on 222 domestic voyages carrying refined petroleum in 2012-13 (Appendix 1).²⁰ These ships carried just under 2 million tonnes of refined petroleum in 2013, an amount that could be carried on 2-3 dedicated domestic tankers on long-term charter.
- 7.12. The DRET report does not consider the risk of relying completely on a very few fuel import terminals. For example, Caltex say that they supply 40-50% of the NSW and ACT total fuel supply, and from 2014 they will be 'totally reliant' on their berth in Kurnell for the supply of petroleum products. This berth is 'at the hub of Caltex's entire supply chain for NSW and the ACT'.²¹ There are only three ports in NSW and the ACT with fuel import berths: Port Botany, Sydney and Newcastle.
- 7.13. Fuel supply in NSW and the ACT in particular is vulnerable to disruption at fuel import terminals as there are no refineries in that state and territory, limited quantities of reserves, high population, high demand for fuels, and significant congestion around port areas.
- 7.14. Fuel contamination is another risk. In July 2014 high-sulfur S77 fuel was supposed to be discharged from a tanker to a fuel terminal in Sydney Harbour on but its recipient, the Australian Navy, refused to accept the fuel because upon testing it was found to be contaminated and suffering from 'Fuel Blockage Tendency'. The S77 fuel was loaded at the Oil Tanking refinery in Singapore in June 2014.

²⁰ From analysis of Temporary Licence Voyage Reports available from:

https://www.infrastructure.gov.au/maritime/business/coastal_trading/licencing/voyage_reports.aspx

²¹ Caltex, 2013 *Environmental Impact Statement: Kurnell Ports and Berthing Facility, Volume 1*, February 2013, p.2-1.

8. Increasing fuel safety and security through Australian shipping

- 8.1. Australia is more reliant than ever before on shipping for its fuel security. Yet companies are shifting to use international-flag, international-owned, international-managed and international-crewed ships with demonstrably poorer safety records than Australian-crewed and managed tankers (section 5). Australian companies and the Australian government do not have the capacity to take control of and re-direct these tankers in the event of a fuel emergency in Australia. The use of the spot market to charter tankers contributes to the persistently high rates of deficiencies and detentions as it leads to a very high turnover of tankers used for imports to Australia, with no incentive for improvements if the ship is not scheduled to return to Australia.
- 8.2. **Recommendation 1: To ensure adequate fuel security and environmental protection, the Australian government should mandate that Australian companies importing fuel to Australia and carrying fuel domestically in Australia only contract Australian-flag ships to carry their cargos. These ships could be partly on the Australian International Shipping Register and partly on the Australian General Register to provide companies additional flexibility.**
- 8.3. Using Australian-flag ships would give the Australian government and fuel companies additional flexibility and security by giving them the ability to take control of and re-direct ships in the event of a fuel emergency. It would also ensure the maximum environmental safety and highest standards for ships regularly travelling in Australian waters carrying petroleum products.
- 8.4. Using Australian-flag ships would contribute to the maintenance of a maritime skills base in Australia, which is essential to the continued smooth operation of Australian ports, the maintenance of shipping expertise in Australian import and export companies. This is not a trivial matter as Australian imports and exports on ships using Australian ports was valued at \$406 billion in 2012-13.²² Maritime skills are also important to the protection of the Australian coastal environment.
- 8.5. The contract structure currently used by Australian companies to import petroleum is adaptable to this recommendation. Fuel is purchased 'Free on Board' (FOB), which means that the Australian fuel importer is responsible for arranging the shipping and owns the fuel from the time it is loaded on to the ship.²³ Australian fuel importing companies could arrange to use Australian-flag ships on long-term contracts to carry this fuel instead of relying on the spot tanker market.

²² Department of Infrastructure and Regional Development, *Australian Sea Freight 2012-13*, p.3.

²³ Hale and Twomey, 2013, *Australia's Maritime Petroleum Supply Chain*, report prepared for the Dept of Resources, Energy and Tourism, 27 June 2013, p. 18-19

9. Gas supply, gas price, gas reserves, and rural and regional development in gas-producing areas

- 9.1. There are 8 LNG projects under construction in Australia, all focused on exporting LNG. Once the first exports from Gladstone begin in December 2014, it is expected that gas prices in eastern Australia will triple, with significant impacts on manufacturers and consumers, and potential loss of thousands of jobs. At the same time, companies seeking to sell gas for a higher price will likely re-direct Queensland's currently supply of gas to NSW to the export market, leaving NSW with potential shortfalls in supply.²⁴
- 9.2. The four LNG projects under construction on the east coast are all located in Gladstone, Queensland. There is significant community concern in Gladstone about what will happen once construction of the LNG plants ends. This is a small town of only 32,000 people. Approximately 10,000 workers are engaged in building the three Gladstone LNG plants. This boom has meant that rent, house prices and cost of living have skyrocketed. Many locals have been forced to leave the town because they could not afford to stay. A two-tier economy has developed between the LNG projects and the rest of the town. It is 8% more expensive to live in the small town of Gladstone than in Brisbane, which has a population of 2.2 million.
- 9.3. The number of workers on the LNG plants in Gladstone will reduce to about 450 across all three plants once construction is fully completed in 2016. The contracts for thousands of workers will be ending in 2015. Unemployment is starting to increase. Aboriginal unemployment for the region is more than 16%. Unemployment could potentially double by 2016.
- 9.4. A survey of local businesses carried out this year by the Gladstone Chamber of Commerce and Industry found that 20% of businesses said they would be reducing staff within the next year.
- 9.5. After huge increases in property prices, there are concerns that these could crash after construction ends, leading some people to lose their homes.
- 9.6. LNG companies will be paying royalties to the Queensland government. However, despite the Queensland government implementing a 'Royalties for Regions' program, **none** of this money is going into Gladstone.²⁵ The mayor and the deputy mayor of Gladstone have expressed their concern about the lack of broader community benefit that these enormous projects will bring to Gladstone.

²⁴ BIS Shrapnel, *The Economic Impact of LNG Exports on Manufacturing and the Economy – How should we respond to the looming crisis?*, September 2014. Available from http://www.reserveourgas.com.au/economic_report.

²⁵ Nicky Moffat, Royalties program a con job, critics say, *The Gladstone Observer*, 9 September 2014.

- 9.7. Despite these significant disruptions, it is estimated that profits from LNG exports repatriated out of Australia will rise from the current \$7.2 billion annually to \$26.6 billion annually in 2023.
- 9.8. The initial capital expenditure on these LNG projects is tax-deductible, so in the 'early years' of production some of the Gladstone LNG plant operators have said they will pay no tax to the federal government at all on their profits.
- 9.9. The Maritime Union of Australia estimates that approximately 80 full-time LNG vessels will be required to export gas from the LNG project currently under construction, with a vessel loading a cargo every single day once all the projects are complete. About 2,500 seafarers will be required to crew these ships. **Yet not a single person from Gladstone, Queensland, the Northern Territory, or West Australia is likely to be employed on these ships.** Even a small portion of these jobs would make a big difference to the communities in which the LNG projects are being constructed.
- 9.10. Four of the vessels exporting LNG from the North-west Shelf project in West Australia have been crewed by Australians for over 25 years. Hundreds of families have been raised and mortgages have been paid off on the basis of these jobs. These seafarers have carried 4,000 shipments of LNG in that time, with no labour disruptions.
- 9.11. We understand that there is some concern from companies about lack of qualified crew for all the new LNG ships which will be launched in the next few years. There are many very well qualified and experienced crew in Australia who would be very happy to make a long-term commitment to crew these ships. We should also be training young people and Aboriginal people to carry out these jobs – successful projects like this have been carried out.
- 9.12. The cost of crew wages on LNG tankers is tiny compared to the value of the cargo that LNG tankers carry. Depending on the number of cargos and the price of gas, each of the approximately 80 LNG tankers operating will carry between \$500 million and \$1 billion worth of LNG each year.
- 9.13. The MUA is currently campaigning for LNG export tankers to have Australian crew. We believe this is a very modest contribution that companies could make to the Australian economy that would have direct benefits in rural and regional Australia where these projects have had such an impact.
- 9.14. The MUA also supports a domestic gas reservation policy for Australia, as outlined in the BIS Shrapnel report *The Economic Impact of LNG Exports on Manufacturing and the Economy – How should we respond to the looming crisis?*
- 9.15. **Recommendation 2: That the Senate Standing Committee on Rural and Regional Affairs and Transport conduct a further inquiry into the related issue of gas supply, gas price, gas reserves, and rural and regional development in gas-producing areas.**

Appendix 1: International flag tankers making domestic refined petroleum voyages in Australia in 2013

International-flag tankers carrying refined petroleum on voyages loading and discharging in Australian ports using a Temporary Licence in 2013. 222 of these voyages were carried out in 2013 on 89 different ships.

These ships would have been chartered by fuel companies to import fuel to Australia, and would carry out domestic voyages opportunistically to complement their primary import voyage. The ships listed represent a sample of all the international-flag tankers importing refined petroleum into Australia.

Table 4: International-flag tankers carrying refined petroleum on domestic Temporary Licence voyages in 2013.

Name of ship	Number of voyages in Australia in 2013
Ocean Autumn	10
Challenge Paragon	9
HIGH COURAGE	9
Unique Fidelity	9
Challenge Plus	8
British Chivalry	7
Eagle Milan	7
Ocean Stellar	7
Iver Excel	6
High Endeavour	5
Iver Express	5
Ocean Summer	5
Turmoil	5
British Integrity	4
British Liberty	4
British Unity	4
Pacific Rainbow	4
Stolt Suisen	4
Value	4
Yayoi Express	4
Advance 2	3
Challenge Polaris	3
Challenge Procyon	3
Doric Pioneer	3
High Prosperity	3
Norca	3
Unique Developer	3
Ardmore Seafarer	2
Atlantic Eagle	2
British Tenacity	2

Caribbean Spirit	2
Chembulk Wellington	2
Dai Nam	2
Eships Maya	2
HAI CHI	2
Maersk Miyajima	2
Maple Express	2
Mearsk Miyajima	2
Ocean Globe	2
Ocean Mars	2
Ocean Sunrise	2
Orient Star	2
Pro Emerald	2
Stolt Rindo	2
Sunda Sea	2
Ye Chi	2
Alice	1
AXIOS	1
Barent Sea	1
British Curlew	1
British Security	1
Britto	1
Castor Voyager	1
Challegne Plus	1
Challegne Premier	1
CHANG HANG GUANG RONG	1
Chang Hang Tan Suo	1
CHANG HANG XING YUN	1
Citron	1
DL SUNFLOWER	1
Framura	1
Gan Tribute	1
Gan Triumph	1
Golden Accord	1
Golden Tiffany	1
He Chi	1
High Glow	1
High Valor	1
HONGBO	1
KWK Esteem	1
Maria Princess	1
Noble Express	1
Nord Optimisor	1
OCEAN MOONBEAM	1

Ocean Spring	1
Petrolimex	1
Pro Jade	1
Pro Sapphire	1
Ratna Namrata	1
Sapporo Princes	1
Seachance	1
Star Bird	1
Stavanger Blossom	1
Stolt Azami	1
Stolt Sakura	1
STX ACE 10	1
Torm Almena	1
Wei Chi	1
Zhu Jiang	1
TOTAL	222

Source: https://www.infrastructure.gov.au/maritime/business/coastal_trading/licencing/voyage_reports.aspx