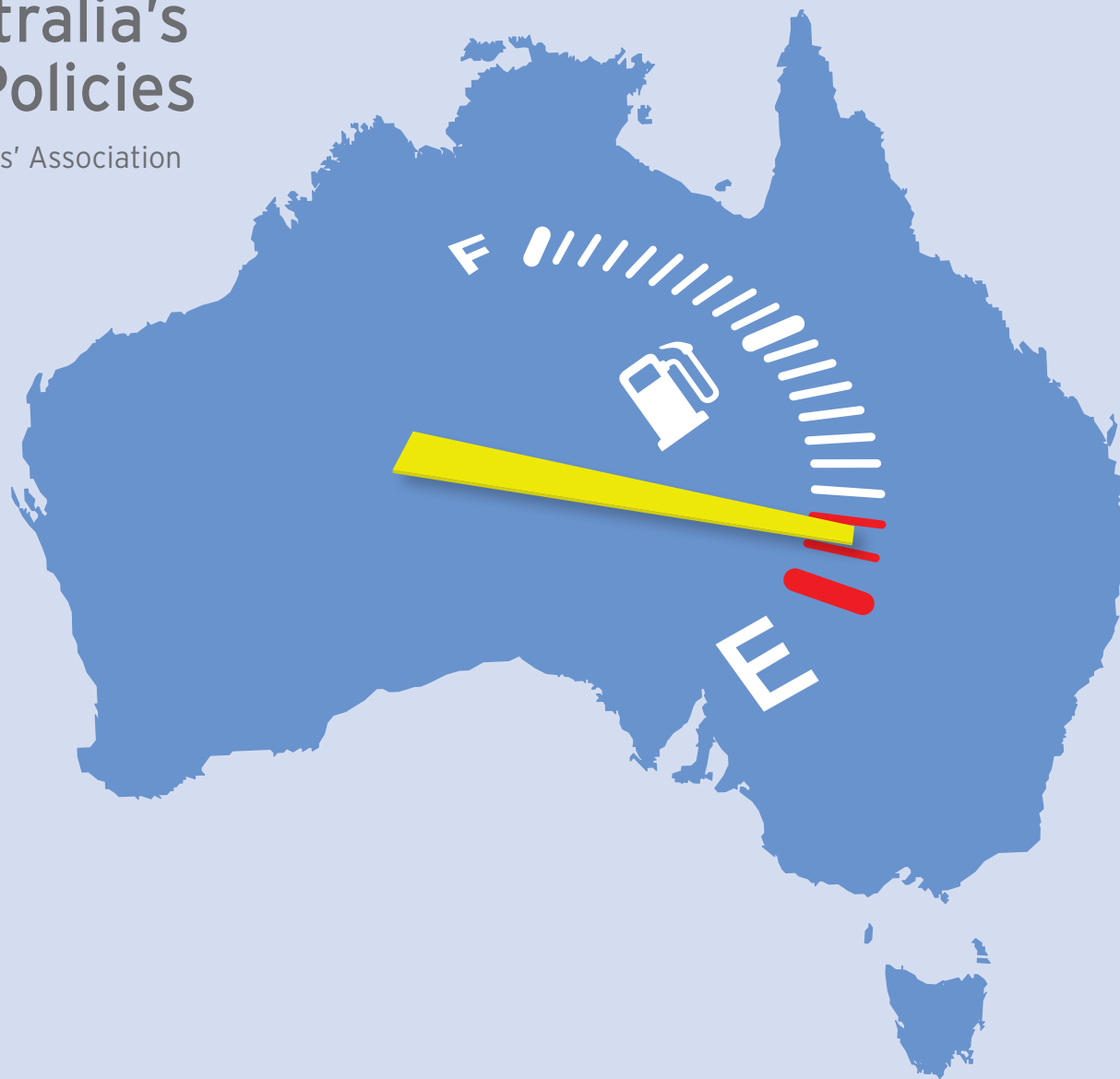


Benchmarking Australia's Transport Energy Policies

A report for the National Roads & Motorists' Association

Prepared by John Blackburn AO
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About the author

Air Vice-Marshal John Blackburn AO (Retd)

John retired as Deputy Chief of the Royal Australian Air Force in 2008. His RAAF career included being an F/A-18 fighter pilot, test pilot, Head of Policy Guidance and Analysis and Commander of the Integrated Air Defence System in Malaysia. He is now a consultant in the fields of Defence and National Security.

He is Deputy Chair of the Kokoda Foundation Board and the Deputy Chair of the Williams Foundation Board. He holds a Master of Arts and a Master of Defence Studies.

In February 2011 the Kokoda Foundation published John's report *Optimising Australia's Response to the Cyber Challenge*, which he co-authored with Dr Gary Waters. The National Roads & Motorists' Association published his report *Australia's Liquid Fuel Security* in February 2013 and subsequently *Australia's Liquid Fuel Security, Part 2* in February 2014.

This report is the third in a series commissioned by the National Roads & Motorists Association (NRMA) and authored by John Blackburn AO.

The first two reports addressed Australia's liquid fuel security, the growing risks in our fuel supply chain and suggested remedial action.

This report benchmarks Australia's energy security policies against those of other nations and finds Australia out of step with virtually every other comparable country in the world.

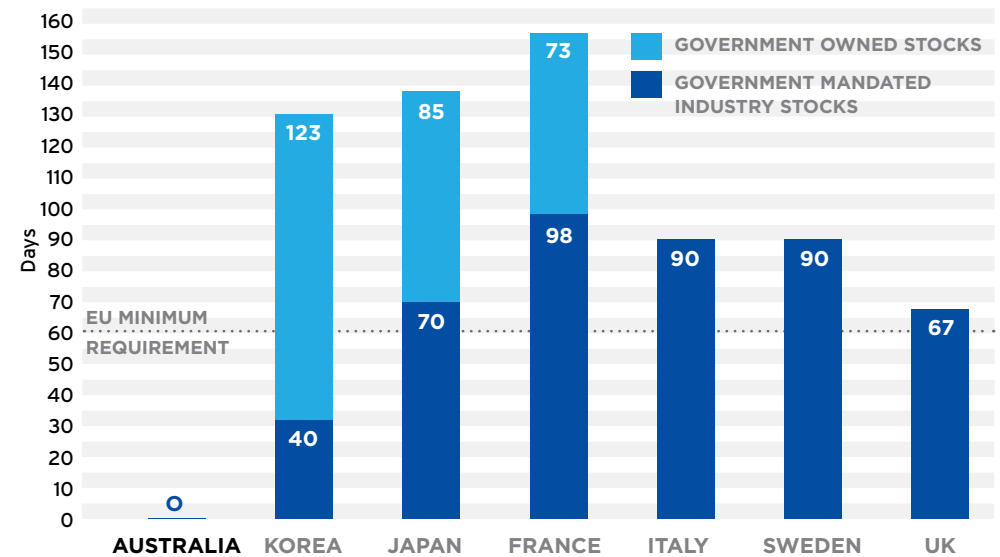


Figure 1: Comparison of Australia versus select Asian and European nations of Government mandated stockholdings of oil/fuel

A review of the transport energy policies of 75 countries globally reveals Australia is alone in its total reliance on “market forces” to ensure secure access to transport fuel – critical to the functioning of society and the economy.

Australia is critically exposed to disruption in the supply of transport fuels

Australia's combined dependency on crude and fuel imports for transport has grown from around 60% in 2000 to over 90% today.¹ The Bureau of Resources and Energy Economics (BREE) have reported in their July 2014 Australian Petroleum Statistics report that end of month industry stocks for June 2014 were in the order of: 19 days of automotive gasoline; 17 days of aviation

turbine fuel; and, 12 days of diesel oil (diesel oil includes automotive diesel oil and industrial and marine diesel fuel).

In just 36 months, since mid 2012, 40% of our nation's oil refining capacity will have been shut down. During this same period, the political instability in some Middle Eastern countries has worsened, our stocks have dwindled and our capacity to produce specialist fuels for our Defence Forces has been eroded.² The bottom line is that in 2003 Australia could refine 113% of its domestic fuel requirements; by mid 2015, it will be down to 48% of which only 10% will be from Australian oil.

A significant supply disruption to our shipping lanes or trade routes – which could take the form of a natural disaster, accident, commercial failure, act of terror or war, could quickly imperil Australia's capacity to provide

for essential, everyday services and our military forces.

We currently have no “Plan B” to deal with fuel disruption

The Australian public is entitled to expect clear assurances from our Government that we have sufficient Australian-controlled sources of fuel within Australia to support essential needs in the event of overseas supply interruptions. With no Government owned fuel stocks, little reporting on industry stocks and a very limited public analysis of supply chain risks, it is difficult to see how our Government could currently provide us with that assurance.

In an ever-changing world, we need to stop our import dependency growing to 100% in the future if we are to have an acceptable level of fuel security. **We do not appear to**

have a “Plan B” to cope with a significant interruption to our fuel imports. Other countries do have a Plan B, as discussed in the following paragraphs.

Australia is out of step with virtually every other comparable country in the world

A comparison of Australia's oil/fuel stockholding versus examples of select Asian and European nations is sobering. Figure 1 illustrates the comparison of mandated industry oil/fuel stocks and Government owned oil/fuel stocks between Australia, Korea, Japan, France, Italy, Sweden and the UK. It is staggering to realise that Australia is not only deficient in terms of the IEA stockholding obligations³, but that **we hold no Government controlled or mandated stocks at all, in stark contrast to regional and global peers.**

¹ Blackburn J. 2014 *Australia's Liquid Fuel Security, Part 2*, National Roads & Motorists' Association. ² A type of fuel required by the Australian Navy (F44) will cease to be produced as a result of the recently announced closure of the BP refinery in Brisbane.

³ Australia is the only one of the 28 member countries that fails to meet its International Energy Agency (IEA) net oil import stockholding level.

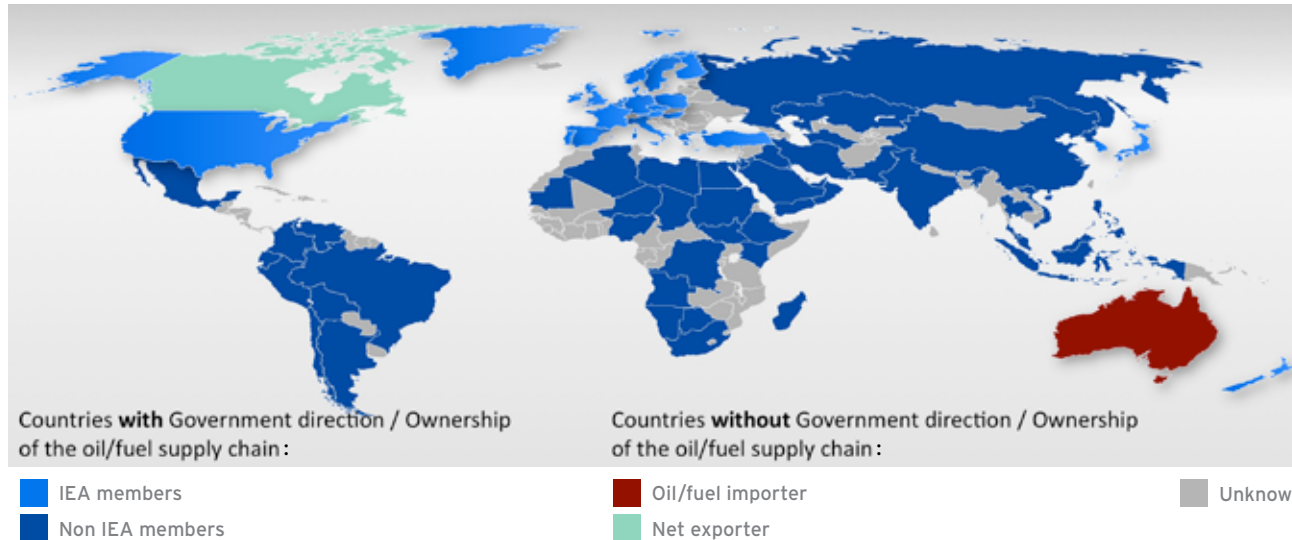


Figure 2: Comparison of Australian Government role in oil and fuel markets

Stockholdings is just one part of the picture. Figure 2 illustrates the disturbing finding that **Australia is the only “developed” oil/fuel importing country in the world** that has no mandated industry stockholdings, no Government owned stockholdings or Government control over any part of the oil/fuel infrastructure.⁴ This, in a world that the International Energy Agency says faces “a high risk of supply disruption which could have great economic consequences for IEA member countries.”

Countries supplying fuel to Australia do not seem as relaxed as Australia about fuel security. Australia sources the majority of its refined fuel from Singapore and other Asian countries. Yet ASEAN has been moving towards a regional energy framework that will include voluntary oil stockpiling. The ASEAN +3 group (including Japan, China and South

Korea) agreed in 2008 to jointly prepare a regional oil-stockpiling plan to prevent shortages and reduce the impact of future oil price surges.

Japan is also proposing a cooperation framework to enhance Strategic Petroleum Reserves (SPR) and crisis management systems for emerging countries in Asia. This initiative is intended to help emerging economies in Asia to develop their SPRs based on Japan’s belief that such developments would also be beneficial for its own energy security.

In other words, **the countries from which we source the majority of our refined fuels are sufficiently concerned about regional fuel supply security to initiate national and collective fuel stockholding measures.** Australia remains nonplussed.

The G7 perspective

The G7 Energy Ministers and the EU Commission for Energy met in Rome on 5-6 May 2014. The resulting *Rome G7 Energy Initiative for Energy Security Joint Statement* identified core principles for energy security which include the need for:

- ① Development of flexible, transparent and competitive energy markets, including gas markets.
- ② **Diversification of energy fuels, sources and routes, and encouragement of indigenous sources of energy supply.**
- ③ Reducing greenhouse gas emissions, and accelerating the transition to a low carbon economy, as a key contribution to enduring energy security.

- ① Enhancing energy efficiency in demand and supply, and demand response management.
- ② Promoting deployment of clean and sustainable energy technologies and continued investment in research and innovation.
- ③ **Improving energy systems’ resilience by promoting infrastructure modernisation and supply and demand policies that help withstand systemic shocks.**
- ④ **Putting in place emergency response systems, including reserves and fuel substitution for importing countries, in case of major energy disruptions.**
- ⑤ In particular, Paragraph 8 of the Joint Statement noted:

⁴ Author’s analysis based on data drawn from International Energy Agency, IEA Net Imports Data for January 2014, and Member Nation summaries; United States Energy Information Administration Country Data and Analysis; and industry websites.

“Energy security and resilience doesn’t just happen by accident. Planning to make it happen is meticulous – because our modern lives revolve around the use of energy.”

UK Energy Secretary, The Right Honorable Edward Davey, MP

‘Energy security must include timely investment to supply energy in line with economic developments and environmental needs. Some investments in infrastructure, needed to increase security of supply, and that cannot be built according to market rules, could be supported by regulatory frameworks or by means of public funding.’

At the subsequent 4-5 June 2014 G7 Leaders summit in Brussels, the Leaders issued a Declaration which addressed the outcomes of the Rome energy ministers meeting by stating their support for the G7 Energy Initiative’s 7-principles as well as their commitments to **‘identify and implement concrete domestic policies ... to build a more competitive, diversified, resilient and low-carbon energy system.’** Based on the 7-principles, the Declaration also articulated immediate actions upon member nations including to **‘conduct**

assessments of our energy security resilience and enhance joint efforts, including on critical infrastructure, transit routes, supply chains and transport.’

Australia’s isolated position calls for a mature debate

Australia’s faith in ‘market forces’ to ensure energy security is misplaced and a threat to national security. The G7 Energy Ministers Joint Statement proposes that energy security is a collective responsibility and that they will be leading discussions and cooperation across international fora, **including the G20**, to explore “a broader energy security strategy ... to address the larger dimensions of today’s globalised energy markets ...”. As a member of the G20, and as host country for the 2014 round of meetings, Australia needs a more robust and mature

debate about the role of Government in the fuel/energy supply chain.

Since the G7 Rome Summit, the challenge of market reliance is an issue that has found a priority position in the policy considerations of the UK Government. The Energy Secretary, The Right Honourable Edward Davey MP, addressed The Economist UK Energy Summit on 10 June 2014 with a speech entitled *UK Energy Security: Active Government, Smart Intervention*.⁵ This title leaves no doubt about how the UK government sees its role in achieving energy security for the nation. Secretary Davey noted that “Energy security and resilience doesn’t just happen by accident. Planning to make it happen is meticulous – because our modern lives revolve around the use of energy”. Of particular note, and reflective of the reality of the international energy market place, Secretary Davey advised

that “Often the development and security of markets requires direct political intervention”.

These comments by the Secretary are economically pragmatic, yet firmly commit the UK Government to having a plan to take an active role when the market can no longer meet national security requirements – and this is a nation that already mandates industry fuel stockholdings. The UK is having a conversation about how to maintain security when the market can no longer deliver. The Australian Government does not yet believe the conversation needs to be had.

The question then that must surely be asked is why is Australia unique with respect to fuel security? Could it be that we have a unique set of circumstances that allow us to place complete faith and reliance in market forces for the security of fuel supply in contrast to all

⁵ Speech by UK Energy Secretary, The Right Honorable Edward Davey, MP, *UK Energy Security: Active Government, Smart Intervention*, 10 June 2014, <https://www.gov.uk/government/speeches/uk-energy-security-active-government-smart-intervention>

other developed nations? Or is it that, unlike other nations, we have not yet recognised the need – or perhaps demonstrated the courage – to mandate requirements on the oil/fuel supply chain in Australia?

Defence Minister Johnston's recent speech at the 2014 Shangri-La Dialogue in Singapore addressed growing security fears about instability in the South China Sea. He urged all parties to exercise restraint, to refrain from actions that could increase tensions and to clarify claims in accordance with international law. He further said any breakdown in security, through miscalculation or actions that run contrary to the general principles of international law and the free flow of goods and services through the region would be 'catastrophic' for all nations. Must we wait for a regional "Crimea" event to pay attention to this critical issue and to address our transport fuel security?

The way forward

A resilient transport fuel supply is essential for all Australians. Without it our economy, our food supply and our way of life is at risk. The Australian Government needs to address the trend of declining fuel security and to have a 'Plan B' for how we will become resilient in the face of possible fuel supply interruptions in the future. As the ninth largest energy producer in the world, Australia has the natural resources to develop a Plan B but no policy to effect such a Plan.

We alone, amongst all developed oil importing countries, rely completely on commercial market forces for our transport energy security. This is no less perilous than contracting out our Defence Forces or out-sourcing our food supply.

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