
Linking National and Military Energy Security in Australia: A Legitimate Nexus, or Political and Economic Expediency?

Martin White

Despite recent declarations of elevated interest, Defence fuel security has remained a low priority for defence policymakers for several decades. Policymakers sometimes linked or de-linked national and military fuel security issues for broader political and economic reasons, but not necessarily because there was a direct impact on Defence. Specific concerns were often only raised when there was a perceived political benefit, such as in the treatment of Offshore Energy Infrastructure in the 2009 Defence White Paper, and no significant actions has followed identification of the problem in this case. The perceived guarantee of logistic supply from the United States in the most anticipated operational scenarios has served to reinforce the low priority for (and subsequent inertia in) Defence fuel management.

The 2012 force structure review paper by Allan Hawke and Ric Smith gave particular emphasis to the requirement for improved Australian Department of Defence (herein titled 'Defence') fuel management, listing 'Strategic Fuel Issues' as the most important Strategic Logistic challenge.¹ This followed other high-level policy documents, such as the 2009 and 2013 Defence White Papers, which declared the need to improve Defence fuel management.² However, despite the rhetoric, Defence fuel security has remained a low priority for defence policymakers³ for several decades, and the emphasis placed on specific issues often depended on factors other than the assurance of national or defence fuel security.

Despite the recent elevated political interest in military fuel security, particularly in the United States⁴ and also in Australia, there has been little

¹ A. Hawke and R. Smith, *Australian Defence Force Posture Review*, Department of Defence, 30 March 2012, <<http://www.defence.gov.au/oscdf/adf-posture-review/docs/final/Report.pdf>> [Accessed 9 August 2013], pp. 48-9.

² Commonwealth of Australia, *Defending Australia in the Asia Pacific Century: Force 2030* (Canberra; Department of Defence, 2009), p. 124; Commonwealth of Australia, *Defence White Paper 2013* (Canberra: Department of Defence, 2013), p. 51.

³ For the purpose of this article, a defence policymaker is defined as an individual who has the authority to plan for and influence Australian defence policy. This includes senior political and military leaders.

⁴ For example, in 2012 at a US Air Force base that had established solar power, President Obama said "the world's largest consumer of energy ... Defense, is making one of the largest commitments to clean energy in history", and, "The less we depend on foreign oil, the more secure we become as a nation". D. Miles, 'Obama Praises DOD's Energy Leadership,

detailed analysis about the relationship between national energy management⁵ considerations, and the action or inaction associated with Defence fuel management. Often, the logic of the national-military linkages made was questionable and inconsistent, and references to energy security were imprecise. This article will contend that defence policymakers sometimes linked or de-linked national and military fuel security issues for broader political and economic reasons, not necessarily because the issue had a direct impact on Defence. Consequently, national and military energy security was often overstated or understated. Rhetoric did not match action, and legitimate concerns about Defence fuel security were not given attention, consistent with the low priority afforded to broader energy security. Factors such as the perceived assurance of logistic support from allies such as the United States in anticipated contingency scenarios were considered more compelling.

The complex and evolutionary nexus between national and military energy security in Australia will also be highlighted by several examples. First, the declared reliance on legislative provisions such as the Commonwealth *Liquid Fuel Emergency Act 1984* (LFEA) to ensure emergency fuel supply for military purposes, and the security this legislation provided, will be examined. The direct linkage of this legislation to military planning after World War Two, and the implications of the legislative evolution from a military to an economic growth focus, will be considered. Second, the lack of priority given to addressing legitimate concerns raised in the Department of Resources, Energy and Tourism 2009 National Energy Security Assessment, and the broader lack of action to mitigate long-term Defence fuel security risks, will be discussed. Third, the overstatement of Defence energy security concerns will be argued, using the example of the Australian defence policy emphasis on military protection of Offshore Energy Infrastructure (OEI). The different approaches to specific energy security issues will be contrasted. This article is specifically focused on fuel (rather than broader energy types) due to its essential role in tactical operations.

'Stewardship', U.S. Air Force, 26 January 2012, <<http://www.af.mil/News/ArticleDisplay/tabid/223/Article/111794/obama-praises-dods-energy-leadership-stewardship.aspx>> [Accessed 7 August 2013].

⁵ Whilst other commentators have used the term 'National Energy Policy' to describe such considerations, this article is aligned with the view of D. Crossley, that energy management in Australia was an "accumulation of isolated actions", dealing with specific (mostly economic) issues. D. Crossley, *Energy Policy in Australia: The Social/Institutional Context and Procedures for Policy Formulation* (Brisbane: Griffith University, 1980), p. 47.

Legislation to Mitigate Liquid Fuel Emergencies

Leaver and Ungerer identify that most nations maintained contingency plans for prioritising military fuel use.⁶ In the decade after World War Two, national and military fuel security in Australia was closely and deliberately linked. Policymakers afforded a high priority to fuel for military contingencies. The importance of fuel in twentieth century conflicts, extensively documented,⁷ was notable in political debates and Australian policy.⁸

The Commonwealth *Liquid Fuel (Defence Stocks) Act 1949* was legislated, based on the recent experience of World War Two, with the acknowledgement that Australian military forces relied heavily on a consistent fuel supply to operate. The Act focused specifically on national defence requirements as its sole concern,⁹ acknowledging the exceptional nature of the task undertaken by Australian military forces.

Australian military exceptionalism, leading to broad political support for fuel prioritisation, was notable in parliamentary debates before and after World War Two. For example, in a speech to the House of Representatives in 1937, Sir Donald Cameron argued, “to-day guns are rattling almost at our doors, and I understand that in a national emergency our oil supplies would not last for more than three months”.¹⁰ In another House of Representatives speech from the same era, Rowley James said,

nothing is being done to ... ensure that we shall have an adequate supply of petrol in time of war ... Australia would be just as defenceless ... unless there were adequate supplies of fuel for aeroplanes, tanks, etcetera.¹¹

The close nexus between national and military fuel security, against the backdrop of a perceived serious or even existential military threat, was understandable. Policymakers were focused on achieving a level of logistic independence for operational contingencies related directly to the defence of Australia.

⁶ R. Leaver and C. Ungerer, *A Natural Power: Challenges for Australia's Resources Diplomacy in Asia* (Canberra: Australian Strategic Policy Institute, May 2010), p. 10.

⁷ For example, see R. Zubrin, *Energy Victory: Winning the War on Terror by Breaking Free of Oil* (New York: Prometheus Books, 2009), p. 224; D. Yergin, ‘America in the Strait of Stringency’, in D. Yergin and M. Hillenbrand (eds), *Global Insecurity: A Strategy for Energy and Economic Renewal* (Boston, USA: Houghton Mifflin Company, 1982), p. 21.

⁸ For example, see House of Representatives, *Parliamentary Debates*, National Oil Proprietary Limited Agreement Bill, Second Reading, 10 September 1937, p. 1; House of Representatives, *Parliamentary Debates*, Estimates 1936-37, Additions, New Works, Buildings, etc, Speech, 16 September 1936, p. 1.

⁹ *Liquid Fuel (Defence Stocks) Act 1949* (Cth), section 4.

¹⁰ House of Representatives, *Parliamentary Debates*, 1937, p. 1.

¹¹ House of Representatives, *Parliamentary Debates*, 1936, p. 1.

CHANGES TO FUEL PRIORITISATION OVER TIME

As direct World War Two experience faded from the collective memory of policymakers, as the defence of Australia became a less immediate concern, and as the economic impact of factors such as the 1973 Organisation of Petroleum Exporting Countries (OPEC) political action was realised, national emergency fuel legislation moved away from a defence focus.

The 1984 LFEA replaced the Liquid Fuel (Defence Stocks) Act. The LFEA was indicative of the economic growth focus that came to dominate the national energy management narrative, also demonstrated in policy documents such as the 2004 Energy White Paper.¹² Whilst the primary declared purpose of the LFEA was to ensure sufficient supply for defence of Australia requirements, the focus moved to economic factors. For example, the LFEA allowed the relevant Minister to invoke the Act to ensure “that trade or commerce … may be carried out without obstruction or hindrance”.¹³ When introducing the LFEA into the House of Representatives, the sponsoring Minister stated that the aim of the bill was “to minimise the total impact on the community … and minimising economic dislocation”, with no mention of defence purposes.¹⁴ The LFEA placed greater emphasis on financial compensation to those parties affected should provisions be invoked. Nevertheless, the economic provisions of the Act were never tested. The LFEA was used to provide a level of economic surety to industries with a heavy reliance on fuel, but with an ambiguous political commitment.

A 2007 amendment to the LFEA moved even further away from a defence focus, with a key aim to ensure that the LFEA was flexible “to deal with the many different circumstances that could require the exercise of the Government’s powers under the Act”.¹⁵ The 2007 amendment was introduced after a study undertaken by Acil Tasman. The primary consideration of the study was “maximising economic efficiency” through the legislation,¹⁶ and there was no reference to Defence in the study terms of reference. When discussing fuel allocation priorities, Acil Tasman declared that “the defence forces would be a higher priority in the case of a military threat to the nation, but less so in … other circumstances”.¹⁷

¹² J. Howard stated, “Our nation’s enormous energy resources are a source of considerable prosperity for all Australians … Looking forward, Australia has an opportunity to play a major role in supplying the world with energy”. Commonwealth of Australia, *Securing Australia’s Energy Future*, Energy White Paper (Canberra: Department of Prime Minister and Cabinet, 2004), Prime Minister’s foreword.

¹³ *Liquid Fuel Emergency Act 1984* (Cth), part I, section 6.

¹⁴ Liquid Fuel Emergency Amendment Bill 2007 (Cth), p. 1.

¹⁵ *Ibid.*, p. 3.

¹⁶ Acil Tasman, *Draft Review of the Liquid Fuel Emergency Act 2004*, Draft Report for Public Comment (Canberra: ACIL Tasman, 16 November 2004), p. v.

¹⁷ *Ibid.*, p. 13.

The move towards an economic growth focus was reinforced through a number of national oil supply constraint simulations. Exercise Tanker, a liquid fuel emergency simulation in 2003, made no recommendations specific to Defence, and emergency services were designated as the highest priority for emergency rationing. Indeed, Defence was not even on the interdepartmental Task Force that was formed to respond to the emergency,¹⁸ an indication that the Howard Government did not seek Defence advice regarding potential security implications when fuel usage was politically reprioritised. The Department of Transport and Regional Services, for example, was given a higher priority through its inclusion on the Task Force. No definitive prioritisation of the departments or industries with the greatest need was made in the Department of Resources, Energy and Tourism (DRET) summary of Exercise Tanker (however, a level of economic security for industry was implied). This lack of prioritisation did not provide certainty for Defence, but the risk would be determined by the prevailing geostrategic circumstances and the operational scenarios expected of Defence by the Australian Government. A short duration fuel disruption, with no concurrent major Defence commitment, would not necessarily have been a threat to national security. Notably, Exercise Tanker rehearsed the response to a short-term fuel supply disruption, with no consideration of an enduring disruption (a common theme in Australia).

Subsequent oil supply constraint exercises were held, such as Exercise Catalyst in 2008 and again in 2011. Results from these exercises were difficult to obtain, and whilst commentators argued that governments did not release information from these exercises due to the information being considered sensitive,¹⁹ this also meant that declared security and economic assurances were not publicly tested. Only a summary of the experiences gained from Exercise Tanker in 2003 was made publicly available. However, there was no indication that the Catalyst exercises assigned a higher priority to a defence requirement. Whilst reducing Defence's priority within emergency fuel legislation did not result in any operational problems for any contemporary Australian government, there was no supply constraint that required the legislation to be enacted, nor was such a problem recently exercised.

Despite it not being tested or exercised, political and military policymakers consistently argued that the LFEA, and the inter-departmental National Oil Security Emergency Committee (NOSEC), were the measures that would ensure sufficient Defence supply. For example, in response to a Joint Standing Committee question about mitigating a fuel supply shortfall, Defence indicated that the primary mitigation was the NOSEC national

¹⁸ MC² Pacific Pty Ltd, *National Oil Supplies Emergency Committee Liquid Fuel Emergency Simulation "Exercise Tanker"* (Canberra: MC² Pacific Pty Ltd, 4 August 2003), p. 8.

¹⁹ Sustainable Transport Coalition, 'Submission on the Discussion Paper for the Review of the Liquid Fuel Emergency Act', Perth, September 2004, pp. 2-3.

prioritisation.²⁰ In response to a specific question on notice in 2008 about energy supply for domestic infrastructure and transport, Minister Carr referred broadly to NOSEC vulnerability assessments.²¹ The Howard Government highlighted NOSEC in a templated answer to a range of energy security questions.²² Similarly, in 2009, the Rudd Government answered questions about Defence's access to fuel during a supply shock by explaining the process for designating priority users of fuel,²³ but without highlighting the fact that Defence was no longer considered the user of primary national importance in most circumstances. With little publicly available information on the actions taken by NOSEC based on the declared need to limit knowledge of specific contingency plans, NOSEC was used as politically expedient evidence to answer specific questions about energy security, whilst implying an economic safety net for industry. Legitimate concerns about fuel supply for military operations were not directly answered.

As time elapsed after World War Two, with less perception of a military threat to Australia, with fewer policymakers with World War Two experience prominent in government, with operational scenarios that mostly saw Defence being logistically supported by a foreign power,²⁴ and with no significant national fuel supply constraints, Australian governments focused less on ensuring fuel supply for Australian military forces. Emergency fuel legislation declared an untested focus on economic continuity, with occasional reference to military provisions, but with less political expectation of a military requirement. The evolution of fuel contingency legislation, from a purely military focus to a predominantly economic focus, had implications for Defence that were not directly addressed.

DEFENCE INERTIA AS CIRCUMSTANCES CHANGED

The widely held belief after World War Two that there was an immediate military threat to Australia became less prevalent, as the anticipation of a short notice large-scale military response reduced. Security assessments from the 1970s and 1980s, such as Dibb's judgement that Australia was "one of the safest countries in world",²⁵ whilst not directly linked to the

²⁰ House of Representatives Joint Standing Committee on Foreign Affairs, Defence and Trade, *Report into the Defence Annual Report 2007-08* (Canberra: Australian Government, October 2009), Paragraphs 9.21-9.22.

²¹ Senate, *Parliamentary Debates*, Questions on Notice, Global Oil Supplies, Question 389, 15 May 2008.

²² House of Representatives, *Parliamentary Debates*, Questions on Notice, Fuel: Diesel Shortage, Question 2112, 12 August 2003, pp. 2-3.

²³ Senate Standing Committee on Foreign Affairs, Defence and Trade, Additional Budget Estimates, Questions Taken on Notice, February 2009, p. 4.

²⁴, The 2009 Defence White Paper outlined the Rudd Government's intention to rely on others for military logistic support. Commonwealth of Australia, *Defending Australia in the Asia Pacific Century*, p. 48.

²⁵ P. Dibb, *Review of Australia's Defence Capabilities: Report to the Minister for Defence* (Canberra: Australian Government Publishing Service, March 1986), p. 1.

change in the approach to national energy management, were consistent with the rationale behind the change. Many policymakers represented the need for fuel prioritisation for Defence in the decade after World War Two, but very few made the same representation since the 1980s.

As the focus evolved to economic growth, reliance on emergency legislation for defence entailed risk that no policymakers declared, although this risk did not result in a negative effect on military operations since World War Two. However, this risk was periodically identified to the Australian Government. The 2004 Acil Tasman review of the LFEA stated that the Act was not designed to manage fuel risk for individual consumers, arguing,

The more users expect governments to ensure their supplies in a liquid fuel emergency, the less the incentive for users to undertake appropriate risk management.²⁶

An Australian National Audit Office (ANAO) review of Defence fuel usage highlighted the risk associated with the longstanding approach, with “no express recognition of (Defence) fuel supply needs in any of the existing legislative regimes”.²⁷ The 2012 Force Structure Review was the latest warning, raising “Strategic Fuel Issues” (related to oil stocks and deployable resupply) as the primary critical risk to sustaining operations, including in Australia.²⁸

The reliance on emergency fuel legislation (by Defence, and also by commercial industries) was also a risk because of the politically unpalatable nature of enacting the legislation, particularly in circumstances where there was no existential threat. Existential threats were considered highly unlikely under contemporary operational scenarios. The politically unpalatable nature of enacting the legislation could be tested in future operational scenarios similar to the International Force for East Timor (INTERFET), unique in the scale of its Australian leadership, but a declared and implied scenario in the 2009 and 2013 White Papers.²⁹ In conjunction with a fuel supply constraint, and with broad criticism of Defence’s fuel supply capability during INTERFET,³⁰ such a scenario could prove politically challenging.

Defence spends a large percentage of its budget on fuel, with estimates in 2010 of \$440 million Australian dollars. Fuel represented 51 per cent of total Defence energy consumption,³¹ so total energy expenditure was

²⁶ Acil Tasman, *Draft Review of the Liquid Fuel Emergency Act 2004*, p. vi.

²⁷ Australian National Audit Office, *Australian Defence Force Fuel Management: Department of Defence*, Audit Report Number 44 (Canberra: Australian National Audit Office, 2002), p. 94.

²⁸ Hawke and Smith, *Australian Defence Force Posture Review*, pp. 48-9.

²⁹ Commonwealth of Australia, *Defending Australia in the Asia Pacific Century*, p. 63; Commonwealth of Australia, *Defence White Paper 2013*, p. 31.

³⁰ P. Firth, ‘Petroleum Support’, *The Link: Defence Logistics Magazine*, no. 3 (2008), p. 21.

³¹ R. Lean, Briefing to Defence Fuel Management Committee, Presentation, Directorate of Climate Change and Sustainable Development, Canberra, 26 August 2009, Slide 7.

approximately 3.4 per cent of total Defence expenditure in that year. However, total consumption figures were small when compared to other Australian industries and sectors. In 2011, DRET indicated that Defence was not one of the eight largest energy consumers in Australia. Sectors such as agriculture, mining, manufacturing and electricity generation, although not single organisations like Defence, all used significantly greater quantities.³² This DRET report did not make any reference to Defence usage, further reason that Defence might not be immediately considered a priority during a fuel supply shortfall.

Outside the LFEA framework, Defence did not undertake risk mitigation partly because of other perceived guarantees of fuel prioritisation. An important factor was the recognition that the operational scenarios required by the Australian Government (typified by operations in Iraq and Afghanistan) did not require fuel supply independence, underwritten by the United States. Traditional foreign logistic support when conducting combined military operations with other countries offered a regular guarantee of fuel supply. Despite not making this admission as candidly, the approach of policymakers to broader Defence logistic capabilities was clear. The 2013 Defence White Paper stated, “Australia continues to rely on significant support from the US and other partners in enabling capabilities such as ... logistics”³³.

Defence policymakers made other decisions that further indicated the priority assigned to Defence fuel management. The 2010 Defence Capability Plan (DCP) labelled elements of national industry, including supply and storage of aviation fuel, as a “Strategic Industry Capability” (SIC). This meant that the capability was of “strategic importance” to Defence, and this designation was said to offer longer-term procurement stability,³⁴ although as an unfunded policy, the benefit to Defence was limited. Fuel supply and storage was not considered a “Primary Industry Capability” (PIC), which was defined as a more important capability that would “confer an essential strategic advantage by being resident in Australia”.³⁵ Defence fuel demand was inelastic, with few substitutes for fuel types like jet fuel if energy prices rose. Therefore, aviation fuel supply and storage was declared to be important, but not sufficiently important nor sufficiently affordable to warrant a more extensive indigenous capacity in Australia. With a logistic dependence on coalition partners during expeditionary operations, this SIC was not considered of sufficient importance to be designated a PIC.

³² Commonwealth of Australia, *Energy in Australia 2011* (Canberra: Department of Resources, Energy and Tourism, 2011), p. 18.

³³ Commonwealth of Australia, *Defence White Paper 2013*, p. 29.

³⁴ Commonwealth of Australia, *Defence Capability Plan 2010-2020*, Public Version (Canberra, Department of Defence, 2010), pp. 16-7.

³⁵ Ibid., p. 15.

Whilst fuel and logistic capabilities were required to support the exceptional military role, few policymakers considered fuel and logistic capabilities to be exceptional themselves. Defence was prepared to accept fuel supply risk, such as through its preparedness to rely on emergency fuel legislation in the event of a national supply disruption, and the effect of long-term logistic underinvestment was demonstrated during military operations such as INTERFET.³⁶ The reliance on emergency legislation was not considered of sufficient importance to articulate in any Defence White Paper. Reliable energy supply was a major undeclared assumption, and major disruption was not considered likely by policymakers. This omission demonstrated the incidental influence of national energy management on Defence. Policymakers did not declare the Defence reliance on national energy management decisions, and DRET did not articulate an in-extremis prioritisation for Defence. Indeed, the primary fuel management advice sought by Defence was external, rather than through DRET.³⁷

Policymakers consistently articulated the link between national and military energy security, through emergency fuel legislation. However, over time, as the declared priority evolved towards economic growth, the legislation was a politically useful justification to describe the actions that would be taken during a security crisis and an energy supply shock, but with no real expectation that the legislation would need to be enacted for military purposes, particularly given the operational scenarios (and logistic reliance on allies) expected of Defence. The LFEA also implied a level of economic support that was never tested, further sign of the politically expedient use of the legislation.

The Evolution from Specific to Generic Energy Insecurity

Just as the declared priority for emergency fuel legislation in Australia evolved from a military to an economic focus, the broader approach to energy security also evolved. Whilst still discussed regularly by policymakers, there was less focus on specific fuel supply concerns, and an evolution towards a generic declared concern about energy security. The many examples of policymakers highlighting specific fuel supply concerns in the 1930s and 1940s,³⁸ through until the 1970s,³⁹ and the regular call for “oil

³⁶ Many commentators analysed Defence's logistic and fuel supply performance in Timor Leste, and were almost exclusively critical. For example, see B. Breen, *Struggling for Self Reliance: Four Case Studies of Australian Regional Force Projection in the Late 1980s and the 1990s*, Strategic and Defence Studies Centre, Canberra Papers on Strategy and Defence, No. 171 (Canberra: ANU E Press, 2008), pp. 146-7, 160; Australian National Audit Office, *Australian Defence Force Fuel Management*, p. 52.

³⁷ Defence sought advice and partnership with commercial entities such as the Australian Institute of Petroleum (raised at the Defence Fuel Management Seminar, Royal Military College Duntroon, Canberra, 24 August 2010).

³⁸ For example, see House of Representatives, *Parliamentary Debates*, 1937, p. 1.

³⁹ *Australian Energy Policy: A Review* was an example of an energy management document that considered foreign energy supplies “insecure and contracting”, but offered little evidence.

self-sufficiency”,⁴⁰ were not replicated from the 1980s. Generic declared concerns came to dominate energy security discourse, with specifics often avoided unless there was a politically expedient reason. A similar trend involving US defense policymakers expediently using the term “energy security” could also be argued.⁴¹

Since the 1980s, the term energy security was often applied imprecisely. It was regularly associated with reliable energy supply, at “affordable prices”,⁴² indicative of an economic focus. Successive governments outlined their desire to improve generic energy security.⁴³ DRET linked energy security to national security.⁴⁴ The 2009 and 2013 Defence White Papers argued that resource scarcity was a potential global problem,⁴⁵ but did not detail specific concerns. The 1988 Energy White Paper listed “security of supply” as the most critical energy issue in Australia.⁴⁶ The security of electricity distribution was highlighted as a specific risk in the 1980s,⁴⁷ however the national integration of electricity distribution was an ongoing task, and there were few major disruptions of electricity supply to Australian consumers. Even significant incidents, such as the 2008 explosion at Varanus Island that reduced Western Australian electricity supply by 35 per cent, were quickly managed.

The generic concerns about energy security arguably created a sense of exaggerated fear that could be exploited when necessary, allowing policymakers to emphasise the importance of niche aspects of energy security. Burke wrote extensively about the role of exaggerated fear in

Department of National Development, *Australian Energy Policy: A Review* (Canberra: Australian Government Publishing Service, 1979), pp. 1-2.

⁴⁰ This was presented by both major parties. For example, see *Ibid.*, p. 2.

⁴¹ Litvin quoted President Obama as saying, “America’s dependence on oil is one of the most serious threats that our nation has faced.” Other US Presidents have made similar statements. D. Litvin, *Oil, Gas and International Security: Tackling a Self-Fuelling Fire*, Chatham House Briefing Paper (London: Chatham House, March 2009), p. 2.

⁴² For example, see Commonwealth of Australia, *Securing Australia’s Energy Future*, p. 116.

⁴³ For example, Department of Resources and Energy, *Energy 2000*, p. 2, articulated this desire, noting that increased security would require higher government expenditure.

⁴⁴ Department of Resources, Energy and Tourism, *Corporate Plan 2009-2013* (Canberra: Commonwealth of Australia, 2009).

⁴⁵ Commonwealth of Australia, *Defending Australia in the Asia Pacific Century*, pp. 12, 99; Commonwealth of Australia, *Defence White Paper 2013*, p. 18.

⁴⁶ Department of Primary Industries and Energy, *Energy 2000: National Energy Policy Paper* (Canberra: Australian Government Publishing Service, 1988), p. 1. H. Saddler noted that Australian policy traditionally focused on supply, not consumption: H. Saddler, *Energy in Australia: Politics and Economics* (Sydney: George Allen and Unwin, 1981), p. 6.

⁴⁷ Forbes discussed the Australian response of vertical disaggregation of the electricity industry to meet this challenge: A. Forbes, ‘Australian Energy Security: The Benefits of Self Sufficiency’, in A. Forbes (ed.), *Asian Energy Security: Regional Cooperation in the Malacca Strait*, Papers in Australian Maritime Affairs, No. 23 (Canberra: Sea Power Centre Australia, 2008), p. 13.

Australia's security policymaking, including the fear of energy insecurity.⁴⁸ Indeed, it was argued that government price controls on energy perversely contributed to fear and uncertainty.⁴⁹ Trengove and Clarke argued in the 1980s that the "fear of depletion" led to the implementation of specific price control policies in Australia (although there were few examples).⁵⁰ Australia's Strategic Culture may also have been a contributing factor to exaggerated fear of energy insecurity.⁵¹

Coal, gas and uranium, three of the main forms of energy used and produced in Australia, were not insecure, with no historical or predicted threat to their continued exploitation, distribution and consumption.⁵² Whilst often left unstated, the term energy security in Australia still implied a reduced reliance on imported oil,⁵³ the consistent concern of policymakers since World War Two, but fuel supply became a generic energy security issue.

Commentators and advisors still referred specifically to fuel supply concerns. For example, Hurley recommended that Australia actively seek to avoid reliance on imported oil, raising the possibility that Australia could be "energy independent".⁵⁴ Whilst there were few historical fuel supply disruptions to Australia, there was a reasonable basis for future concern. A Commonwealth Scientific and Industrial Research Organisation (CSIRO)-led study in 2006 indicated, "The volatility of oil prices tends to retard investment directed to preparatory action that would make Australia more resilient to future price variations".⁵⁵ This suggested a lack of preparedness in Australia for fuel price or availability variation. However, commentary such as Hurley's recommendation required a level of Australian Government involvement in national energy management not demonstrated since World War Two.

The evolution to generic energy security discourse meant that it became difficult to determine the energy security measures that policymakers considered most important, and policy inertia was observable. Whilst policymakers regularly argued that energy security was a necessary policy

⁴⁸ A. Burke, *Fear of Security: Australia's Invasion Anxiety* (Melbourne: Cambridge University Press, 2008), pp. 1-23.

⁴⁹ C. Trengove and R. Clarke, 'Australian Energy Markets', in C. Trengove (ed.), *Australian Energy Policies in the 1980s* (Sydney: Allen and Unwin, 1986), p. 13.

⁵⁰ Ibid., p. 3.

⁵¹ Burke argued that Australia's identity was one of vulnerability and perpetual opposition to outsiders: Burke, *Fear of Security*, p. 4.

⁵² Although deteriorating security of access to natural gas in Australia has been predicted. Department of Resources, Energy and Tourism, *Annual Report 2008-2009*, p. 15.

⁵³ This was highlighted in Department of Primary Industries and Energy, *Energy 2000: National Energy Policy* (Canberra: Australian Government Publishing Service, 1988)p. 42.

⁵⁴ E. Hurley, *Securing Australia's Energy for the Future*, Kokoda Paper no. 10 (Canberra: Kokoda Foundation, 2009), pp. 39-40.

⁵⁵ Commonwealth Scientific and Industrial Research Organisation, *The Heat Is On: The Future of Energy in Australia* (Canberra: CSIRO, 2006), p. 9.

objective, and whilst some commentators believed that the Australian Government acted to mitigate energy insecurity,⁵⁶ there were few examples of actions taken to meet this imprecise objective. For example, through its proposed Carbon Pollution Reduction Scheme, the Rudd Government designed a staggered carbon emissions reduction plan until 2050, with more difficult reductions required in later years.⁵⁷ Saddler argued that although the rhetoric may have reflected a desire to improve energy security, complacency about the indefinite continuation of current energy supply prices and availability dominated.⁵⁸ This reflected the tension between Australian society being “more sanguine about energy security than many of the other countries of the Asia-Pacific”,⁵⁹ and energy security as an “anxiety-provoking theme”.⁶⁰

This article will discuss two examples of avoidance of specific fuel security issues—the inaction after the release of the National Energy Security Assessment (NESA), and the treatment of global crude oil depletion concerns.

AVOIDANCE OF SPECIFIC ENERGY USAGE CONCERNs

The NESA, produced by DRET in 2009 to fulfil a Rudd Government election promise, summarised energy security considerations for major energy sources produced and consumed in Australia. Whilst criticised for not adopting a worst-case approach,⁶¹ the NESA should logically have informed and led the development of national energy management, for government departments and for other sectors.

Whilst all parts of the Australian economy and society may be affected by energy affordability and security concerns, Defence had many reasons for interest in future trends, such as the long term nature of defence procurement, and the historical importance of fuel in twentieth century conflicts. Defence could reasonably have been expected to demonstrate⁶² interest in the NESA prediction of a medium-term decline in oil security.⁶² However, the NESA was not used to support further defence (or broader

⁵⁶ For example, Hurley argued that the Australian Government had made a “decision to address climate change”, and was addressing energy efficiency as a “key objective”. Hurley, *Securing Australia’s Energy for the Future*, p. 10.

⁵⁷ Department of Climate Change and Energy Efficiency, *Carbon Pollution Reduction Scheme: Australia’s Low Pollution Future White Paper*, vols 1 and 2 (Canberra: Australian Government, December 2008), p. iv.

⁵⁸ Interview with H. Saddler, 24 November 2010.

⁵⁹ M. Wesley, ‘Australia-China’, in B. Taylor (ed.), *Australia as an Asia-Pacific Regional Power: Friendships in Flux?* (London: Routledge, 2007), p. 2.

⁶⁰ Litvin, *Oil, Gas and International Security*, p. 2.

⁶¹ In an interview on 24 November 2010, H. Saddler argued that the NESA missed addressing the challenges of climate change and oil supply, and relied too heavily on the market to solve policy concerns. The failure of the NESA to provide credible scenarios was considered by Saddler to be another concern.

⁶² Department of Resources, Energy and Tourism, *National Energy Security Assessment 2009* (Canberra: Australian Government, April 2009), p. 9.

public) policy development. There was no reference to the NESA within high-level defence policy, including in the 2009 Defence White Paper (which was published later in the same year and even referred to energy security concerns).⁶³ This could be viewed as an indication of the lack of DRET influence within the Australian Government, but it was indicative of the low level of importance assigned by policymakers to Defence fuel usage.

The publication of the NESA could reasonably be considered a politically opportunistic reference to energy security. The Australian Government did not compel departments to mitigate or consider the implications from the NESA. There was no indication, in the planning or policy of government departments, that the NESA was acted upon or even noted as important. There was no apparent depth of political support for the NESA, or indication that the Rudd or Gillard Governments would compel Defence to consider that estimate. The fact that the NESA was a 2007 election promise, with no follow-up action from the government, suggested that this assessment was used as a political strategy rather than a means to improve energy security.⁶⁴

The NESA made reference to long-term crude oil depletion, identifying it as a potential short to medium term concern. Other national governments and international organisations were demonstrably concerned about the continued reliable supply of cheap fuel. Many commentators argued for the US Department of Defense (DoD) to change its fuel usage due to the risk posed by Peak Oil.⁶⁵ Some Australian political and military policymakers shared this concern, however, consistent with the emphasis on generic energy security concerns previously discussed, policymakers did not make long-term fuel supply a major issue for debate.

There were reasons why defence policymakers may reasonably have been expected to demonstrate an interest in long-term oil production limitations and risks. Primarily, over a long period of time, Defence maintained a force structure that was heavily reliant on fuel supply. For example, the basis of the 2013 White Paper was to maintain conventional military capabilities that would deter an attack against Australia.⁶⁶ However, Australian policymakers rarely used the term Peak Oil, and this article contends that use of the term was often faddish⁶⁷ and politicised, and its credibility was affected by many exaggerated or sensational predictions. This was partly responsible for some defence policymakers avoiding fuel supply risk mitigation.

⁶³ Commonwealth of Australia, *Defending Australia in the Asia Pacific Century*, pp. 16, 39, 43.

⁶⁴ Department of Resources, Energy and Tourism, *Annual Report 2008-2009* (Canberra: Commonwealth of Australia, 2009), p. 21.

⁶⁵ For example, M. J. Hornitschek, *War Without Oil: A Catalyst for True Transformation*, Occasional Paper No. 56 (Maxwell Air Force Base, Alabama: Centre for Strategy and Technology, Air War College, 17 February 2006), p. 62.

⁶⁶ Commonwealth of Australia, *Defence White Paper 2013*, p. 24.

⁶⁷ Faddism can be defined as an interest or issue followed widely and briefly, with exaggerated devotion.

In 2007, a Senate Standing Committee analysed future oil availability, focusing on the concept of Peak Oil, and referring to a number of international actors. For example, the Committee examined the International Energy Agency (IEA) prediction of an oil production peak between 2013 and 2037, and the US Energy Information Administration (EIA) prediction of Peak Oil between 2020 and 2050.⁶⁸ The EIA, an agency within the US Department of Energy, and the IEA, representing most nations within the Organisation for Economic Cooperation and Development, were credible organisations with privileged access to resource information. However, other prominent participants in the Peak Oil debate demonstrated political opportunism and less credibility. For example, Australian Greens Senator Scott Ludlam raised in Parliament the issue of Peak Oil on many occasions, claiming in 2011 that “credible sources” predicted that Peak Oil had occurred in 2006,⁶⁹ an unverifiable claim.

Whilst geological limitations were mostly the focus of Peak Oil predictions, economic and political limitations were also a factor. For example, whilst DRET conferred an assumption that there was a geological limitation to the supply of oil, geopolitical risks and the political stability in oil exporting nations was a declared concern. Curtotti and others, writing for the Australian Bureau of Agricultural and Resource Economics and Sciences, argued that the “world oil market remains the major risk to energy security”, and growing demand in China and India was highlighted extensively. Curtotti and others assessed that energy security risks to Australia would increase over time.⁷⁰

The broad range of predictions, many of which proved inaccurate, and the extreme societal and military changes recommended by some, reduced the credibility of the term Peak Oil. This commentary and these pessimistic predictions indicated faddism, particularly in US defense commentary. For example, Davis outlined his concern for the “decades of persistent conflict” and “international chaos” caused by Peak Oil, with the need to significantly reduce the size of the US DoD “heavy force” such as tanks and aircraft.⁷¹ The broad range of predictions also allowed or encouraged policymakers to avoid reference to the term. Fisher conducted an excellent analysis of the Peak Oil debate in 2008, arguing that many of the alarming Peak Oil claims

⁶⁸ Senate Standing Committee on Rural and Regional Affairs and Transport, *Australia's Future Oil Supply and Alternative Transport Fuels, Final Report* (Canberra: Australian Government, February 2007), p. x.

⁶⁹ Ludlam, *Road Rage: Federal Transport Budget has Australia on Route for Oil Shock*, Media Release, 27 May 2011

⁷⁰ R. Curtotti, A. Austin, A. Dickson, L. Hogan and P. Drysdale, ‘A Background Paper on Energy Issues for the 2nd East Asia Summit’, Final Report, REPSF Project No. 06/003, Department of Agriculture, Fisheries and Forestry, November 2006, pp. i, vii.

⁷¹ D. Davis, *Running on Empty* (Armed Forces Journal, May 2008)

were false, but that production limitations within the next two decades should be carefully considered.⁷²

Therefore, despite the credible concern about reliable and cheap fuel supply, the term Peak Oil became politicised and faddish, debate about Peak Oil was not always rational, and consequently was predominantly ignored by policymakers. Policymakers did not use the term in any defence policy or national energy management documentation, and there was limited political association with the term. For example, in a 2008 interview, Prime Minister Rudd avoided direct questions about Peak Oil and indeed about the potential for long-term concern, declaring any attempt to predict oil supply as a “very murky future”.⁷³

The faddism associated with Peak Oil aligned with many other reasons policymakers had to not seek to mitigate oil depletion or price concerns. First, the concept of oil depletion was a long-term issue, and was made a lower priority against other competing demands. In a media release in 2011, Senator Ludlam stated,

The (Australian Government) lack of foresight is stunning ... The age of cheap oil is over. I've been using successive budget estimates hearings to try and detect any sense of urgency, without success so far.⁷⁴

Whilst Senator Ludlam was a keen advocate for mitigation against Peak Oil, his point that policymakers saw oil depletion as a low priority was reasonable. Second, successive Australian governments established an “Ecological Modernisation” (EM) framework for energy consumption,⁷⁵ characterising the achievement of competing outcomes as “win-win”. For example, the Gillard Government claimed that its Carbon Tax would benefit both the environment and the economy, but there was significant evidence that the transition of energy storage, distribution and operating systems would have resulted in some groups being disadvantaged. The use of language was important—for example, when change was not desired, the Howard Government described the pursuit of alternative fuels as having the potential to “weaken Australia’s competitiveness, and potentially weaken its energy security position”.⁷⁶ Third, Australian consumers rarely faced oil

⁷² B. Fisher, *Review and Analysis of the Peak Oil Debate* (Virginia, USA: Institute for Defense Analysis, August 2008), pp. 16–24.

⁷³ Australian Broadcasting Corporation, Kerry O’Brien interviews Kevin Rudd, *The 7.30 Report*, 16 June 2008.

⁷⁴ S. Ludlam, *Road Rage: Federal Transport Budget has Australia on Route for Oil Shock*, Media Release, 27 May 2011.

⁷⁵ Curren argued that Australia’s energy-intensive economy meant that any attempt to transition to a less energy-intensive structure would require confrontational policies, but Prime Minister Rudd presented a “win-win” outlook for economic growth and environmental protection. G. Curren, ‘Ecological Modernisation and Climate Change in Australia’, *Environmental Politics*, vol. 18, no. 2 (March 2009), p. 202.

⁷⁶ Commonwealth of Australia, *Securing Australia’s Energy Future*, p. 22.

supply shortfalls since World War Two, resulting in less perceived pressure on the government to take action.

There were other reasons (in relation to Peak Oil) why policymakers did not take more measures to mitigate Defence fuel supply or price risks. First, the perceived assurance afforded by both the LFEA and the US supply during expected operational contingencies, discussed previously, encouraged inertia. Furthermore, Defence had pressing issues to manage, heavily committed in Timor Leste and the Middle East throughout the twenty-first century, and with expenditure reduction programs such as the Strategic Reform Program to manage. Second, the many different Peak Oil estimates meant that Defence could legitimately question whether the concept was relevant. Key advisers to Defence dismissed the concept. For example, at a 2010 seminar, presenting to Defence, the Australian Institute of Petroleum discussed the success of military hybrid vehicles, reinforced the efficiency of the energy market, argued (fairly) that oil supply had never been a problem in Australia or for Defence, and reinforced the fact that fuel prices were very low in Australia when compared internationally.⁷⁷ Third, as a logistic element, fuel was not considered as exceptional as combat capabilities, and therefore fuel issues (including Peak Oil) were not considered an equal priority. Finally, with few employees, the Defence Directorate of Strategic Fuel was not enabled to examine in detail the implications of global oil depletion.

The desire of some lower-ranking Defence officers to mitigate the perceived risk from Peak Oil was not acted upon by policymakers. For example, at the 2010 Defence Fuel Management Seminar in Canberra, numerous Defence presenters displayed concern about the future of Defence energy supply and expenditure. Some predicted that Defence expenditure on fuel was about to rise significantly, were concerned about international insecurity and instability and its effect on Defence expenditure and supply, were concerned about the onset of Peak Oil, and discussed the development of capabilities such as unmanned aircraft to specifically mitigate the risk of rising energy expenditure and insecurity.⁷⁸ Leckie argued the lack of Defence preparedness for an onset of Peak Oil.⁷⁹ Policymakers did not share this concern.

There was also a lack of credibility, and political opportunism, associated with the extrapolation of some Peak Oil claims and their relevance to military forces. This was particularly the case in the United States. For example, writing for the Center for Naval Analysis, a retired group of senior military officers linked the (reasonable) US DoD requirement for reliable and

⁷⁷ Department of Defence, Defence Fuel Management Seminar, Royal Military College Duntroon, Canberra, 24 August 2010.

⁷⁸ Ibid.

⁷⁹ C. Leckie, 'Peak Oil and the Australian Army', *Australian Army Journal*, Summer 2007, pp. 23-5.

affordable energy supply to “the enormous military presence to the Middle East since the 1980s”,⁸⁰ an issue of incidental relevance. In Australia, Defence was advised by the Department of Resources and Energy in 1986 to consider renewable energy sources to improve long-term energy security,⁸¹ which Defence did not do, but with no evidence of any likely or obvious impact. In 2007, Richardson highlighted Australia’s growing demand for foreign oil supplies, and its “easily disrupted” supply chains, as a “strategic vulnerability”, linking the lack of military fuel stockpiling as an issue within his article.⁸² There was less public analysis of more pertinent factors, such as whether the military forces of potential adversaries would be disadvantaged to a greater extent. Whilst the growing linkage between economic considerations, national security and environmental considerations was reasonable to argue,⁸³ an issue in one of these domains does not always fit within another.

For a society and a military dependent on oil, the concept of a decline in production could have been expected to elicit policy interest. However, many inaccurate predictions of declining global oil production were made, and “Peak Oil” lost credibility. Australian policymakers rarely used the term, and did not act to mitigate long-term concerns. In contrast to the avoidance of this issue, Offshore Energy Infrastructure (OEI) was a specific issue regularly referred to by policymakers in recent times.

THE CONTRAST TO OFFSHORE ENERGY INFRASTRUCTURE

Through the 2009 and 2013 Defence White Papers, the Rudd and Gillard Governments specifically raised concern about OEI. OEI was important to Australia’s Gross Domestic Product and continued investment in the resources sector. However, OEI was not directly related to Defence fuel security, as the output from OEI was not directly used to support tactical operations. Despite this, many references were made to link the White Papers to this national energy management issue. Defending OEI was directed as a specific task for Defence,⁸⁴ with the threat to OEI mentioned many times, whilst the other White Paper tasks were general and non-specific.⁸⁵

The role of Defence in “securing” OEI was questionable. Placing the 2009 White Paper tasks in doubt, a 2012 offshore oil and gas sector inquiry

⁸⁰ The CNA Corporation, *National Security and the Threat of Climate Change* (Alexandria, Virginia: The CNA Corporation, 2007), p. vii.

⁸¹ Department of Resources and Energy, *Energy 2000: A National Energy Policy Review* (Canberra: Commonwealth of Australia, March 1986), p. 2.

⁸² M. Richardson, ‘Australia’s Oil Security’, *Defender*, Winter 2007, pp. 26-7.

⁸³ Leaver and Ungerer, *A Natural Power*, p. 1.

⁸⁴ Commonwealth of Australia, *Defending Australia in the Asia Pacific Century*, pp. 88-9.

⁸⁵ For example, the 2009 Defence White Paper listed other tasks such as “establish and maintain sea control and air superiority at key locations in the ADF’s primary operational environment” *Ibid*.

highlighted that Defence was unlikely to be used for the majority of OEI security responses, because the responsibility fell within state and territory jurisdictions except in circumstances where the threat to life was too great for police to manage. The same inquiry also highlighted that no security requirement for OEI or “direction from government as to how such facilities should be secured” was articulated.⁸⁶ The 2012 inquiry described the OEI industry as “risk averse”, with a desire to operate in secure offshore environments, and the White Paper references arguably were used to provide a measure of investment confidence to this industry.

With few security threats to OEI in the past, and with the 2012 inquiry highlighting that security for OEI was a relatively new concept for the Australian resources sector,⁸⁷ the declared concern about OEI, and the likely relationship between Defence and OEI security, was overemphasised. For example, with terrorism identified as a key OEI security risk, such a threat would only have had a limited capacity to affect a small number of OEI installations. The example used in the inquiry to situate possible terrorist threats to OEI was the Utoya Island massacre in Norway,⁸⁸ a tenuous and sensationalised link.

It is reasonable to conclude that there was an overemphasis on the threat to, and security required for, OEI, probably to offer investment confidence to the industry. Moreover, the Australian Government did not follow-up on the declared priority identified in the 2009 White Paper. Defence Minister Smith, in announcing the 2012 force structure review, again highlighted “energy security and security issues associated with expending offshore resource exploitation in our North West and Northern approaches” as a central issue.⁸⁹ However, the actual review by Hawke and Smith found that “potential threats to Australia’s resource and energy interests should not be exaggerated”, and circumstances did “not require new permanent bases”.⁹⁰ The link between OEI and Defence was an example of a specific energy security issue being used when politically expedient, with successive governments seeking to emphasise investment security or be seen as strong on national security, by defending energy resources that were high national economic priorities. Governments used defence policy to demonstrate a high priority on “securing” the financially important OEI, when few actions were undertaken, planned or even feasible.

With relevance to Defence, the NESA and long term oil supply security assessments raised specific issues that were mostly unaddressed by policymakers. The security of OEI, of less direct relevance to Defence, was

⁸⁶ Department of Infrastructure and Transport, *Offshore Oil and Gas Resources Sector Security Inquiry* (Canberra: Australian Government, June 2012), pp. 26, 75.

⁸⁷ Ibid., p. 1.

⁸⁸ Ibid., p. 3.

⁸⁹ S. Smith, *Australian Defence Force Posture Review*, Media Release, 22 June 2011, p. 1.

⁹⁰ Hawke and Smith, *Australian Defence Force Posture Review*, p. ii.

closely linked and the issue was widely discussed. None of these issues led to significant actions being taken, and were used or avoided in a politically expedient manner. The level of direct political interest coincided with the opportunity for political or economic gain, but was not consistently applied to ensure a higher level of Defence fuel security.

Conclusion

As the immediate post-World War Two link between national and military fuel security issues faded from collective memory, policymakers demonstrated extremes of interest in Defence fuel security, depending on the likely political outcome. Where there was a possible political gain or economic growth outcome, such as in OEI, the emphasis placed on energy security (and the assessment of the risk) was high. Where there was no perceived economic or political benefit, such as in the costly mitigation of long term oil supply risk for Defence, policymakers avoided discussion of the issue, and the low credibility of terms such as Peak Oil allowed policymakers to avoid action. The treatment of the NESA, an election promise that was not subsequently acted upon, was further indication of the political opportunism associated with energy security in Australia.

The evolutionary use of emergency fuel prioritisation legislation, to become a political tool to offer a level of economic certainty to some sectors of the economy, was indicative of the economic growth focus of successive governments, away from the direct interest in military fuel security. The declared reliance on NOSEC and the LFEA for Defence in a liquid fuel emergency, despite the warnings, demonstrated the lower order nature of fuel security, and the rhetoric was inconsistent with the action taken.

The low priority afforded to Defence energy security was further indication that policymakers did not see fuel as a major risk for Defence to meet its expected operational scenarios, typified by coalition operations in Afghanistan and Iraq, where US support was readily available. It was also an indication of fuel management being seen as a less exceptional enabling function for the exceptional military role. The 2012 force structure review recommendations by Hawke and Smith appear to be lost in a long history of unaddressed Defence fuel security warnings.

Martin White is a serving Australian Army officer. He has undertaken numerous military deployments to Timor Leste, Iraq and Afghanistan. He is currently completing a PhD through La Trobe University, focused on Australian defence policy. martin.white@defence.gov.au.