

Strategic Analysis Paper

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Australia and the New Geopolitics of Energy

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Summary

The principal aim of this Strategic Analysis Paper is to discuss what has become known as the “new geopolitics of energy” and to consider Australia’s place within that characterisation. The paper will then describe the geopolitics of Australia’s role as an energy exporter to Asia, with special reference to the export of uranium. It is argued that a more assertive Australian global role in terms of nuclear non-proliferation and in facilitating an Asian dialogue on nuclear security necessitates logical and continued engagement in the overall nuclear cycle. Such a role would both facilitate the maintenance of international credibility and place Australia in a position to assert some measure of international influence.

Analysis

It is clear that, in the post-Cold War period, new global and regional divisions are replacing the former East-West divide. These are principally based around economic development, economic inequality, religion, ethnicity, political participation and environmental degradation. These new divisions are, in turn, associated with a newly defined set of insecurities – economic, social, political and environmental – that have resulted in new government responses. These responses go far beyond the traditional military security role of the state and invariably require inter-state collaboration to be successful.

Global access to sufficient and affordable energy underpins a fundamentally important sub-category of this new range of twenty-first century security concerns; that is, energy security. Deficient energy security can have intrinsic geopolitical and domestic political implications. Consider the following three examples. First, it has been argued that the reliance by the United States on oil ‘to project its global hegemony is a fundamental weakness’ since the US Department of Defense *alone* uses in the order of 350,000 barrels per day. That is equivalent to about 75 per cent of the daily consumption of Greece and about 50 per cent of Singapore’s daily usage. The interesting irony about the context of this situation was noted by US Congressman Steve Israel, founder of the US Defense Energy Working Group in 2006, who noted that: ‘We borrow money from China to purchase oil

from unstable Persian Gulf countries to fuel our Air Force planes to protect us against threats from these very same countries’.

A second *domestic* political example relates to the attempts by the former British Prime Minister, Gordon Brown, to remain in office. In early September 2008, in a speech to Scottish business leaders designed to reassure British voters about his ongoing leadership credentials, Mr Brown ‘vowed to free Britain from the dictatorship of oil’.

The third example is of the “oil war”, declared in Nigeria (the world’s fourth largest oil exporter in 2006) by The Movement for the Emancipation of the Niger Delta (MEND) in September 2008. MEND, which emerged in early 2006, wanted a larger share of Nigeria’s oil revenue to go to local communities, and has since been engaged in an increasing number of attacks, kidnappings and sabotage. The oil war, which was in response to Government-led attacks on MEND bases, threatened the security of all international oil vessels operating in the region. Phrases such as “defence energy” (US), “dictatorship of oil” (UK) and “oil war” (Nigeria) have become part of a growing global energy security discourse.

The New Geopolitics of Energy

In a recent book – *Rising Powers, Shrinking Planet: The New Geopolitics of Energy* (2008) – Michael Klare has argued that the national security implications of the attempt in 2005 by CNOOC, the Chinese state-controlled oil company, to take over the US oil corporation, Unocal, marked the beginnings of a “new geopolitics of energy”. While energy security had already taken on an added significance post-9/11, the United States now has concerns over a *new* geopolitics of energy. These centre especially on the impact of international economic development on energy demand, competition for increasingly scarce energy resources, and the prospect that this might lead to violent conflict. Klare argues that the resulting ‘power struggle’ will ‘prove to be the defining characteristic of the new century’.

Overall, the logic of Klare’s argument is that, in the twenty-first century, energy-rich states will be able to wield greater economic and political influence, while energy-deficit states will likely become more aggressively (even violently) competitive.

As Klare notes:

In the emerging international power system, we can expect the struggle over energy to override all other considerations, national leaders to go to extreme lengths to ensure energy sufficiency for their countries, and state authority over both domestic and foreign energy affairs to expand (Klare 2008, pp. 6-7).

Energy-Rich and Energy-Deficit States

If we take 50 million tonnes of oil equivalent (mtoe) as an arbitrary cut-off point and examine the pattern of energy imports, we can identify no less than 14 energy import dependent states in 2007 (Table 1, p. 3). These are principally the Northern economies based in the United States, Japan and Europe (nine in total), with the remaining five being in Asia: South Korea, China, India, Taiwan and Singapore. Of those five Asian energy import-dependent states, China and India have had the fastest growth in dependency in the twenty-

first century and, over the next 25 years, are expected to account for almost half of the global increase in energy demand.

We can use the same cut-off point of 50 mtoe to identify 19 of what might be regarded as “energy-niche economies” – that is, states in which energy exports substantially outweigh imports and generally comprise a significant proportion of the national export profile (Table 2, below).

While Russia and Saudi Arabia are clearly especially powerful states in the twenty-first century’s new geopolitics of energy, the United States and Japan and the two

rapidly growing Asian states of China and India are likely to be among the fiercest competitors for energy supplies (Tables 1 and 2). As can be seen, Australia is located in an important “second tier” of energy-niche economies (Table 2).

Table 1: Energy Import Dependent States 2007

(Net imports >50mtoe)

1. USA	714.0
2. Japan	434.7
3. Germany	201.6
4. South Korea	190.3
5. China	166.8
6. Italy	158.0
7. India #	150.0
8. France	135.9
9. Spain	123.8
10. Taiwan	101.6
11. Turkey	75.8
12. Ukraine	59.6
13. Singapore #	54.0
14. Belgium	51.9

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Source: Key World Energy Statistics, International Energy Agency, Paris, 2009.

Table 2: Energy-Niche Economies 2007

(Net imports <50mtoe or more)

1. Russia	-544.4	11. Kuwait*	-120.2
2. Saudi Arabia*	-396.1	12. UAE #*	-108.9
3. Norway	-186.8	13. Angola	-84.2
4. Australia #	-156.3	14. Libya*	-83.5
5. Canada	-149.8	15. Qatar*	-80.0
6. Indonesia #*	-139.6	16. Iraq*	-70.9
7. Iran #*	-137.8	17. Kazakhstan	-69.7
8. Venezuela*	-136.8	18. Mexico	-62.2
9. Algeria*	-127.5	19. Colombia	-56.0
10. Nigeria*	-124.3		

IOR-ARC member *OPEC member

Source: Key World Energy Statistics, International Energy Agency, Paris, 2009.

Of course, apart from actual energy supply and demand, an important additional consideration in the emerging network of global energy interrelations will be the geopolitics of energy technology transfer. Technological expertise in maximising existing energy sources and in the application of additional energy sources will increasingly be used for competitive economic and geopolitical advantage.

The New International Energy Order

Klare argues that the new geopolitics of energy is associated with the emergence of a 'new international energy order' with the main players being Russia - an 'energy juggernaut' - the 'rising powers' of China and India – "Chindia" – and the United States. To Klare, we are seeing the initiation of a global 'black gold war' with the US and its allies versus a rising Asia, although energy conflicts will also take on something of an intra-Asian dimension. In addition, energy competition will escalate, especially in Third World energy-producing regions and in potential new areas such as the Arctic.

In this new "order", the strategic perceptions of the policy-makers of the main players will become increasingly oriented towards energy-rich states, especially in the developing world. This is exemplified by the intense competition between the United States and China for access to oil in central Asia and Africa. The process of competition for scarce energy resources is invariably accompanied by new or increased arms supplies – whether China to Africa or the United States to Saudi Arabia – designed in part to minimise domestic dissent by energy-niche states in the appropriation of their energy and the extension of influence by energy import-dependent states. From this perspective, energy security and human security are generally inversely related.

Klare's portrayal of US perceptions of these processes of competition and their implications is a fascinating one. For example, he refers to the competition for oil in Central Asia as 'draining the Caspian' and as representing a twenty-first century version of the imperial "Great Game" of the nineteenth century. US regional geopolitical concerns centre around "the pull from the north" (Russia) and China's "Go West" strategy, associated with its focus on Kazakhstan. Other energy-deficient "foreign hunters", including India, Japan, South Korea, Turkey and other European states are, however, involved in the competition for the region's energy resources.

While the "scramble for Africa" in the European colonial era was associated with the plunder and exploitation of high value agricultural and mineral resources, in the twenty-first century competition for Africa's energy resources is portrayed as a "global assault" undertaken by the main players and by others. This "assault", which has been facilitated by endemic corruption coupled with the inherent structural weakness of most African states, according to Klare involves an 'American invasion' and strong competition from China and India, who are both portrayed as 'predators'. Indeed, he talks of the 'China threat' in Africa to US strategic interests. Particular African "prizes" in the assault would be Algeria, Angola, Libya and Nigeria.

As a result, the new international energy order will be associated with an emerging energy diplomacy which will be exemplified by new relationships and alliances geared to maximise leverage in relation to energy supply and demand. For example, its high-level delegation present at the October 2008 OPEC meeting was indicative of Russia's attempt to strengthen strategic oil co-operation, especially in an organisation dominated by Iran, Saudi Arabia and Venezuela. Indeed, one US commentator has characterised the linkages among Russia, Venezuela and Iran as an 'emerging petro-power axis' and as an 'axis of petro-tyrants'. The

members of this “axis of diesel” are reported as having ‘extended their reach abroad, backing separatists in Georgia, Islamists in the Middle East and leftists around the world.’

Although the United States is seen to be ‘on the offensive in the global struggle over valuable energy deposits’ in the Caspian Basin and Africa, the US is portrayed as being ‘on the defensive’ in the Persian Gulf due to what is considered to be the ‘encroachment on an “American Lake”’ principally by Asian states, often facilitated, as elsewhere, by state-owned energy corporations. China, for example, secured Iraq’s first post-Saddam Hussein oil contract by reviving a 1997 concession to exploit the reserves in the al-Ahdab oilfield south of Baghdad.

United States Energy Diplomacy

Energy diplomacy on the part of the world’s most energy import-dependent country, the United States, has taken four principal directions in the new international energy order. First, the United States has been aggressively competing for energy supplies, especially “hemispherically” in the energy-niche states of Canada, Mexico and Venezuela.

Second, the United States has used various means of dissuasion towards states entering its ‘perceived sphere of energy influence’. Any “intrusion” into the “American Lake”, therefore, by an Asian energy competitor, especially in the form of a bilateral agreement, is condemned and opposed. Thus, the United States placed considerable pressure upon Japan when it opted to develop the Azadegan oil field in Iran. Furthermore, India’s agreement with Iran to build a gas pipeline through Baluchistan (the so-called “peace pipeline”) was perceived as a ‘challenge to American authority’ in the region and thus, according to Klare, elicited ‘Washington’s hysterical reaction’.

Third, US diplomacy towards energy-niche economies and those of its allies involving a variety of inter-state agreements is encouraged. On the other hand, regional groupings, or ‘proto-blocs’, as Klare refers to them, such as the Shanghai Co-operation Organization (SCO), which comprises China, Russia and Central Asian states, are condemned because of their ‘decidedly anti-American character’ and their increasing involvement in energy security. Furthermore, the United States would likely oppose the construction of any other new bilateral or regional energy arrangement that would involve any other major Asian energy import-dependent state, such as India. On the contrary, sole US “ownership” of such bilateral agreements is much preferred and is realised by sufficient economic and political pressure on energy-niche economies and energy import-dependent states.

Fourth, the geopolitical strategy of the United States in the new international energy order essentially comes down to one of two contrasting scenarios directed towards its most feared energy threat, China. The first is a future hope that US energy diplomacy with China will move from a context of competition to one of collaboration. The second and more immediate scenario involves an encirclement strategy designed to contain China. In contrast to the SCO, Klare argues that there exists a nascent grouping with an ‘anti-Chinese cast’ centred on the United States and Japan, but which also includes Australia, South Korea and others. He notes, however, that: ‘Australia, India, Indonesia and Vietnam have not committed to joining the United States and Japan in an explicitly anti-Chinese alliance’.

From an Australian perspective, there is clearly no significant desire to be involved in a “containment of China” energy policy. Indeed, in a 2008 survey, 62 per cent of Australians believed that China’s growth was good for their country, while the sample was almost evenly divided on whether Australia should join with other countries to limit China’s influence. This is partly because Australia is now in the midst of its “regional” international trading phase, with China being its largest trading partner, and because Australia, as an energy-niche economy, will aim to exploit this advantage with all energy import-dependent states, including China.

Australia’s Energy Resources and the New Geopolitics

Accepting the categorisation of Australia as an “energy-niche economy” (Table 2, p. 3), and since there are six energy import-dependent states in Asia – China, India, Japan, Singapore, South Korea and Taiwan (Table 1, p. 3) – and given that Australian international trade is heavily oriented towards Asian states, then one would assume that Australian energy, especially coal, natural gas and uranium, would not only be a significant export earner, but would also give Australia some regional geopolitical leverage.

Coal and Gas

In 2007, Australia possessed nine per cent of the world’s hard coal reserves (fourth after USA, Russia and China) and was the world’s largest exporter. While Singapore is oil and gas import-dependent, the other five Asian energy import-dependent states – Japan, South Korea, Taiwan, India and China – were among the world’s top six hard coal users and importers (Table 3).

Furthermore, these five states together accounted for more than 75 per cent of Australian coal exports in 2006, with Japan (44.4 per cent) being the most important destination.

Australia has 1.4 per cent of the world’s proven reserves of

natural gas, equal fourteenth in the world with Malaysia. Liquefied natural gas (LNG) exports are very closely tied to Asian markets, especially Japan (79.3 per cent of Australian LNG exports), China (3.3%), South Korea (2.8%) and Taiwan (1.6%). Asian “LNG dependence” on Australia in 2008 varied considerably from zero in the case of India, compared to Japanese LNG imports from Australia which represented 18.1 per cent of total LNG imports into Japan, and Chinese imports from Australia which represented 85.3 per cent of Chinese LNG imports.

Table 3: Asian Energy Import Dependent States - Percentage Consumption of Fuel (mtoe) 2009

	<i>Oil</i>	<i>Natural Gas</i>	<i>Coal</i>	<i>Nuclear</i>	<i>HEP*</i>
China	18.6	3.7	70.6	0.7	6.4
India	31.7	10.0	52.4	0.8	5.1
Japan	42.6	17.0	23.5	13.3	3.6
Singapore	85.7	14.3	-	-	-
South Korea	43.9	12.8	28.9	14.1	0.3
Taiwan	44.1	9.6	36.6	8.9	0.8

Source: Calculated from data presented in BP Statistical Review of World Energy 2010, p. 41.

** Hydroelectric power*

Uranium

One of the central assumptions underpinning the likelihood of the broad dimensions of conflict emerging in the new geopolitics of energy is that energy competition will be principally based on access to hydrocarbons. As Klare points out, however, the environmental impact of the use of hydrocarbons has ensured that global climate change has also become an integral part of the ‘new geopolitics of energy’. Energy sources that result in fewer or no greenhouse gas emissions, such as uranium, will thus be in increasingly high demand, and, consequently, politically stable uranium-rich states such as Australia and Canada will become important players in the ‘new international energy order’.

Given the economic and environmental pressures on the use of carbon fuels, the ten “uranium states” of Australia, Brazil, Canada, Kazakhstan, Namibia, Niger, Russia, South Africa, United States and Uzbekistan, which together possess more than 90 per cent of the world’s reserves and production, assume an increasingly important geopolitical status. The current largest uranium suppliers are not, however, necessarily those with the largest uranium reserves (Table 4).

Table 4: Global Uranium Reserves and Production 2009

(Percentage of global total)

<u>Uranium reserves:</u>	<u>Uranium production:</u>
Australia*# (23%)	Kazakhstan* (27%)
Kazakhstan* (15%)	Canada*# (20%)
Russia*# (10%)	Australia*# (16%)
Canada*# (8%)	Namibia (9%)
S. Africa*# (8%)	Russia*# (7%)
Namibia (5%)	Niger# (6%)
Brazil*# (5%)	Uzbekistan (5%)
Niger# (5%)	USA*# (3%)

* Member of the Nuclear Supplier’s Group (NSG)

Ratified Convention on the Physical Protection of Nuclear Material (CPPNM)

Source: World Nuclear Association - <http://www.world-nuclear.org>

For example, in 2009, Canada, with the fourth largest global reserves (eight per cent) was the world’s second largest uranium producer, with 23 per cent. On the other hand, the two states with the world’s largest reserves – Australia and Kazakhstan – together produced 43 per cent of the world’s uranium in 2009. Three states representing 20 per cent of world uranium production – Namibia, Niger and Uzbekistan – are not participants in the Nuclear Suppliers Group. Furthermore, three states – Kazakhstan, Namibia and Uzbekistan – representing 41 per cent of global uranium production, have yet to ratify the Convention on the Physical Protection of Nuclear Material (CPPNM). All “uranium powers” have, however, acceded to, or ratified, the nuclear Non-Proliferation Treaty, with India, Israel, North Korea and Pakistan being its only non-signatories.

From a global perspective, both Australia (with 23 per cent of reserves and 16 per cent of production) and South Africa (with eight per cent of reserves and about one per cent of production) could be regarded as “under-producers”, and both are likely to be future sources for growing Indian Ocean and North-East Asian demand. It is predicted that, over the next two decades, Asian nuclear generating capacity will more than double, with the greatest increase in demand coming from China, India, Japan and South Korea – four of the

Asian energy import-dependent states. At present, however, Australia exports uranium to just three of those states: China, Japan and South Korea.

In 2009, Australia exported in excess of 10,000 tonnes of uranium oxide concentrate, most of which was to the developed Northern states of the US (34 per cent), EU (30 per cent) and Japan (21 per cent). The remaining export destinations were South Korea (eight per cent) and Taiwan (four per cent). An arrangement reached in 2006 to facilitate such trade as part of a preferential trade agreement meant that China received 300 tonnes in 2009 and this will increase. Furthermore, in 2007, Australia and Russia signed a nuclear safeguards agreement allowing Australian uranium to be used for the first time in the production of civil nuclear power.

Australian Government Uranium Policy

The constitutional division of powers is one of many factors which have historically resulted in a wide range of federal-state conflicts in Australia. At present, the Australian States possess the power over the extraction of minerals resources (so-called “minerals power”), and uranium mining is disallowed in all States and Territories except South Australia (which contains Australia’s largest deposits at Olympic Dam), the Northern Territory, and, more recently, Western Australia. The Federal Government, however, possesses export powers and thus can effectively disallow uranium exploitation in the absence of domestic nuclear power.

Before the November 2007 Federal election, this issue was rapidly developing into an important Federal-State conflict in Australia as Labor States, such as Western Australia, with significant uranium deposits and no uranium mine, appeared likely to become increasingly at odds with a conservative Federal Government keen to open up new mines, expand Australia’s uranium exports and potentially to develop a domestic nuclear industry. Political pressure was also to be backed up by powerful economic pressure, since, in WA, BHP-Billiton holds one of the largest uranium deposits at Yeelirie, with Cameco-Mitsubishi holding another at Kintyre. Within the last three years, however, Australia’s political landscape has changed vis-à-vis uranium mining. First, the conservative Howard coalition government lost power in the 2007 Federal election and was replaced by the Rudd Labor government. Second, in September 2008, in Western Australia, the Labor State government was replaced by a conservative alliance.

Historically, the uranium policy of the current Federal Australian Labor Party (ALP) government has been riddled with contradictions. It is a conflicting, generally unchallenged and unspoken combination of idealism and realism, which is regarded overall as sacrosanct. This policy orientation has been referred to by one commentator as “ideological tradition” based on “uranium phobia”. While the former Federal Coalition government (the Howard Government) favoured a review and a wide-ranging policy debate, the then-opposition Labor Party has preferred uranium mining to be restricted to three mines. However, the ALP dropped its so-called “three mines policy” prior to the 2007 Federal election, and, in January 2008, the South Australian Premier announced Australia’s fourth mine to be opened at Honeymoon, 400 kilometres northeast of Adelaide. Any expansion of uranium mining is regarded in some quarters as one step towards Australia becoming an “energy superpower”.

The incoming State Government in Western Australia ran a pro-uranium platform as one of its issues during the 2008 WA State election campaign. According to the Department of Mines and Petroleum, Western Australia has known resources in excess 200,000 tonnes of uranium oxide and has significant potential for additional deposits to be discovered. It has been estimated that the Government's support for the opening up of the State's first uranium mines from 2012 will add \$3.2 billion in net present value, \$4 billion in terms of export value and more than \$2 billion to Australia's GDP to 2030.

Australian Uranium and India: Some Cons and Pros

A few days after the South Australian Honeymoon mine announcement, the Australian Federal Government decided to veto uranium sales to India that had been agreed to in principle by the previous Howard Government in August 2007, provided that strict conditions applied to its use solely for generating power. In short, unlike its predecessor, the incoming Government had decided to enforce its well-known uranium export guidelines. The principal reason given for the decision was that India was not a signatory to the nuclear Non-Proliferation Treaty (NPT). Australia was also concerned over India's refusal to accept a ban on nuclear testing and that a decision in favour of India might trigger bids from other states that were also non-NPT signatories. Australia was concerned about the possibility of further nuclear proliferation and thus assumed a risk minimisation posture. In effect, therefore, Australia's uranium exports policy would now be restricted to "NPT-members only". In short, the NPT is seen as being more valuable to Australia than its relationship with India.

The view that increasing uranium exports will necessarily further weaken the NPT is highly questionable, since the world is now firmly in the "second nuclear age" and the NPT is in the process of being reviewed. Furthermore, a restrictive uranium export policy perspective is not universally held within the ALP and essentially represents a Cold War ideological legacy of the "old left" in the Australian Labor Party, which, if fully implemented, would envisage a cessation of all uranium exports. The ideological legacy, however, is given added policy weight due to the reinvigoration of an assumed Australian global moral role associated in part with a "restored activism" on the nuclear agenda of disarmament, arms control and non-proliferation.

On the other hand, given the "nuclear energy revival", Australia could have an important role in helping to minimise global and regional energy insecurity. In the case of India, which is poorly endowed with uranium, it has been projected that there will be a five-fold increase in its energy needs over the next 25 years. Exporting Australian uranium to India would help in terms of meeting energy demands, reducing greenhouse gas emissions and assisting in development goals, while an expansion in India's nuclear energy production does not necessarily imply a rise in the proliferation threat.

Apart from the additional export income benefits, which, in the long-term could be considerable, Australian uranium exports would potentially enable the maintenance of some degree of influence, and an Australian engagement in ending India's nuclear isolation might also have an impact on Indian nuclear security thinking.

The decision in September 2007 to allow the resumption of nuclear trade with India implies that the Nuclear Suppliers Group (NSG) had concluded that they needed to work outside of the NPT in order to preserve it. Australia agreed to the NSG decision and officially supports the US-India nuclear deal. Under this scenario, however, not only is there a double standard, it is possible that Australian uranium will not need to be sold directly to India but will simply be “traded on”. In any event, since the NSG decision did not require India to sign the NPT, Australia should consider reevaluating its position on exporting uranium only to NPT states. Australia’s support for the India-US deal has removed any moral high ground that it had presumed by rigidly applying its uranium export guidelines and by applying its NPT-states only uranium export policy. Of course, former US President Bush’s belated signing of Bill 123 meant that France became India’s first nuclear supplier on 1 October 2008. Furthermore, the UK has recently decided to allow the export of nuclear technology and components to India.

The Australian decision not to export uranium to India raises another suite of double standards related to its export agreements with China and Russia. There is understandable concern over what can be interpreted as the apparent inequity in decisions that had already been made by the previous government to sell uranium to China that were not overturned by the incoming government. To some, the creation of such inequity implies that Australia is willing to accept Chinese regional dominance over India. In addition, there is some concern that, since Russia has yet to ratify the IEA “additional protocol”, it is possible that projected Australian uranium exports to Russia could be funnelled to Iran.

Conclusion

Australia faces a series of acute dilemmas regarding its international role, both as a potential “energy superpower” and as a stable guarantor of energy security on the one hand and, as a responsible international citizen taking a prominent role on nuclear disarmament, on the other. However, the argument in favour of a more assertive Australian global role in terms of nuclear non-proliferation and even a leadership role in promoting an Asian dialogue on nuclear security also requires logical and continued engagement in the overall nuclear cycle. Such an approach will not only facilitate the maintenance of international credibility, but will also enable Australia to be in a position to assert some measure of international influence on these issues.

Given the contradictory, and even confusing, overall environment of decision-making by successive Australian governments on uranium production and export, energy import-deficient states – especially those which are Australian allies and friends – would be forgiven for raising serious questions about Australia’s international credibility on energy security and even for coming to the conclusion that, with regard to uranium exports, Australia simply wants to have its cake and eat it, too!

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