

# Strategic Weekly Analysis

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## From the Editor's Desk

Dear FDI supporters,

Welcome to this week's edition of the *Strategic Weekly Analysis*. This week, we analyse the latest round of China-India boundary negotiations, the attempted military coup in Bangladesh, the behind-the-scenes growth of ties between the Indian and Israeli Governments and the recent assassination of another Iranian nuclear scientist.

Also considered are the implications of Indonesia's military expansion and the severe structural weaknesses underpinning the continuing crisis in Yemen. The Global Food and Water Crises Research Programme reports on the conclusions from the inaugural international conference on Asian Food Security, held in Singapore in August 2011, and attended by Future Directions International.

The Northern Australia/Energy Security Research Programme concludes this week's SWA with an analysis of the potential of the Pilbara region to support an expanded biofuel industry.

This week, FDI is proud to unveil a new product: *Strategic Alerts*. These offer a brief snapshot of

unfolding events of particular importance. You will have received our first *Strategic Alert* yesterday, covering the implications of the oil embargo placed against Iran by the European Union.

Also this week, FDI is pleased to unveil the first of a number of refinements to our website. We hope these changes will improve the experience for visitors. We now include the ability to share FDI product via social media.

*Strategic Analysis Papers* to be released over the next month include feature profiles of the Ethiopian Army and the Lord's Resistance Army rebel movement, and examinations of the national involvement in the Indian Ocean region of Indonesia and South Korea. Staying with South Korea, the Global Food and Water Crises Research Programme will investigate the future water situation in that country.

**Major General John Hartley AO (Retd)**  
*Institute Director and CEO*  
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## China-India Relations in 2012: Bilateral Ties Set to Expand

### Background

After holding talks for the 15<sup>th</sup> round of boundary negotiations in New Delhi on 16-17 January, China's State Councillor, Dai Bingguo, and India's National Security Advisor, Shivshankar Menon, signed the 'India-China Agreement on the Establishment of a Working Mechanism for Consultation and Co-ordination on India-China Border Affairs,' which will be headed by high-level diplomatic and military officials from each country.

### Comment

Building on the spirit of previous border agreements signed in 1993, 1996 and 2005, the 2012 accord is an important practical and symbolic step towards normalising bilateral ties, as both countries pledge to build what has been officially termed the 'India-China Strategic and Co-operative Partnership for Peace and Prosperity.'

From a broader strategic perspective, the new working mechanism is a clear indication that China and India see increasing benefit from peaceful relations, although they remain strategic rivals competing for regional influence and engage in contradictory and counterproductive acts.

Yet, rapidly growing economic ties are fast taking precedence in strategic calculations between both countries. For consecutive years, China has maintained its position as India's largest trading partner with two-way trade reaching a historic milestone of US\$67 billion at the conclusion of 2011. Both countries have vowed to reach US\$100 billion by 2015. Although the balance of trade has been in favour of China, both countries recognise the importance of fostering improved trade relations.

For instance, in September 2011 China and India held their first annual strategic economic dialogue attended by senior government officials, designed to provide enhanced opportunities for bilateral investment and trade. The event was touted as a major success. More recently, on 9 January this year, in a speech at a Chinese Embassy Function in New Delhi, India's National Security Advisor, Shivshankar Menon, affirmed: '... investment flows between us have not kept pace with trade. Indian investment in China, worth a total of US\$433 million, is spread over 676 projects, while Chinese investment in India is worth nearly US\$300 million.' He continued: 'India is already one of China's most important markets for project exports, with a cumulative value of contracted projects at US\$53.5 billion and turnover realised at US\$24.6 billion.'

There is reason to believe that the incentive behind China's and India's moves to improve relations can, in part, be explained by the global repercussions of the US economy's slow recovery, coupled with the ongoing Eurozone crisis. In addition, China's and India's economies have also started to show signs of slowing, which, in India's case, has been a sharp decline. This makes broadening economic co-operation increasingly attractive politically and economically to both countries. While strategic rivalry between the two powers will continue to exist and possibly escalate in some areas, these initiatives are positive first steps in improving understanding and ushering in the prospect of long-term stability between them.

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## Bangladesh: Islamists Linked to Coup Plotters

### Background

The recent arrest of a group of military officers planning a coup against the government of Prime Minister Sheikh Hasina, highlights the growing tensions in Bangladesh between secular and Islamist forces, and exposes a serious problem that lies at heart of the country's largest paramilitary force.

### Comment

While some news reports describe the plot attempt as a military coup, it is important to differentiate between sections of the Bangladeshi military to learn the nature of the destabilisation that has occurred over the last three years. The officers arrested in relation to the latest coup appear to come not from the regular Bangladeshi armed forces, but from the smaller, paramilitary, Border Guards Bangladesh (BGB) organisation.

To understand what is driving this instability, it is beneficial to note the context and recent history of the BGB. The last major military uprising to occur in Bangladesh happened on 25 February 2009; just a few months after the current government came to power. This was when elements of the BGB (then known as the Bangladeshi Rifles) mutinied, killing a number of their senior officers, including the organisation's commanding Director-General.

Unlike the latest coup plot, the 2009 revolt was a limited BGB mutiny, based around the issue of entitlements and resentment of the superior status and perks of the regular Bangladeshi Army. A sticking point was the appointment of Bangladeshi Army officers to the most senior ranks of the BGB and the fact that BGB members did not have access to peacekeeping deployments, which are considered a lucrative opportunity among regular Bangladeshi military personnel.

According to a recent United Nations report, Bangladesh is now the single largest contributor to UN peacekeeping forces, with 10,498 troops deployed as of October 2011. These UN postings are highly sought after, due to the high income payments and bonuses associated with them. Indian analyst Dr Smruti S. Pattanaik, from the Institute for Defence Studies and Analysis in New Delhi, went so far as indicating that the military in Bangladesh would not want to take power from a directly elected government, as its heavy involvement and desire to participate in UN peacekeeping missions would most likely constrain its actions. The fact that the BGB sits outside these benefits explains, to an extent, why the 2009 revolt started and also why it failed to spread into the wider Bangladeshi military, quickly losing momentum and lasting just two days.

A January 2012 report in the Qatar-based *Gulf Times* highlighted the serious nature of the problems afflicting the BGB, when it noted that, since 2009, a total of 3,036 members of the organisation had been sentenced to jail for their involvement in the mutiny. It is within this picture of the paramilitary BGB facing ongoing internal stability issues that we come to the context of the current coup plot. On 20 January 2012, the *Times of India* reported that the first two officers arrested over the recent coup plot, Lt. Col. Ehsan Yusuf and Major Zakir, had links to the earlier 2009 BGB revolt (indicating their status as former BGB, not regular Army, officers). Even more troubling was the reporting of follow up arrests, which linked

the two arrested officers to members of the outlawed Islamist group *Hizb ut-Tahrir*, which was banned by the Sheikh Hasina Government in 2009.

It appears that instability within the BGB is attracting the interest of groups such as *Hizb ut-Tahrir*, which seeks to destabilise the current Bangladeshi Government because of its secular leanings and because it outlawed the organisation in 2009.

It should be noted that the Bangladeshi Army is also being targeted for infiltration by Islamists. The alleged ring leader of the plot, Syed Mohammad Ziaul Huq (who is currently on the run), was identified as a Bangladesh army major with links to Islamist movements in the country. It is BGB, however, which appears to be more structurally at risk of falling victim to infiltration by enemies of the current government.

**Jahnu Russell\***

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## **Indo-Israeli Relations Set for Further Acceleration**

### **Background**

The visit of Indian Foreign Minister SM Krishna to Israel, in early January, represents a key milestone in the development of the two countries' relations at the governmental level. Although it has grown over the last decade, it is a part of the bilateral relationship that has kept a relatively low profile. This is in sharp contrast to the dynamic growth of commercial, economic and defence links.

The extent of the growth is exceptional. It is reported by the Indian Government that since the commencement of diplomatic relations in 1992, bilateral trade has increased from US\$200 million to over US\$4.657 billion in 2010. Even more striking, was the fact that, in just one year, from 2009 to 2010, the level of total bilateral trade grew at a rate of 59 per cent. Today, India is Israel's fourth-largest export destination.

### **Comment**

Such growth is set for yet further acceleration, with negotiations for a free trade agreement now well underway and recent revelations that Israel has expressed interest in exporting gas to India, having made massive gas discoveries in its Tamar and Leviathan offshore fields.

Yet the economic links only represent a part of the story. Trade statistics do not include armaments sales and the significant contribution the Israeli defence industry is now making to the modernisation of India's armed forces. It was reported by the *Times of India* that, since 1999, the bilateral defence industry has grown to over US\$9 billion dollars. Israel is now India's second-largest source of defence imports, exceeded only by Russia.

In an recent opinion piece, published on 5 January 2012 in the *Asian Age*, Bharat Karnad, a Research Professor in National Security Studies at the Centre for Policy Research, New Delhi and a former member of the Indian security council, stated: 'If the details were to be out about the quality and extent of Indo-Israeli co-operation and collaboration in defence, space and anti-terrorism spheres, it would astonish

most people.’ He further went on to note that much of India’s more antiquated Russian-built military assets are only viable due to Indian acquisition of Israeli technological upgrades.

From the Israeli perspective, India is now its largest defence export market, accounting for nearly 50 per cent of all sales. In 2009, Israeli Aerospace Industries (IAI) secured a US\$1.4 billion contract to supply India with *Barak* ground-based and ship defence missiles. India’s importance to Israel’s defence industry cannot be understated. In 2010, the president of IAI, Itzhak Nissan, in an interview with *Middle East Newslines*, expressed concern over increased competition facing the Israeli defence sector in keeping their important Indian gains, as US and EU military budgets shrink. Yet the signs are still very promising for Israeli defence interests, as the Indian Government continues to show eagerness to access Israeli technology in its race to modernise the armed forces and accelerate technology transfers. Nevertheless, the latter has been hampered to an extent by US pressure, such the 2011 move to block IAI’s US\$1.1 billion sale of EL/M-2052 AESA radar systems to India.

Beyond the supplies of defence materials and technology, India has also increased co-operation with Israel in the area of counter-terrorism. This has been given greater impetus since the Mumbai terror attacks of November 2008. The growing level of co-operation was highlighted by the 2010 visit to India of the Israeli minister for internal security, Yitzhak Aharonovitch, to discuss counter-terrorism co-operation. It was also announced during Minister Krishna’s visit that the two countries had signed an Extradition Treaty and a pact on the Transfer of Sentenced Prisoners.

It is interesting to note that this progress in building relations has largely occurred behind the scenes. Until last week’s visit, the Indian Government had sent no foreign or prime ministerial delegation to Israel in over 11 years. This is an interesting dynamic, which both Israeli and Indian media commentators have referred to as a “mistress relationship”.

This was highlighted in a speech given by the Israeli ambassador at the 2008 annual IDSA-BESA dialogue, in which he stated:

‘On the other hand, we are trying, both of us Israel and India, to strike the fine line between too much and nothing. And I think that we have found this fine line in the sense that everybody knows there is a strong and burgeoning relationship on the one hand and the details of this relationship are really quiet, they are not so relevant, as a matter of fact.’

The current pace of growing economic ties, and mutual interests in defence and counter-terrorism, highlighted by SM Krishna’s visit to Israel, shows signs that the strange dynamic might finally be ready to mature.

**Jahnu Russell\***

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\* **About the author:** Jahnu Russell manages the international research team for Melbourne-based company Export Results and has extensive experience in undertaking market analysis projects, both in Australia and overseas. Mr Russell has experience in the organic, agricultural, manufacturing, food and energy industry sectors and has facilitated research and competitor analysis projects in USA, Canada, Europe, India, South-East Asia and the Middle East. He has a Bachelor of Business (Finance) and a Bachelor of Arts (Asian Studies). In 2005 he completed the Austrade Institute’s ‘Going International’ export advisors course and is a former member of the Export Consultants Association of Australia (ECAL). He has an ongoing interest in strategic issues and the critical role of Australia’s trade relationships.

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## Assassination of Iranian Nuclear Scientist Raises Tensions in the Middle East

### Background

The assassination of an Iranian nuclear scientist earlier this month has increased tensions between Iran, Israel and the United States. Though no one has officially claimed responsibility for the latest act, in what appears to be an increasingly audacious covert campaign, the move may have profound consequences for the region.

### Comment

The assassination, which bears a striking similarity to past assassinations and is the fifth in two years against Iranian nuclear scientists, has further divided Iran and the West. *Al-Jazeera* news reports that the Iranian foreign ministry had ‘reliable documents and evidence that this terrorist attack was planned, guided and supported by the CIA.’<sup>1</sup> The US has denied any involvement in the attack, with Tommy Vietor, a spokesman for the US National Security Council, declaring ‘the United States had absolutely nothing to do with this.’

Iran also believes the actual attack may have been undertaken by Israel. ‘The responsibility of this explosion falls on the Zionist regime’ said Safar Ali Bratloo, an Iranian official.<sup>2</sup> Israel has remained tight-lipped over the attack, claiming neither responsibility nor innocence. However, the warning by Israeli military leader Lieutenant-General Benny Gantz, just hours before the assassination, that Iran should expect “unnatural” setbacks to its nuclear programme, has done little to quell Iranian suspicion of Israeli involvement in the attack.

Indeed, it is possible the attack was a joint operation between Mossad and a dissident group within Iran, such as *Mujahdeen-e Khalq* (MeK, or People’s Mujahedeen Organisation of Iran). Robert Baer, a former CIA agent in the Middle East, claims that ‘to do this in the middle of the day, you need a lot of people on the ground ... you need an extensive network of the kind only someone like MeK can provide.’<sup>3</sup> Baer also suggested that Israel, dissatisfied with the sanctions recently placed on Iran, may be trying to provoke the Iranians into launching a missile, effectively providing it and the US with a *casus belli*.

The MeK is a Marxist-Islamist terrorist group, which was formed in 1965 and used in the 1980s by Saddam Hussein to attack Iran during the Iran-Iraq war. It has often been implicated in co-operative attacks with Israel. The group, consisting of between 3,000-5,000 members, mostly situated in Iraq, is believed to be a key provider of intelligence on Iran’s nuclear weapons programme, including its nuclear sites and scientists. The US State Department currently recognises the MeK as a terrorist organisation, although the

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<sup>1</sup> Al-Jazeera, 15 January 2012, ‘Iran claims evidence to tie US to killing’.  
<<http://www.aljazeera.com/news/middleeast/2012/01/201211551641924633.html>>.

<sup>2</sup> *The Australian*, 11 January 2012, ‘Iran blames Israel after nuclear scientist killed by car bomb’.

<sup>2</sup> *The Australian*, 11 January 2012, ‘Iran blames Israel after nuclear scientist killed by car bomb’.  
<<http://www.theaustralian.com.au/news/world/iran-blames-israel-after-nuclear-scientist-killed-by-car-bomb/story-e6frg6so-1226242061077>>.

<sup>3</sup> Borger, J., ‘Who is responsible for the Iran nuclear scientists attacks?’, *Guardian*, 12 January 2012.  
<<http://www.guardian.co.uk/world/2012/jan/12/iran-nuclear-scientists-attacks>>.

MeK has lobbied to be removed from the list in recent times and enjoys the support of some current and former US officials, *Foreign Policy* reports.<sup>4</sup>

Not everyone believes Israel is responsible for the assassination, however. There is speculation that some of the murdered scientists may have been killed by the Iranian government, possibly for showing sympathy for the opposition. As Karim Sadjaour at the Carnegie Endowment for International Peace says, 'I think there is reason to doubt the idea that all the hits have been carried out by Israel .... It's very puzzling that Iranian nuclear scientists, whose movements are likely carefully monitored by the state, can be executed in broad daylight, sometimes in rush-hour traffic, and their culprits never found.'<sup>5</sup>

In any case, even with the ongoing assassinations, security officials believe Iran will obtain nuclear weapons within the next few years, which would likely result in a nuclear standoff with Israel. So far, the combination of diplomacy, sanctions and covert attacks have failed to significantly halt Iran's nuclear ambitions. Meanwhile, as Iran and the US continue to clash over the oil embargo placed on Iran and its corresponding threat to block the Strait of Hormuz, the situation is as delicate and tense as ever.

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## **Indonesian Military Expansion Strengthens China Partnership**

### **Background**

China's Defence Minister, General Liang Guanglie, met the Indonesian ambassador to China, Imron Cotan, in Beijing on 16 January 2012, to discuss increasing military co-operation between the two countries.

### **Comment**

The meeting occurred on the same day Indonesian Defence Minister, Purnomo Yusgiantoro, declared that, after ten years of limited military spending, Indonesia was now entering an intensive period of military expansion. 'Our economy is very strong,' Mr Yusgiantoro said as he announced the new defence budget of 150 trillion *rupiah* (\$16.3 billion), after the government revised the budget in December 2011, giving it a 53 per cent year-on-year increase.<sup>6</sup>

The new budget will bring Indonesian defence spending above one per cent of Gross Domestic Product. With Indonesia sitting astride the chokepoints between the Indian and the western Pacific Oceans, it is an

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<sup>4</sup> Rogan, J., 'State Department scrambling to move the MEK - to a former U.S. military base?', *Foreign Policy*, 21 December 2011.

<[http://thecable.foreignpolicy.com/posts/2011/12/21/state\\_department\\_scrambling\\_to\\_move\\_the\\_mek\\_to\\_a\\_former\\_us\\_military\\_base](http://thecable.foreignpolicy.com/posts/2011/12/21/state_department_scrambling_to_move_the_mek_to_a_former_us_military_base)>.

<sup>5</sup> Shane, S., 'Adversaries of Iran Said to Be Stepping Up Covert Actions', *New York Times*, 11 January 2012.

<<http://www.nytimes.com/2012/01/12/world/middleeast/iran-adversaries-said-to-step-up-covert-actions.html?pagewanted=all>>.

<sup>6</sup> Moss, T, 18 January 2012, 'Indonesia Military Powers Up'. <<http://the-diplomat.com/flashpoints-blog/2012/01/18/indonesia-military-powers-up/>>.

increase that has implications for South-East Asia. It will see Indonesia overtake Singapore as the region's biggest military spender, leaving behind countries such as Malaysia and Thailand.

Indonesia has wasted no time in drafting a wish-list that includes tanks, multiple rocket systems, a guided missile destroyer, three submarines, and retrofits for ex-United States' F-16s and ex-Australian C-130 transport aircraft.

Indonesia's ambitions have attracted renewed Chinese interest in military co-operation between the two countries, a move which has been welcomed by Indonesia. Mr Cotan said increased strategic communication with China would improve bilateral ties and jointly maintain peace and stability in the region.<sup>7</sup>

According to Mr Cotan, Indonesia regards working with China as an opportunity, rather than a challenge. Aside from a joint Sino-Indonesian missile production programme, which commenced in early 2011, China is, however, yet to find a significant role in Indonesia's rise as a regional power.

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## **Yemen: Long-term Structural Weaknesses Exposed by Political Crisis**

### **Background**

Yemen faces an unfolding humanitarian crisis. While international attention focuses on political and separatist tensions, for a growing number of Yemenis, daily survival and food procurement are paramount.

### **Comment**

There is little doubt that the protracted nature of Yemen's internal security situation has exacerbated the prospect for widespread poverty and food shortages. A lack of security has also made international assistance more difficult. Fuel shortages, caused partly by the conflict between various groups, have led to price surges and unemployment.

All these issues have worsened the situation but have not necessarily been its cause. In other words, the political crisis has exposed and worsened long-term structural weaknesses.

Yemen's population is likely to double in the next 10 to 15 years. This situation is exacerbated by unprecedented numbers of refugees arriving from Somalia and Ethiopia. In 2011, some 103,000 refugees were involved, or roughly double the number for the previous year. Somalis are fleeing either violence or drought; Ethiopians because they see no prospects in their impoverished state.

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<sup>7</sup> Xinhua, 16 January 2012, 'China, Indonesia eye for closer military links'. <[http://www.china.org.cn/world/2012-01/16/content\\_24419726.htm](http://www.china.org.cn/world/2012-01/16/content_24419726.htm)>.

Most food requirements in Yemen are satisfied through imports. This includes up to 90 per cent of wheat and 100 per cent of rice. Both food and water require transportation. The fuel crisis, which has existed since mid-2011, means that the cost of transporting goods has increased considerably. A similar situation applies to water, which has to be extracted from aquifers and transported to users. As a result, over the last 12 months, food prices have increased by over 60 per cent.

The result is less water to produce food, fewer fishing vessels able to operate, cities without electricity, reduced transportation and increasing unemployment.

A substantial part of the Yemeni population is increasingly adopting survival measures. These include reducing the number of meals per day, taking children from school and increasing debt levels.

Nor is there any immediate solution in sight. Foreign donors and aid agencies are increasingly reluctant to operate in Yemen. Corruption is rife, with only a small number of people controlling the import and movement of goods. Many businesses are also closing or leaving, recognising the difficulties facing the country.

**Major General John Hartley AO (Retd)**

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## **Asian Food Security Road Map Released**

### **Background**

In August 2011, the inaugural international conference on Asian Food Security took place in Singapore to discuss the way forward for Asian food security. It was attended by Future Directions International and organised by the RSIS Centre for Non-Traditional Security Studies and the South-East Asian Regional Centre for Graduate Study and Research in Agriculture. The final conclusions from the conference have just been published.

### **Comment**

Food security concerns particularly came to the fore in 2007-08, when food prices of some commodities climbed sharply, leading to unrest and increasing hunger in many parts of Asia. It is estimated that about 560 million people in Asia and the Pacific are undernourished. This represents around 62 per cent of the world's undernourished.

The conference concluded that there was an urgent need to rethink food security and promote a "doubly green revolution" that would lead to increasing food production, while reducing land degradation and the unsustainable use of fertilisers, pesticides and water.

Supermarket chains are reshaping the food supply chain and assuming greater control in Asia. In addition, the urbanisation of the region has food security ramifications. To achieve sustainable food security in the region, the conference paper suggests that a comprehensive policy and investment agenda needs to achieve the following:

- Improve small-holder productivity
- Protect vulnerable people
- Support transparent, fair and open trade
- Establish regional strategic grain reserves
- Exercise extreme caution on biofuel expansion
- Create regional frameworks for knowledge sharing and better co-ordination

The conference, which brought together leading international food security experts, went a long way in crystallising the challenges Asia faces in dealing with food security. It highlighted the inherent complexities and demonstrated the need for Asian countries to work closer together, using, where possible, existing frameworks, such as ASEAN.

There remains one hurdle.

The 2007-08 food price spike experience was driven in part by the desire of some countries for self-preservation, over and above the common Asian good. When food prices rose, countries reacted in different ways, such as by stockpiling food or buying more food than was required to shore-up food security. This only exacerbated the problem.

It is unlikely that it will be different next time food prices spike. While working together and being more transparent with each other might provide greater food price certainty, it is unlikely that countries will not want to take care of themselves first, before they consider any philosophical desire to care for their neighbours.

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## **Developments Bode Well for Biofuel Sector**

### **Background**

Developments in, and growth of, “second generation” biofuels have provided increased viability for the sector. The Pilbara region has an existing capability to support projected growth in the industry. Scope, however, exists for the region to also play an enhanced role in both the consumption and production of biofuels.

### **Comment**

According to a mid-January 2012 article appearing in *Science*, American bioengineers have devised a way to produce ethanol from seaweed. If viable, the work led by Yasuo Yoshikuni and his colleagues at the Bio Architecture Lab in Berkeley, California, is an important milestone, creating a biofuel without the need to sacrifice food crops.

Viability of biofuels was further bolstered in January, with the announcement of a biofuel partnership between Maersk and the United States Navy (USN). Initial developments between the world's two largest shipping fleets bode well, with large cargo vessels and warships having been successfully powered by oil derived from genetically modified algae. Currently, ships are primarily powered by bunker oil, a highly polluting, asphalt-like material. According to a 2009 *Guardian* article, shipping causes between three and four per cent of global greenhouse gasses, with a single container vessel emitting the equivalent of 50 million cars.<sup>8</sup> The push by Maersk and the USN for renewable marine fuels will likely be replicated globally by other large fleets as they seek to reduce their carbon footprints.

A particular benefit of recent biofuel developments is the growth of the "second generation" biofuel industry. Demand for first generation biofuels, produced primarily from sugar cane or maize, has been cited as a key catalyst for the rise in global food commodity prices, a contributing factor to unrest in the Middle East and Africa. In addition, biofuels using food stock are land-intensive, requiring large tracts of arable land.

The most significant issue facing a large-scale biofuel industry remains scalability. To power Maersk's fleet of vessels, it is estimated that it would require an area half the size of Denmark. Northern Australia, particularly areas in the Pilbara region of north-west Australia, presents an opportune solution to such concerns. Large areas of the region's hinterland are marginalised, unable to support other economic prospects. Biofuel projects, such as Aurora's algae farm in [Karratha](#), have the potential to provide clean energy and diversify the regional economic profile.

Further synergies exist with established industries within the region. The Pilbara serves as an export hub, with ore and gas carriers transiting from Dampier and Port Hedland to markets throughout Asia. Scope exists for these vessels to use Maersk and USN-inspired algal fuels, supplied by farms in the Pilbara.

For a Pilbara biofuel industry to reach commercialisation, however, it is important that current government initiatives are supported by the region's energy sectors. In the United States, Chevron and ExxonMobil have provided research and investment to support the biofuel sector. In addition to supporting environmental initiatives, this support has provided alternate streams of revenue. Financially strong, as a nation the biofuel industry would rank sixteenth in global oil production, above the United Kingdom and Libya and slightly below Norway and Nigeria.

Demand for biofuels will continue to grow, particularly as the efficiency and viability of the commodity is realised. Accordingly, Australia, which boasts significant biofuel potential, should seek to capitalise on its energy credentials. To maximise these opportunities, it is imperative that current government-supported initiatives seek support from established energy enterprises, which can provide the requisite marketing and technical expertise that the public sector may lack.

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<sup>8</sup> Vidal, J., 9 April 2009, 'Health risks of shipping pollution have been "underestimated"'.  
<<http://www.guardian.co.uk/environment/2009/apr/09/shipping-pollution>>.

## What's Next?

- Begun on 23 January, the African Union's 18<sup>th</sup> annual summit continues in Addis Ababa until 30 January. The summit theme is "Boosting Intra-African Trade". The AU Executive Council meeting is to take place on 26 - 27 January.
- From 23-27 January, leading international water experts will meet in Sydney to advise on Australia's groundwater research and training needs. The four experts are Professor Ghislain de Marsily, Professor Edward Sudicky, Dr Leonard F. Konikow and Professor Robert F. Glennon. For more details: <http://www.groundwater.com.au/newsitem.php?nid=10>.
- New Zealand Foreign Minister Murray McCully is visiting Qatar today, prior to attending the AU Executive Council meeting in Addis Ababa.
- Afghan President Hamid Karzai will meet with French President Nicholas Sarkozy and Foreign Minister Alain Juppé at the Élysée Palace in Paris on 27 January.
- The Australian Meteorological and Oceanographic Society Annual Conference will be held in Sydney from 31 January to 3 February. For more information, visit: <http://www.amos.org.au/2012conference/cid/1/parent/0/pid/1/t/2012conference/title/conference-home>.
- The University of WA is holding a public lecture, 'Another India: Land, Water and Rural Poverty'. Speaking will be P. Sainath, Swapna Banerjee-Guha and Dr Anjal Prakash. It will be held at the University Club Theatre on 2 February, at 6pm. For more details, click [HERE](#).

*Any opinions or views expressed in this paper are those of the individual author, unless stated to be those of Future Directions International.*