The Asia-Pacific Journal: Japan Focus
In-depth critical analysis of the forces shaping the Asia-Pacific...and the world.

Japan's Fragile Relations with Indonesia and the Spectre of China

David Adam Stott

Abstract

This article focuses on energy ties to assess the current state of bilateral relations between Japan and Indonesia in the wake of the August 2007 signing of the Japan-Indonesia Economic Partnership Agreement (JIEPA). With ratification by Japan's upper and lower houses expected by July 2008, the JIEPA leaves unresolved arguably the most important issue between the signatories, namely future natural gas exports to Japan. Indonesia seems determined to more than halve its exports to Japan, its best customer, whilst at the same time charging it more for the same supplies that China will also receive. This paper explains the reasons for the new Indonesian policy before briefly assessing a second strand of recent bilateral energy security developments, that of Japanese assistance to secure the Straits of Malacca.

Introduction

The August 2007 signing of the Japan-Indonesia Economic Partnership Agreement (JIEPA) appeared to consolidate the close historic interdependence between Japan and Indonesia as they celebrate the 50th anniversary of bilateral diplomatic relations in 2008. For the last three decades, the archipelago has relied quite heavily on its northern neighbour for Official Development Assistance (ODA), foreign investment and as a buyer of its natural resources, whilst the relationship has guaranteed Japan a stable supply of a wide range of natural resources. Indeed, in that time Japan has been the buyer of nearly 70% of Indonesia's fuels, metals and minerals. [1] Underlying the importance of Indonesian resources is the fact that between 1967 and 1999, Indonesia was the largest recipient of Japanese ODA loans, receiving some 3,432 billion yen (around US$34 billion) or 18.6% of Japan's total ODA loans. [2] Since then, Indonesia was the single largest recipient of Japanese ODA in 2000-2001, and was second behind China in 2002. Whilst levels of Japanese aid to Indonesia have fluctuated somewhat since then, yen loan assistance for the country in fiscal 2007 (until March 31, 2008) will reach $1 billion. Meanwhile, Indonesian statistics indicate that bilateral trade rose 10.69% in 2007, up from US$27.24 billion the previous year. The Indonesian Investment Coordinating Board (BKPM) calculates that between 1967 and 2007 Japanese firms invested some US$40 billion in Indonesia but such inflows have fallen dramatically since 1997. In 2007 Japan ranked fourth in terms of Indonesian FDI inflows.

The JIEPA looks set to redress this decline and widen cooperation between the two countries. Under its terms, Indonesia is committed to eliminating about 93% of 11,163 tariffs on Japanese goods, with 58% of these to be cut immediately after implementation of the agreement. Japan, for its part, will slash more than 90% of its 9,275 tariffs on Indonesian products, with 80% of these set to disappear upon implementation. For Indonesia, the biggest immediate beneficiaries from these cuts will be the automotive, electronics and construction sectors due to some 26 new Japanese investments in these industries, most of which expand existing operations and are worth around US$557.5 million.

After the JIEPA's ratification by the Diet, Japan will also begin accepting the first group of some 400 Indonesian nurses and 600 care workers. Whilst the details have yet to be fully ironed out, they could start arriving in Japan after July 2008, holding special visas for up to three-years for nurses and four-years for care workers. They are expected to learn Japanese during the initial six-month period, and will receive the same wages as their Japanese counterparts. Thereafter, they will have to acquire Japanese licenses while working in Japan. Those who fail to obtain licenses before their visas expire will be required to leave Japan. A test to be taken after two years of employment has also been mooted. A similar provision for nurses and care workers was included in the Japan-Philippines EPA signed in Helsinki on September 9, 2006.

Nevertheless, despite wide cooperation on a number of other issues ranging from bird flu research to patrol boats for the Malacca Strait, energy ties, the foundations of the bilateral relationship, have been strained of late due to disagreements over future resource supplies. These centre on the Indonesian determination to renew Japan's current LNG contracts at just a quarter of their present volume upon expiry in 2010 and 2011, whilst simultaneously reducing the term commitment. Ironically, for Tokyo the raison d'être for the JIEPA was to secure a continued and stable supply of energy. This article will attempt to pinpoint the reasons for this dramatic reversal in the Japan-Indonesian LNG relationship within the broader context of bilateral ties. Finally, it will briefly examine the related issue for Japan of shipping security in Indonesian waters.

LNG in Japan

Liquefied natural gas (LNG) is roughly 1/614th of the volume of natural gas at standard temperature and pressure, and is thus more economical to transport over long distances where pipelines do not exist. LNG processing plants condense natural gas by refrigerating it for shipment in special tankers.

Beginning with imports from Alaska in 1969, Japan was a pioneer in the global LNG trade. It remains the world's biggest market, but rising oil prices in recent years have prompted the United States, China, India and South Korea, among other nations, to sharply increase their LNG imports. Indonesia's two major processing facilities, Arun at Lhokseumawe in Aceh province and Badak at Bontang in East Kalimantan province, were both constructed in the mid-1970s under supply contracts to Japan, although excess production has been made available to other buyers. Both Badak and Arun are still 15% owned by the Japan Indonesia LNG Company (JILCO), and it is fair to say that Japan has been the driving force behind the development of the Indonesian LNG industry.

Electric utilities consume roughly 70% of Japan's LNG imports for power generation and gas utilities account for the remaining 30%. Close cooperation exists between utilities and major gas companies in Japan, for instance in constructing LNG receiving terminals, owning much of the country's LNG tanker fleet and running gas-fired power stations. This model has subsequently been applied by other nations in Northeast Asia which now compete with Japan for supplies.

Constructing new LNG cargo ships

The fierceness of this rivalry is exacerbated by the fact that Japanese utilities increased their LNG imports dramatically after the shutdown of Tokyo Electric's Kashiwazaki-Kariwa nuclear power station following an earthquake in July 2007. [3] In normal conditions, the plant accounted for roughly 6 or 7% of Japan's electricity needs but remained shut as of May 2008. Before this incident the Japanese government anticipated that domestic demand for natural gas would rise to around 14% of primary energy supply by 2010. Thereafter, it was predicted to further rise to between 15% and 17% by 2020, according to the Institute of Energy Economics, Japan. Whilst it was anticipated that LNG demand would also increase steadily due to safety issues surrounding Japan's nuclear power stations, it appears these forecasts will have to be revised upwards now.

LNG demand is spurred further by gas utilities, in response to environmental pressures, moving away from coal-type gas and the liquefied petroleum gas (LPG) still used by around half of gas consumers in Japan. At the same time, the utilities have reported that overall gas consumption is increasing by 2-6% per annum, with Japan's natural gas consumption projected to increase at an average annual rate of 1.5% to 2025. [4] Japanese manufacturers too have been gradually shifting power consumption from oil to gas, due to concerns over pricing and carbon dioxide emissions. Consequently, Tokyo Gas, the largest domestic gas utility company, increased LNG imports by 30% between 2002 and 2005, and expects this trend to continue for the foreseeable future. [5]

An LNG storage facility

As Japanese rules permit individual utilities and natural gas distribution firms to sign LNG supply contracts with overseas suppliers, these firms exert a strong influence on the LNG market. However, these LNG procuring companies face increasing competition for resources. Whilst in 1996 Japan imported 62% of available world supplies, that proportion had fallen to 41% in 2005 and is under continuing assault as other countries respond to the attractiveness of LNG. [6] In particular, China's imports of LNG, which began in 2006, are expected to increase rapidly. Although China has two LNG receiving terminals at present, it has plans to build as many as seven LNG terminals in six provinces and municipalities. This scenario poses such a strategic security and economic risk that Japan's Ministry of Economy, Trade and Industry cautioned in May 2006 that: "Japan's bargaining power (in the international gas market) may be weakened." [7] Facing the imperative to secure as much LNG as possible for the longest term possible, the JIEPA negotiations opened in 2005.

As many of the current long-term LNG contracts were signed by Japanese firms in the 1970s and 1980s, when terms were less flexible and closely linked to crude oil prices, they are due for renewal in 2010-11. When these contracts were originally negotiated, Pertamina (Perusahaan Tambang Minyak Negara - State Oil Company) held a monopoly in Indonesia and was Southeast Asia's only supplier with the power to dictate prices. In the late 1980s, when new producers from Malaysia, Australia, Brunei and Qatar started shipments, this dynamic changed and the global LNG trade became much more of a buyer's market. As a result, in recent years Japanese buyers have pushed hard for better terms, in particular on volume variances and a looser tie to crude oil prices. Difficult

negotiations with Indonesia, also ongoing since 2005, have been behind Japanese attempts to acquire equity stakes in foreign LNG projects, in a bid to guarantee future supply.

This coincides with Japan's so-called 'New National Energy Strategy', adopted in late May 2006, which aims for stronger relations with resource-rich nations. Specifically, the strategy targets a greater share in oil imports of oil developed by domestic companies from the present 15% to 40% of total imports by 2030. Such thinking has led Japan to follow China and others into moving away from open markets and toward greater government intervention and resource nationalism.

Japan has also sought to diversify its suppliers of oil, gas and other energy resources, as demonstrated by its effort to secure access to LNG from Russia's delayed Sakhalin 2 project, scheduled to start deliveries in 2009. Whilst Japanese firms are also participating in new natural gas developments in Australia, Qatar is expected to become Japan's largest supplier of LNG by around 2010, by which time it will have nearly doubled LNG exports to the country. Qatar was Japan's fourth-biggest LNG supplier in 2005, after Indonesia, Malaysia and Australia, accounting for about 11% of her total imports, but is keen to boost its LNG exports to Japan to more than 11 million tonnes (MT) per annum in 2010, up from 6 MT in 2005. Since April 2006 however, unofficial reports have indicated that Qatar has overtaken Indonesia as the world's biggest LNG exporter, with some 30.7 MT of annual liquefaction capacity as of March 2007. Based on existing plans, Qatar is projected to increase its global LNG shipments to 77 MT per year by 2012. [8] By contrast, Indonesia was the world's biggest exporter in 2005 with 22.46 MT. With Qatar expanding LNG exports, Japan is stepping up its investments in the Gulf state. Indeed, Japan is already Qatar's biggest trading partner, purchasing about 70% of its oil production. For Tokyo, Qatar seems set to become the new 'Indonesia', just as its LNG supplies from that county could well be halved.

In the meantime however, Japan has been forced to turn to the LNG spot market, especially since the shutdown of the troubled Kashiwazaki-Kariwa nuclear complex in July 2007. [9] As a result, Japan's LNG demand suddenly increased along with its readiness to outbid other countries for short-term gas supplies, making the global LNG market more competitive. Whilst still only accounting for 15% of the global market, LNG spot prices are quite volatile and always higher than average LNG prices under long-term sales contracts, which provide the security necessary to construct the costly supply-chain infrastructure. In Japan's case, until the Kashiwazaki-Kariwa shutdown, long-term contracts which include a pricing formula to offset the impact of crude oil price rises have lead to lower and more stable LNG prices, averaging US$6.81 per Million British Thermal Units (MBTU) between January 2006 and March 2007. In the same period, South Korean prices averaged US$8.1 MBTU and Taiwan US$9.15 MBTU. [10]

Indonesia's LNG Exports

Whilst Indonesia is a member of OPEC and exports crude oil to Japan and other countries, the archipelago's most significant energy export is LNG. Pertamina, also a major pioneer in the LNG industry, signed its first long-term LNG supply contract in 1973 with first shipments from the Badak plant in Borneo in 1977 and from the Arun plant in Sumatra the following year. The inking of further LNG contracts prior to 1995 with Japan, South Korea and Taiwan cemented Indonesia's position as the world's leading producer and exporter. In recent years however, Indonesian LNG exports have been hit by a decline in production and rising domestic demand at a time when other countries such as Qatar, Malaysia, Russia and Australia have expanded production.

Nonetheless, Indonesia's overall gas exports, in both LNG form and by pipeline, were still increasing in 2003 and plans were afoot to boost exports and maintain the country's preeminent position in the industry. Indeed, in 2003 Badak alone accounted for some 25% of the Asian LNG market and Pertamina was planning a ninth production line at the plant, dependent on Japanese buyers extending their contracts. Analysts confidently predicted Indonesian LNG exports would exceed 60 MT per annum by 2010. [11] Instead, domestic political changes and rising world oil prices have prompted a policy reversal placing even the renewal of current contracts with Japan in doubt.

LNG has long been the largest foreign exchange earner for Indonesia, with Japan buying between 50% and 70% of Indonesia's LNG exports over the last three decades. [12] By 2004, however, Indonesia was beginning to experience growing difficulties in meeting these contractual obligations and found itself having to import LNG to meet contractual obligations for sale to Northeast Asia. Indeed, it is thought that Pertamina had to buy up to 30 cargoes on the LNG spot market in order to meet its 2004 export commitments, and consequently deliveries to these three markets fell to 22.46 MT in 2005, with Japan receiving 14.26 MT, South Korea 4.8 MT and Taiwan about 3.4 MT. [13] Nevertheless, Indonesia remained the largest exporter in 2005, ahead of Malaysia's 20.8 MT and Qatar's 19.8 MT. [14]

The victory of Susilo Bambang Yudhoyono (SBY) in the first direct Indonesian presidential election of September 2004 altered the political landscape with regard to LNG exports. Although SBY himself secured 61% of the vote in the presidential election run-off, his own election vehicle, the Democratic Party, won only 7% of the votes in the separate parliamentary election held earlier that year. Thus, with only 57 seats he needed the backing of a major party to pass legislation, and has since ruled in a de facto coalition government with Golkar, led by Vice President Jusuf Kalla. Indeed, Kalla soon appeared to be more powerful than the president himself, especially since Golkar, the party of former President Suharto, remains the largest party in the People's Representative Council (DPR), the lower house of parliament, with 128 seats. As one of the chief financiers of SBY's presidential campaign, Kalla has become the most powerful vice president since independence in 1949 and as a successful businessman before entering politics, a driving force behind many key policies. At the start of SBY's presidency, it was agreed that Kalla would manage the economy, leaving the president to focus on issues of politics and national security. As such, Kalla is apparently free to make major trade and industry decisions, a sea change from the largely ceremonial positions held by his predecessors. [15]

As early as 2002, Pertamina's then president director Baihaki Hakim started urging the government to prioritise LNG production for the domestic market in order to avoid scarcities in the future. In 2004 legislation was passed which required that 25% of domestic oil-and-gas production be sold to local markets. Subsequently, under pressure from Kalla, on December 2, 2005 the Coordinating Minister for Economic Affairs issued instructions to cancel all new LNG export contracts, not to extend current contracts, and to prioritise gas production for domestic use, especially for power generation. It has subsequently become clear that the SBY-Kalla government plans to rely on the domestic consumption of LNG to offset Indonesia's declining oil reserves.

The biggest victim of this policy reversal will be Japan. In March 2008 it was announced that annual LNG export contracts to Japan would be slashed from around 12 MT at present to 3 MT following their expiry in 2010 and 2011. Even though such contracts typically run for 15- to 25-year periods, Pertamina will renew them for only ten years, with 3 MT annually in the first five years and 2 MT per annum thereafter. These contracts cover Japan's Kansai Electric Power, Chubu Electric, Kyushu Electric, Osaka Gas, Toho Gas and Nippon Steel Corp, all of which signed long-term deals to import a total of 14.54 MT annually from Badak. Their contracts covering about 12 MT expire in 2010-11. Due to the squeeze on exports, Tokyo Electric, Japan's biggest electric utility, will not renew its own contract with Indonesia upon expiry in 2009. As resource supplies form the bedrock of the bilateral relationship, such news has been received with trepidation in Tokyo.

This is especially embarrassing in light of Japan's aforementioned New National Energy Strategy to consolidate energy supplies. Among other things, the strategy aims to improve relations with oil- and gas-producing countries through ODA and trade agreements, and the Japanese government had long urged Jakarta to guarantee LNG supplies as part of the JIEPA. However, despite

the two countries agreeing to approximately US$4 billion worth of energy projects on the sidelines of the JIEPA signing, the Indonesian government has refused to meet this request. The importance of the JIEPA was demonstrated by the high-profile three-day visit in August 2007 by Japan's then-prime minister Abe Shinzo aimed at enhancing economic and political relations. It thus came as a shock to many in Japan when Indonesian officials again insisted that major cuts in LNG supplies to Japan would still be forthcoming.

For Indonesia, the pact provides a framework to encourage Japanese investment in energy development projects. For instance, there is a proposed scheme to build new large-scale coal-fired power stations to further move away from costly oil. No doubt Japanese investment in this massive project will be sought, as per the JIEPA, and Indonesia remains desperate to secure foreign investment.

Naturally relations between the two countries appear delicately balanced at present. When Ginandjar Kartasasmita, head of Indonesia's Regional Representatives Council (DPD-RI), visited Japan on October 22, 2007, ostensibly to meet Foreign Minister Komura, he also visited the head office of the Nippon Keidanren (Japan Business Federation) in Tokyo's Otemachi district. There Chairman Mitarai expressed his concerns about future LNG supplies. Ginandjar, himself Chairman of the PPIJ (Indonesia-Japan Friendship Association), also handed a personal letter from SBY to Japanese Prime Minister Fukuda, an old friend and Chairman of the Indonesia-Japan Association (Japinda). Analysts can only speculate about its contents and how Fukuda is going to deal with this problem.

Reasons for Policy Change

On the surface the main reason for such an abrupt change of policy is increasing domestic demand at a time of declining LNG production and record oil prices. Indeed, Indonesia itself has been facing a portentous energy crisis, as demonstrated by long queues for kerosene, LPG scarcities, power supply restrictions and costly energy subsidies.

Lying behind this has been Indonesian population growth, which averaged around 1.5% per annum in 2000-07, and real economic growth over 5% annually since 2004. [16] Soaring domestic demand in recent years from local fertiliser producers and the power sector has hit Indonesia's LNG exports; especially as state-owned electricity firm PT Perusahaan Listrik Negara (PLN) has ambitious plans to provide electricity to every Indonesian household by 2020. Presently, about 44% of the population lives without electricity, mostly in rural areas. As annual power demand is estimated to be rising by around 10% a year, increasing the availability of natural gas in areas which suffer energy shortages has prompted Jakarta to shift its LNG export focus towards domestic use as a substitute for costly oil. [17] To this end, Indonesia is currently expanding its domestic pipeline infrastructure from Kalimantan and Sumatra to supply the main consuming areas of Java, although it seems unlikely this infrastructure will be complete by 2011.

According to official figures, Indonesia became a net importer of crude oil for the first time in February 2004, ironically during its term as president of the Organisation of Petroleum Exporting Countries (OPEC) oil cartel when it had to sooth customers disgruntled at 14-year price highs. Despite its OPEC membership, Indonesia has much larger reserves of natural gas than oil.

Mindful of this new reality, the SBY-Kalla government reduced fuel subsidies in March 2005 and again in October 2005, but rising global oil prices increased the actual 2005 fuel subsidy cost to 76.5 trillion rupiah (roughly US$8.2 billion). Indeed, at this time Indonesia faced something of an economic crisis due to price rises for oil and imports combined with a temporary decline in the value of the rupiah. Due to stubbornly high oil prices, the subsidy is estimated to have cost 90 trillion rupiah in 2007 (about US$9.8 billion), outstripping the original prediction of 55 trillion (US$6 billion). [18] As raising domestic fuel prices again is considered politically untenable with elections due in 2009, such figures make lessening the reliance on oil imports imperative and alternative energy sources like natural gas therefore become exponentially more attractive. As a result, since 2005 the government has also been forced to reassess its LNG export policy.

This reassessment has been made more urgent by the fact that Indonesia's production capacity has been declining at both of its processing plants. For instance, output from the Arun plant in Aceh peaked in 1995, and the facility's capacity has since been cut by almost half. Some 90% of the plant's gas reserves have already been extracted and operations are expected to discontinue in 2014, with reserves slated to run out entirely in 2018. The Energy and Mineral Resources Ministry estimated that the North Sumatra region suffered a gas deficit of 446.5 million cubic feet in 2007, which could rise to 448.7 million cubic feet in 2008, and 499.2 million cubic feet in 2009.

Due to this decline there have been insufficient supplies for domestic fertiliser plants, and Jakarta thus requested that operator ExxonMobil redirect some of Arun's production to local fertiliser firm Pupuk Iskandar Muda (PIM). The resulting drop in the plant's delivery of export cargoes forced Jakarta to look to the spot LNG market to meet supply commitments to Japan, South Korea and Taiwan, with between eight and ten LNG cargoes acquired this way in 2005.

These shortages forced Jakarta to delay a total of 51 scheduled LNG shipments to Japan, South Korea, and Taiwan in 2005. The following year the shortfall amounted to 70 cargoes from Badak and 9 from Arun, a total loss of almost 4.5 MT of LNG. Whilst the decline continues it has been arrested somewhat as LNG production will fall to 358 cargoes in 2008 from 372 cargoes in 2007. In November 2007 Pertamina deputy president director Iin Arifin Takhyan said that 12 export cargoes from Arun would be diverted in 2008 for use at PIM. "However, our buyers from South Korea and Japan have expressed objections". [19]

Although the Arun delays and diversions are frustrating, around 90% of Japan's LNG imports from Indonesia are sourced from the Badak plant in Bontang on the east coast of Borneo. Badak presently consists of eight LNG trains and proposals have been fielded for an additional one or two more. This is largely because in January 2006 it was reported that four of its trains face closure. Despite a supposed capacity of 27 MT per annum, Indonesia's biggest gas field is producing below existing export commitments. Even though Indonesia has a contractual obligation to supply 365 cargoes of LNG from Badak each year, actual deliveries have been falling steadily in the past few years (see table below). However, thanks to Badak operator Total's discovery last year of two new gas reserves in the Mahakam Block in East Kalimantan, Indonesia's LNG exports will actually rise by 6.2% this year, although exports from the plant will still be 35 cargoes under contracted levels. [20]

Annual number of LNG cargoes, each at 125,000 cubic metres. The figures for 2008 are estimates. [21]

Year	Total	Badak	Arun
2008	376	330	46
2007	372	320	52
2006	394	335	59
2005	419	340	79

Indeed, as more gas gets diverted to supply domestic demand, Japanese clients have been increasingly unhappy, and their frustrations were vented by Ryoki Yasuo of Osaka Gas, who was quoted as saying, "Indonesia should offer LNG prices close to the price formula for Fujian". [22] This refers to the price China negotiated for gas from the new Tangguh LNG plant under development in Indonesia's Papua province. Indeed, Japan's average import prices rose 9% to US$5.18 MBTU in 2004 from US$4.77 in 2003, compared to the benchmark prices agreed in 2002 of between US$2.40-$3.00 MBTU

for China's Guangdong and Fujian LNG terminals.

Indonesia still possesses abundant energy resources, but a lack of investment has resulted in a reduction in supplies. This is largely due to Jakarta's insistence on tough production sharing terms which deter investment and exploration, and which some argue is a holdover from Dutch colonial exploitation. [23] Moreover, LNG industry insiders, increasingly concerned that poor policy and government mismanagement are threatening Indonesia's competitiveness, have been pressing Jakarta to strengthen LNG governance and revise or clarify key regulations. This reflects a malaise visible in other sectors of the economy which further deters foreign investment. Many of those who rely on Indonesian LNG supplies, in Japan and elsewhere, look wistfully back to the Suharto Era (1966-1998) when its LNG exports were reliable and abundant. Ryoki Yasuo, for instance, has also gone on record as being unhappy with Indonesia's management of its gas industry. [24]

Indonesia's declining status as an LNG exporter should recover over the next 18 months, however. Despite an uncertain foreign investment climate, new LNG projects are scheduled to come onstream before the Japanese contracts expire. The most advanced of these is the aforementioned BP-led Tangguh project in Bintuni Bay, on the north coast of Papua province. After receiving final approval from Jakarta in March 2005, the US$5 billion project had reached 82.7 % completion by the end of October 2007. Initially running just two trains, deliveries are expected to commence in October 2008, and should yield 7.6 MT per annum by the end of the year. Further enhancements are expected to yield 10 MT by 2011, which would be timely for overseas buyers if the gas is earmarked for export.

In addition, Pertamina is leading the development of the US$700 million Senoro LNG plant in Central Sulawesi, which is due to open in 2011 and yield 2 MT per annum, all of which will be exported to Japan. In this latter project, Japanese conglomerate Mitsubishi is a 51% shareholder, and Japan had demanded LNG supply guarantees as part of the partnership agreement which was finalised during the August 2007 visit to Indonesia by then Japanese Prime Minister Abe. Construction will begin in mid-2008 and is expected to be completed by 2010. This specifies that Mitsubishi would pay at least US$3.85 MBTU for the LNG, to be supplied from the Senoro and Matindok gas fields. [25] Mindful of domestic political prerogatives, Iin Arifin Takhyan cited a lack of infrastructure to supply it to the domestic market as another reason why the Senoro LNG would be exported to Japan. [26]

Lastly, it is possible that gas production currently under exploration at the Masela Block in the Timor Sea, in which the Japanese firm Inpex holds a 100% share, could be used to meet future export demand. [27] Inpex has been considering submitting a US$4.2 billion project proposal to Jakarta, with plans to ship 3-5 MT per year of LNG to Japan and elsewhere by 2015. The firm has been assessing what kind of processing plant to build after it decided not to process the gas in Australia. [28]

Perceptions

Tokyo probably suspects that Jakarta is using scare tactics to drive the price up, well aware of the competition for resource supplies at a time when Japan's contracts are due to expire. With Japanese buyers pressuring Pertamina for a better deal in what has become more of a buyer's market since Indonesia's virtual LNG monopoly was broken, the Indonesian side may be digging in its heels.

Tokyo's fears are fanned further by the pricing controversy surrounding Indonesia's latest gas field in Tangguh, scheduled to start shipping LNG in 2008. It has emerged that some of the Tangguh LNG has already been sold below the established market price to the China National Offshore Oil Corporation (CNOOC), a 16.96% shareholder in the Tangguh scheme. At the same time, buyers in Japan are trying to secure more gas from Indonesia and are thought to be prepared to pay handsomely for it.

As a result, the Energy and Mineral Resources Ministry and the Upstream Oil/Gas Management Board (BPMigas) have reportedly been offering half of Tangguh's LNG to Japan and South Korea at far higher prices than China will be paying, with the LNG being redirected from the share due to be sold to Sempra Energy of San Diego. It has been speculated that the Tangguh contract with Sempra might be cancelled in order to supply Japan and South Korea at these higher prices. [29] As Sempra is due to receive 3.7 MT of LNG annually for 20 years at US$5.94 per MBTU, to cancel this contract it must be assumed that Japan and South Korea will pay much more, especially as Sempra will undoubtedly demand compensation. Meanwhile, China is due to receive 2.6 MT a year for 25 years at US$3.35 MBTU, and K Power and Posco from South Korea have each agreed to an annual supply of 1.2 MT for 20 years at US$3.5 MBTU. The deals with Posco and K Power were made in July and August 2004 respectively, whilst CNOOC's was inked in September 2002.

Indonesia's LNG contract prices have traditionally been tied to prevailing oil prices and the present SBY administration has already renegotiated the Tangguh LNG supply prices with all four contracted buyers. Nevertheless, the Indonesian House of Representatives has enlisted a team consisting of members of the Supreme Audit Agency, lawmakers and government officials to probe the contracts amid reports that those agreed with China and South Korea are lower than the domestic gas price. [30] Indeed, such low prices are below those which Japan currently pays for LNG supplied from Badak. With declining exports from its existing gas fields, Indonesia needs to get a good price from the LNG in Papua, and it is thought that even many domestic industries are prepared to buy gas at a price higher than that agreed with CNOOC.

Therefore, it is worth considering why Japan is being asked to pay more than the Chinese, especially when China is new to the LNG market while Japan has been the driving force behind the development of the Indonesian LNG industry. Furthermore, Nippon Oil Exploration (Berau) is a 12.23% shareholder in the project and LNG Japan Corporation (a joint venture between the Sumitomo Corporation and Sojitz Holdings Corporation) is a 7.35% stakeholder. The simple answer is timing, although naturally the real reasons are much more complex than that.

The Tangguh LNG plant was scheduled to start shipping in 2006 and the delays have been due to both budget overruns and the difficulty in finding a major buyer for the gas. The cost of the scheme has spiralled from an estimated US$2 billion in 2002 to in excess of US$5 billion at present. Meanwhile, Indonesia began marketing Tangguh's LNG in China in the summer of 2001, during what was still the LNG buyer's market which had existed since the late-1980s. Indeed, by November 2001 six companies - the others were from Australia, Malaysia, Qatar, Russia and Yemen - were competing against each other for the prized Guangdong tender of 3.3 MT per year. The loss of this supply contract in August 2002 to Australia cast doubt upon Tangguh's viability, as BP and Pertamina were planning to commence LNG shipments to Guangdong in early 2006 but had to delay building the plant until buyers had been found for most of its output. [31] The next month however, Pertamina secured a smaller contract to supply Fujian province, the location for China's second terminal, which thus became the first customer to sign a long-term contract for Tangguh's LNG. Whilst this original pricing agreement has since been renegotiated to reflect different market realities, CNOOC is still benefitting from this timing and the competition generated by the opening of the Chinese LNG market.

Could it be that Japan, confident that its current agreement with Badak would be renewed, missed the boat when contracts for the Tangguh LNG were being signed? Back in 2003-04 Pertamina and BP were desperately seeking customers to augment the smaller contract to supply CNOOC's Fujian LNG terminal and make the massive project financially viable. It seems likely that Japan would have received better terms if it had signed up as an early client for the Tangguh LNG. In fact, negotiations with a Japanese buyer for LNG deliveries from Tangguh beginning in 2010 were reportedly halted in 2005 pending a government reevaluation of gas supply policy. Regardless, Indonesia's desire to diversify its own LNG customer base, at a time when it was much more of a buyer's market

amid lower oil prices, in hindsight looks like an underselling of its LNG. Nevertheless, it is understandable that Indonesian policy makers would prefer to reduce their reliance on one main customer, whilst at the same time reducing somewhat the leverage Japan holds over the Indonesian economy.

Another possible reason why CNOOC has managed to gain such a price advantage is that the company is also a large investor in the other efforts to tap Papua's vast resource potential. For instance, the Tangguh price agreement could be part of a package deal which includes CNOOC's July 2007 acquisition of a controlling 51% stake in the development of biodiesel from crude palm oil and bioethanol from sugar cane or cassava in both Papua and Kalimantan. Moreover, the biggest player in the expansion of palm oil development in Papua is Indonesian conglomerate Sinar Mas which plans to develop millions of hectares in the province. Their main partner in this ambitious US$5.5 billion, eight-year undertaking is CNOOC.

Like almost all major Indonesian corporations, Sinar Mas is Chinese-Indonesian owned and has substantial holdings in mainland China. Particularly since a 1974 change in the foreign investment law required joint ventures, it has usually been the policy of Japanese investors to partner with local ethnic Chinese businesses in Indonesia. It has been long pondered whether the dominance of the Chinese Diaspora in most Southeast Asian economies would eventually give China an advantage over Japan in terms of economic influence in the region. The deal for the Tangguh gas seems to indicate that this might be becoming a reality.

Furthermore, it appears that Japanese buyers are being made to pay for previous decisions. For instance, power utility Tohoku Electric did not help the current situation when in July 2003 it shortened a long-term LNG import contract with Pertamina and cut the volume from 3 MT to 830,000 tonnes per annum. On an official visit to Tokyo President Megawati Sukarnoputri unsuccessfully lobbied Tokyo to press Japanese buyers to extend their import agreements. [32] Jakarta might be determined to exact revenge and avoid such an embarrassing repeat. Moreover, threats by some Japanese buyers in 2005, including Osaka Gas, not to sign new contracts with Indonesia unless they guaranteed delivery and price cuts to the CNOOC level seem to have backfired.

Indeed, from the Indonesian perspective a degree of suspicion and mistrust of Japan remains. This is despite Japan being by far the country's largest foreign donor since the 1980s, consistently dispersing aid in times of need such as in the economic crises of 1985-87 and 1997-98, without the hectoring of other donor nations with regard to human rights and economic reforms.

Actually, since large-scale Japanese investment began in the Suharto era, there have long been fears of Japanese attempts to impose onerous conditions. This somewhat ambivalent view is today reflected by a suspicion in the Indonesian media that Japan got the better deal in the JIEPA and therefore Indonesia, often characterised as a proud nation, could be reminding Japan of a certain reality in the bilateral relationship - namely Japan's resource dependence. Such a perception is nothing new as Indonesia has long felt at a disadvantage in its dealings with Japan. This feeling manifests itself in both imports and exports. For instance, domestically it is felt that Japanese goods are dumped in Indonesia to the detriment of local industry, whilst Indonesian exporters are prevented from accessing Japanese markets due to powerful informal barriers to trade. As the JIEPA focuses largely on bilateral tariff reductions some Indonesian business leaders are sceptical that it can be an engine for domestic growth in manufacturing. Indeed, Indonesia's inability to sell finished goods, such as furniture and food, to Japan has long been a source of bilateral tensions. There is a perception in Jakarta that inequalities in bilateral ties justify the government's tactics in the LNG negotiations.

Combative attitudes towards Japan can also be played upon by Indonesian politicians eager to garner domestic support with elections on the horizon. Although the country's next presidential polls are not due until July 2009, contenders are already declaring their candidacies and current president SBY is expected to run for reelection. His main opponent seems likely to be his predecessor Megawati Sukarnoputri, and given SBY's patchy record as president there is no guarantee that he can defeat the daughter of Sukarno, Indonesia's founding father, a second time. There is also the possibility that Megawati's PDI-P (Indonesian Democratic Party of Struggle) may form a coalition with Golkar for the 2009 elections, which would bring the two largest parties together and present a formidable challenge to SBY. Golkar and PDI-P are the only two parties with the infrastructure to effectively mobilise voters in the outlying provinces of the sprawling Indonesian archipelago. Whilst not a significant electoral issue at present, appearing tough against Japan on the LNG issue might appeal to nationalist sentiments, especially as SBY is seen to be putting domestic interests first.

Another explanation for the dual pricing strategy is that the Japanese are still perceived to be richer than other countries, and hence should be prepared to pay more for Indonesia's scarce natural resources. Indonesia's bargaining position in the negotiations is strengthened by the knowledge that Japan has fewer options for resource supplies than China due to certain ethical considerations. For instance, whilst China was cosying up to regimes such as Zimbabwe and Sudan, Japanese power utilities Kansai Electric and Kyushu Electric announced in November 2007 that they would cut crude oil imports from Sudan, citing concerns over oil revenues fuelling military ventures in Darfur. Whilst seven of the other eight regional electric utilities will continue Sudanese crude imports, the Japanese government has been mulling a complete ban on Sudanese oil. [33] This is especially significant because in 2006 almost half of all Sudanese oil exports were sent to Japan. [34]

At the same time, the buyer's market that characterised the LNG trade in the 1990s and early 2000s has been shifting again amid continuing high crude prices and the peak oil theory. According to Japanese government research, LNG prices in Asia increased by around 40% between June 2004 and June 2006, to about US$370 per tonne. [35] Whilst LNG reserves are rising, so is global demand with a 63% increase projected by US government statistics between 2004 and 2030. [36] Therefore, from its perspective, Indonesia is well within its rights to demand a high price from Japan for future LNG supplies, especially as prices will likely continue rising. By having already undersold the Tangguh LNG, it therefore becomes even more important that Indonesia secure a good price from those who have the money and are thought to be prepared to pay, regardless of the previous relationship.

Unfortunately for Japan, the failure of its Kashiwazaki-Kariwa nuclear power station coincides with record oil prices, and the impending expiry of long-term LNG supply contracts which require price and volume renegotiation. Moreover, since China signed its LNG contract a new government with different priorities regarding resource exports has taken office in Jakarta, to Japan's detriment.

The Indonesian government will be aware that in recent years Japan's LNG prices have been lower than crude oil by around 35% on an energy equivalence basis. [37] Indeed, Japanese buyers have had to accept LNG prices more closely linked to crude oil prices in some recently renewed contracts with Australian exporters. [38] Analysts expect that after 2010 the average LNG price for Japan will be within 20% of the crude oil price, with import prices for even its long-term LNG cargoes becoming more responsive to oil price changes in the near future. [39]

As it seems likely that many areas of the JIEPA have yet to be fully ironed out, the negotiating game continues. These negotiations will be a true examination of Fukuda's premiership and may test his connections and friendships in Indonesia to the full.

Malacca Straits

Whilst LNG supplies are the key issue in bilateral energy ties for Tokyo at present, Indonesia is also vital to Japan as a supply route through which almost all of its oil imports pass. Although Japan's economy heavily depends on the safe passage of ships through three straits in Indonesian waters - Malacca, Sunda, and Lombok - it has focused most of its attention on the Malacca Strait, an

area which accounted for 40% of worldwide piracy in 2004. Indeed, leading insurers Lloyds Market Association's Joint War Committee declared in 2005 the Strait at risk of "war, strikes, terrorism and related perils". [40] Even though Lloyds subsequently removed the Malacca Strait from this list in 2006, after security upgrades had been completed, Tokyo remains nervous about its reliance on this shipping lane. The geography of the narrow Strait makes it highly susceptible to piracy, with its thousands of islets and river mouths into which pirates can hide and escape.

An LNG cargo ship

As a consequence, Japan has long cooperated with the littoral states Singapore, Malaysia, and Indonesia, especially after piracy at this vulnerable choke point increased after the 1997-1998 Asian economic crisis. Japanese assistance in these anti-piracy efforts has included Japanese Coast Guard patrols and joint exercises in Southeast Asian waters, in addition to training seminars to enhance the littoral states' maritime law enforcement capacities. In an attempt to secure ships from attack, Japan has also promoted regional multilateral institution building. Among other initiatives, Tokyo has proposed the Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP), to share information both about ships suffering piracy and those suspected of perpetrating such acts. Whilst the agreement took effect in September 2006, Malaysia and Indonesia have yet to sign citing jurisdictional concerns.

Nevertheless, it seems that this cooperation might be bearing fruit as the International Maritime Bureau (IMB) has reported that pirate attacks in the Strait fell from 79 in 2005 to 50 in 2006. [41] Whilst the IMB reported in October 2007 that Indonesia continued to host the world's most pirate-infested waters, with 37 attacks since January 2007, this was an improvement over the same nine-month period in 2006. [42] Having the least equipped of the littoral navies, Indonesia has been the focus of Japanese assistance in combating piracy and upgrading the abilities of coastal patrols.

As part of this assistance, on November 30, 2007, Japan donated three boats to the Indonesian Water Police to patrol the Malacca Strait. Whilst President Megawati and Prime Minister Koizumi signed a broad agreement to combat international terrorism during a 2003 bilateral summit in Tokyo, there remained Japanese constitutional stumbling blocks in providing direct assistance to the Indonesian Coast Guard due to it being part of the Indonesian Armed Forces. This was circumvented by presenting the boats to National Police chief General Sutanto, who signed the handing-over agreement with Japanese Ambassador Ebihara Shin at Tanjung Priok port in North Jakarta. Ebihara said at the ceremony that 20% of the some 50,000 vessels that transit the Malacca Strait annually belong to Japan. [43] Sutanto confirmed that, "We will place these three boats in Tanjung Batu, Riau and Belawan, Medan, in accordance to the agreement with the Japanese government". [44]

As Indonesia's is the world's largest archipelagic country, consisting of between 13,000 and 17,000 islands spread over 5,000 kilometers east to west, its maritime security concerns cover far more than just the Malacca Strait. However, whilst most victims of piracy in the Strait are foreign ships in transit, KADIN, the Indonesian Chamber of Commerce and Industry, has also been pushing for improved security to reduce the high insurance premiums for ships traversing Indonesia, which raise the costs of doing business in the country. Nevertheless, Tokyo's fixation with the Malacca Strait differs from Jakarta's preference to deploy the donated ships more widely around the archipelago to address other priorities, such as preventing terrorism, illegal fishing and illegal migration. Therefore, Japan's practical assistance in enhancing personnel training and maritime surveillance is seen as more beneficial than the narrow deployment of the three patrol boats. [45] Nonetheless, more experienced non-Japanese providers of security assistance regard all three facets of Japan's ongoing maritime support to Indonesia as lacking "long-term working relations and mentoring aspects". [46] In particular, the long-term stationing of Japanese personnel at the deployment sites to properly train local staff in using and maintaining the donated equipment has been recommended. [47]

In reality, piracy in Indonesian waters is most severe around Bangka Island, south of the Malacca Strait, whilst other areas such as the Makassar Strait and the Celebes Sea are a concern due to the movement of Jemaah Islamiyah terrorists and people smugglers between Indonesia, Malaysia and the Philippines. Indonesia, the United States and Australia have quietly cooperated to tackle this terrorist threat, whilst Japan's focus on the Malacca Strait stems in part from a trilateral U.S.-Australia-Japan agreement to prevent duplicating each other's efforts. [48]

As Japan does not carry the political baggage associated with the United States and Australia, in part due to her acquiescent attitude toward misadventures such as the 1975 invasion and occupation of East Timor, it is seen as the least threatening regional power by the Indonesian political and military elite. Nevertheless, it remains acutely sensitive to any foreign involvement in Indonesian sovereign territory. As such, Japan has limited itself to civilian cooperation and deployed military personnel only for disaster relief, for example to Indonesia's Aceh province after the tsunami of December 26, 2004. Whilst some within the Indonesian Navy seek closer cooperation with their Japanese counterparts to counterbalance relations with the Indian and Chinese navies, Japan's Maritime Self Defense Force tends to focus on direct military threats such as those posed by North Korea rather than on dangers such as piracy, which remains the realm of the Coast Guard. [49]

Conclusion

This paper has assessed two pressing energy security issues for Japan in its bilateral relationship with Indonesia. The LNG price and volume negotiations remain the more serious given that Japanese demand for LNG is rising at a time when global prices and demand are increasing rapidly, and exports from Indonesia, its biggest supplier, are set to more than halve in 2010-11. The reasons

for this precipitous decline are manifold but rest upon high global oil prices and demand, and revised Indonesian government priorities. In all likelihood, LNG supply contracts with China and others signed before 2005 will be honored but new LNG supply contracts are likely to be based on higher prices and shorter terms. Japanese utilities will pay more for any LNG they agree to buy from Indonesia under this new regime, although ultimately it is consumers living in Japan who will foot the bill. Ironically, this is despite the signing of the Japan-Indonesia Economic Partnership Agreement in August 2007.

In recent energy security developments with Indonesia, the Malacca Strait issue is of secondary but still major concern for the Japanese government. Despite the misgivings of some in both Indonesia and Japan, the Strait is one area where Tokyo has shown a degree of political leadership within a wider East Asian context. Japan seems to have been galvanised into action by an increase in piracy in the Strait after the Asian financial crisis of the late-1990s, and as a response to China's increasingly proactive diplomacy in Southeast Asia. Whilst generally welcomed, Jakarta is chafing a little at the restrictions placed on the use of the Japanese-donated patrol boats, which appear transparently in Japan's interest.

In the wider context, Japan's recent initiatives concerning the JIEPA and patrol boats can be traced to its 'New National Energy Strategy', which calls for stronger ties with resource exporting countries. This strategy can be considered something of a failure with regard to Indonesia, despite the prospect of LNG from the new Senoro plant in Sulawesi. As a result, Japan will have to diversify its suppliers of natural resources in general and LNG in particular. Qatar appears to become the new 'Indonesia' for Japan after 2010, but policy makers and business leaders in Tokyo should be cautious about again becoming overly reliant on one country for energy supplies.

From a regional perspective, competition for Indonesian LNG is another arena of international relations where Japan's preeminent economic position in Southeast Asia is being challenged by China. Whilst Tokyo was generous in dispersing financial assistance in the wake of the Asian financial crisis, there remains a perception that Japan failed to meet expectations and display strong leadership credentials. [50] Despite the April 14, 2008 signing of an economic partnership agreement with the Association of Southeast Asian Nations (ASEAN), the crisis represents something of a missed opportunity for Japan to play a greater role in Southeast Asia. China's greater geographical and human connections with the region are allowing it to encroach further upon Japan's 'territory' as the PRC's economic influence increases year-by-year.

For Indonesia, the LNG issue is a delicate balancing act between satisfying domestic demand to improve the power grid and attracting foreign investment to improve its physical infrastructure. The present model of exporting gas and importing oil is considered unsustainable as it requires Jakarta to maintain prohibitively expensive energy subsidies, which in turn preclude significant state investment in other sectors. Whilst striving to maintain ties with economic partners such as Japan, rising international oil prices have prompted a paradigm shift in which domestic energy security is prioritised at the expense of exports. Quite simply, it is no longer cost effective to export natural gas whilst importing oil to service soaring domestic demand.

To its benefit, China negotiated its deal with Indonesia during the last days of the LNG buyer's market, and profited from six LNG producing countries competing fiercely to become the first to enter its new LNG market. Whilst the volume of gas that China will receive from the new Tangguh plant is relatively small, buyers in Japan are bristling that they will not receive the same pricing formula despite having been the archipelago's biggest customer since 1977. With the importance of LNG set to increase in the coming years, perhaps the Tangguh pricing formula represents a microcosm of future rivalry between Japan and China.

David Adam Stott is an associate professor at the University of Kitakyushu, Japan, where he teaches international relations and researches the political economy of conflict in Southeast Asia. This article was written for Japan Focus.

Posted on May 4, 2008.

Notes

[1] Hal Hill, 'The Indonesian Economy,' Cambridge University Press, 2000.

[2] However, it was not the largest recipient of grant aid. Sugeng Bahagijo, 'Japanese ODA in Indonesia - a high price for poverty,' Reality of Aid Reports 2002.

[3] Ishibashi Katsuhiko, 'Why Worry? Japan's Nuclear Plants at Grave Risk From Quake Damage,' Japan Focus, August 11, 2007.

[4] Energy Business Reports, 'Asia-Pacific Natural Gas Consumption,' Energy Business Daily, August 8, 2007.

[5] Mari Iwata, 'Tokyo Gas Not Worried Now Over China LNG Plan,' Dow Jones Asian Equities Report, August 14, 2006.

[6] ibid

[7] ibid

[8] Energy Information Administration (EIA), 'Qatar Country Analysis Brief,' EIA, May, 2007.

[9] The spot market or cash market is a market in which goods are sold for cash and delivered immediately. The spot energy market allows producers of surplus energy to locate buyers fast, quickly negotiate prices and rapidly deliver to the customer. Prices tend to be higher on the spot market, making

it a more costly way to buy energy. For LNG it refers to short-term deals or the sale of one cargo.

[10] Argus Global LNG Monthly Average Prices, 2007.

[11] APS Review Gas Market Trends, 'Indonesian LNG & Pipeline Gas Exports Decline,' March 14, 2005.

[12] Japan's share of Indonesian LNG exports has been falling since Jakarta diversified its customer base. For example, in 2004 Japan received 16.3 MT from Indonesia, around 30% of her LNG imports, with 5.3 MT also going to South Korea and 4 MT to Taiwan, some 26% and 63% of their imports respectively.

[13] ibid

[14] Grace Nirang and Christian Schmollinger, 'Dwindling gas fields undermine Indonesia,' International Herald Tribune, August 9, 2006.

[15] Bill Guerin, 'Indonesia's brewing power struggle,' Asia Times, July 13, 2006.

[16] CIA World Factbook 2007.

[17] Bill Guerin, 'Indonesia's natural gas dilemma,' Asia Times, July 22, 2003.

[18] Xinhua, 'Indonesian fuel subsidy soars amid oil price rise,' Xinhua, November 5, 2007.

[19] Muklis Ali, 'Indonesian LNG exports to fall 4 pct, maybe more,' Reuters, November 22, 2007.

[20] Eric Watkins, 'Indonesia's LNG exports to increase this year,' PennWell Oil & Gas Journal, April 24, 2008.

[21] Bloomberg, 'Indonesia to get record price for LNG,' Bloomberg, April 1, 2008.

[22] APS Review Gas Market Trends (2005).

[23] Philip Barnes, 'Indonesia: The Political Economy of Oil,' Oxford University Press, 1995. Coincidentally, the Yapen Block production sharing contract (PSC) signed in November 2002 with Continental Energy Corporation to explore for oil and gas off Papua province contains a substantially more favorable production sharing split between with Pertamina than standard PSCs in Indonesia.

[24] ibid

[25] Ika Krismantari, 'Medco to invest $400m in eight bioethanol plants,' Jakarta Post, May 11, 2007.

[26] Ika Krismantari, 'Japan to buy more LNG from Indonesia,' Jakarta Post, August 24, 2007.

[27] ibid

[28] BP Migas, 'Inpex Plans Four-well Masela Program,' Rigzone.com, May 23, 2007.

[29] Kurtubi, 'Appropriate sale price for Tangguh LNG is imperative,' Jakarta Post, June 12, 2007.

[30] Guerin, Bill, 'Tapping a gas gusher in Indonesia,' Asia Times, October 11, 2007.

[31] ibid

[32] Guerin (2003)

[33] Scott Wisor, 'Japan Firms Cut Sudan Oil Imports,' Genocide Intervention Network, November 20, 2007.

[34] Bloomberg, 'Japan Studies Effect of Possible Sudan Crude Oil Ban,' Bloomberg, November 17, 2007.

[35] Mari Iwata, 'Tokyo Gas Not Worried Now Over China LNG Plan,' Dow Jones Asian Equities Report, August 14, 2006.

[36] Energy Information Administration (EIA), 'International Energy Outlook 2007 - Natural Gas,' EIA, May 2007.

[37] David Wood, 'Japan's LNG Prices: Trending Upwards,' Energy Tribune, December 21, 2007.

[38] ibid

[39] ibid

[40] For a less alarmist view see Nazery Khalid, 'Security in the Straits of Malacca,' Japan Focus, June 1, 2006.

[41] Jakarta Post, 'Japan gives RI three boats to patrol Malacca Strait,' Jakarta Post, December 1, 2007.

[42] ibid

[43] ibid

[44] ibid

[45] Yoichiro Sato, 'Southeast Asian Receptiveness to Japanese Maritime Security Cooperation,' Asia-Pacific Center for Security Studies, September 2007.

[46] ibid

[47] ibid

[48] ibid

[49] ibid

[50] See Syed Javed Maswood (ed.), 'Japan and East Asian Regionalism,' Taylor & Francis, 2001.