Rising oil prices, the peak oil debate, the G8 summit in July, and continued instability in the Middle East – not to mention concerns surrounding China’s exploration and production (E&P) activities and the increased threat of terrorist attacks in bottleneck areas such as the Strait of Malacca – have recently heightened energy security awareness in Japan, as in much of the world. While definitions of “energy security” vary, for the purposes of this discussion focusing on Japan, the world’s second largest economy which imports 86% of its total primary energy supply, “securing the necessary quantity of energy at reasonable prices” offers a suitable definition. In May, the Ministry of Economics, Trade and Industry (METI) released the New National Energy Strategy exploring just how to achieve this security. This paper will focus on how ideas presented in this strategy relate to Iran, Japan’s third largest supplier of oil.

Oil comprised 48% of Japan’s primary energy supply in 2004 (Figure 1) and is still the dominant energy source, even with great efforts to reduce oil dependency since the oil crises as nearly 100% of oil is imported. The Middle East supplied 89% of all oil imports, with the top three suppliers being Saudi Arabia (26%), the UAE (25%) and Iran (15%), as shown in Figure 2. Japan’s ability to diversify oil supply away from the Middle East peaked in 1987 at 32.12% of oil imports sourced from the rest of the world. However, since then, the Middle East has gradually resumed its place as the largest source of imports, and Japan is now

---

1 This Discussion Paper was written by the author, based on the work during the author’s internship in the Institute of Energy Economics, Japan (IEEJ) from June to August 2006. The views, opinions and statements expressed in the Discussion Paper are those of author, and do not represent those of the organization the author belongs to, nor those of IEEJ.

2 IEA.

3 METI. Shin Kokka Enerugi Senryaku. All translations are the author’s own.

4 METI. 2004 (Heisei 16) Nendo ni okeru Enerugi p.12

5 METI. Fundamental Policy, Section 4.1.

6 METI. Shigen Enerugi. Combining these statistics shows that the Middle East provides at least 45% of Japan’s primary energy supply: 50% PES oil reliance x 100% oil import dependence x 90% oil imports from Middle East. The comparable percentage for the US is 6% (40% x 60% x 25%) (Source: LDP).
again at approximately the same level of dependency on Middle Eastern oil as it was before the oil crises. Thus, having an actionable energy strategy toward the Middle East is absolutely necessary for Japan.

Figure 1: Japan’s Primary Energy Supply by Fuel Type

[Diagram showing energy supply by fuel type from 1973 to 2004, with oil, natural gas, coal, nuclear power, and hydroelectric power categories.]

Figure 2: Japan’s Oil Imports by Source

[Diagram showing oil imports from 1965 to 2004, with contributions from Rest of Middle East, Saudi Arabia, UAE, Iran, and Rest of World.

To put this Middle East reliance in perspective, in 2003 the US relied on the Persian Gulf for 22% of its net oil imports, or 12% of total oil demand (see Figure 3). Western Europe, unlike Japan or the US, has significantly reduced its imports from the Persian Gulf region over the past 16 years to 30% of total net oil imports or 17% of total oil demand. While the EIA figures for Japan differ slightly from those earlier presented from METI due to slightly

---

7 METI. Shigen Enerugi
8 EIA. Persian Gulf Oil and Gas Exports Fact Sheet.
different definitions, the implication is the same: while the US and Western Europe would be affected by a stoppage of oil imports from the Middle Eastern region, such an event would be even more disastrous for Japan.

**Figure 3: Net Oil Imports from the Persian Gulf Region**

![Net Oil Imports from the Persian Gulf Region](image)

From the opposite perspective, Iran is dependent on Japan for its oil exports. As shown in Figure 4, for the last decade oil exports have contributed on average 20% of Iran’s GDP. Furthermore, as shown in Figure 5, Japan is the single largest destination for Iranian oil exports. Indeed, in 2004, the total exports to all of Western Europe was only 64,000 barrels per day (BDP) more than that to Japan; Japan received three times as much as Western Europe’s largest destination, Italy. This high level of energy exports to Japan makes Japan Iran’s largest overall export partner.

---

9 EIA reports on “Persian Gulf” countries while METI report specifies “Middle East.”
10 OPEC.
11 22.2% of exports went to Japan, 9.9% to China, 6.4% to Italy, 5.6% to Taiwan, and 5.5% each to Turkey and South Korea. Source: Country Watch.
Given the importance of the Middle East and Iran, to Japan’s energy supply, this paper will attempt to analyze the perspective from which Japan’s energy strategy is formed, taking Iran as a case point. As a framework for the analysis, I will rely on a question posed by Robert Manning in a review of energy security in the Asian markets:

Will [Asian policy makers] view [the global politics of Asian energy markets] through the lens of traditional geopolitics of real estate and sea-lane security? Or with they view it through the lens of geo-economics, where international investment, joint ventures, and global cooperation rather than competition for resources and conflict is

---

12 OPEC. Year corresponds to fiscal year ending March 20.
13 OPEC. Year corresponds to fiscal year ending March 20.
the prevalent means to satisfy energy security requirements?\textsuperscript{14}

Understanding the basis behind Japan’s energy strategy will help understand how Japan will respond to future developments in the energy sector, such as increasingly frequent actions by China abroad to secure resources or US pressure to withdraw from investments in Iran, and could give an indication of possible future policy actions.

A “geo-political lens,” in this instance, refers to a pre-World War I mercantilist approach where each country strives to secure its own energy sources for its own benefit, usually to the detriment of other consuming countries. This perspective is what Michael Klare fears will drive a sort of World War III in his book, \textit{Resource Wars}; continually increasing demand in consuming countries combined with instability in resource supplying territories could result in increased competition and territorial disputes, ultimately leading to conflict. The geo-political view stresses access to resources over access to market. Specifically for Japan, a geo-politically dominated viewpoint has a high potential to lead to conflict with China, as the latter’s increasing energy import requirements could potentially squeeze the supply to Japan.

A “geo-economic” view, on the other hand, is motivated by economic concerns. This relatively unfamiliar term is used instead of “market-based approach” because the definition reaches beyond simply supporting the buying and selling of energy resources in a transparent market, though this is also an important point. This expression also encompasses the ideas that adequate finances are available to reach required infrastructure investments in both supplying and consuming countries, that all parties can access sufficient information for decision making, and that important technological innovations are disseminated globally. From a free market basis, a geo-economic view would stress privatization and deregulation as a means to achieve these goals. Firms would then be able to enter into cross-national joint ventures and investment opportunities as they deemed economically viable, and new technologies would be supported by end-use consumers based on transparent prices.

To clarify the two opposing drives, Manning poses the following question:

\begin{quote}
Will Japan continue to invest in its plutonium reprocessing program though it lacks any economic rationale? Or will it scale back its nuclear power ambitions and increase investment in the infrastructure required to expand natural gas use?\textsuperscript{15}
\end{quote}

Japan, as any country, faces a finite budget and must make difficult decisions how to apply funds towards energy security. As Manning sees it, Japan could continue to fund plutonium

\textsuperscript{14} Manning, Robert. p. 23
\textsuperscript{15} Manning, p. 24
reprocessing, representing the geo-political viewpoint with a distrust of reliance on foreign countries for supply of energy, or it could turn the budget towards expanding natural gas infrastructure, such as a national grid, which could greatly lower costs for consumers and increase availability. This paper will not explore this particular choice – and some readers may take issue with Manning’s assessment – but the example is put forth to illustrate how in this geo-economic vs. geo-political evaluation, economically viable decisions are viewed as preferable to energy self-sufficiency.

With this understanding of “geo-political” vs. “geo-economic” policy drivers, I will explore Japan’s energy security policy, predominately as outlined in the New National Energy Strategy, focusing on sections relevant to Iran. While I will conclude that geo-political considerations cannot be avoided in the current state of high-tension, I will also offer some steps Japanese policy could take to ensure a geo-economic viewpoint also has a place in the national energy strategy.

Japan’s New National Energy Strategy

In May 2006, keeping “energy security at the core,” the Ministry of Economics, Trade and Industry (METI) published the New National Energy Strategy, calling its creation “indispensable” given “the changes in the energy environment, both at home and abroad.”\(^ {16}\) This comprehensive strategy towards all facets of energy use in Japan was formed with the basic perspectives as outlined in Table 1.

<table>
<thead>
<tr>
<th>Table 1: Basic Perspective of the New National Energy Strategy(^ {17})</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Realizing the state-of-the-art energy supply and demand structure</strong></td>
</tr>
<tr>
<td>• Improving efficiency in energy utilization</td>
</tr>
<tr>
<td>• Diversifying energy sources for increasing options</td>
</tr>
<tr>
<td>• Retaining the strength to secure reserve energy supply</td>
</tr>
<tr>
<td><strong>2. Comprehensive strengthening of resource diplomacy and energy and environmental cooperation</strong></td>
</tr>
<tr>
<td>• Strengthening multifaceted connections with oil/gas producing countries</td>
</tr>
<tr>
<td>• Strengthening the relationship with Asian countries</td>
</tr>
<tr>
<td>• Strengthening overseas development projects for diversifying supply sources</td>
</tr>
</tbody>
</table>

\(^ {16}\) METI. Shin-kokka enerugi senryaku p. 15.

\(^ {17}\) METI. New Energy Strategy Digest p. 12; Shin-kokka enerugi senryaku p. 20. I have designated the policy building blocks as: perspectives, initiatives and concrete actions.
As expected for a national strategy, the perspectives are broad enough to reach across all facets of energy usage – from conservation, to diversification, to international cooperation. While the first and third perspectives predominately focus on internal measures, the second highlights how Japan views its role in the international energy system. Japan’s eagerness to help fellow Asian countries in various energy-related issues, from increasing oil stockpiles throughout Asia (thus lessening the burden on Japan in the event of a stoppage) to increasing energy conservation and efficient use (thus easing energy demand growth and the current supply-demand stringency) is but one facet of its foreign assistance in Asia. While worthy of exploration, especially because not just Japan but much of Asia Pacific relies significantly on the Middle East for oil supply, this is outside the scope of this paper.18

Of interest are those perspectives that link Japan to the Middle East, particularly Iran. Namely, how does the perspective that Japan needs to “strengthen multifaceted connections” with producing countries effect Japan’s energy policy? What is behind the perspective that government effort is necessary to support Japanese companies’ overseas development activities and procurement abilities? And, to tie back to the framework of this paper, do such governmental perspectives imply a geo-political or geo-economic bent?

At first blush, the three perspectives appear to support a market-based approach, demonstrating a geo-economic drive to the strategy. However, a hesitation to leave something so central to the economy of a country which relies on imports for nearly 100% of its energy supply to the private sector alone emerges with closer reading, especially given the market uncertainties mentioned at the outset.19 The perspectives encourage private firm activities while simultaneously supporting government involvement to ensure that the relationship with supplier countries goes beyond buying and selling of energy. Thus arises the dilemma for the geo-political vs. geo-economic framework: the two can never be totally independent. But one can endeavor to discern the dominant force.

---

18 73% of Asia-Pacific’s oil imports come from the Middle East (Source: BP, Oil: Inter-area Movements).
19 Japan’s energy self-supply rate is a meager 4%, raising to 19% if nuclear fuel cycle is included (Source: LDP)
From the broad perspectives outlined in Table 1, eight specific initiatives are identified to translate these into actionable government programs (Table 2).

### Table 2: Eight Specific Initiatives of New National Energy Strategy

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Concrete Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Realizing the State of the Art energy supply and demand structure</td>
<td></td>
</tr>
<tr>
<td>1. Energy conservation front runner plan</td>
<td></td>
</tr>
<tr>
<td>2. Transport energy for the next generation plan</td>
<td></td>
</tr>
<tr>
<td>3. New energy innovation plan</td>
<td></td>
</tr>
<tr>
<td>4. Nuclear power nation plan</td>
<td></td>
</tr>
<tr>
<td>Comprehensive strengthening of resource diplomacy and energy and environment cooperation</td>
<td></td>
</tr>
<tr>
<td>5. Comprehensive strategy for securing resources</td>
<td></td>
</tr>
<tr>
<td>6. Asia energy and environment cooperation strategy</td>
<td></td>
</tr>
<tr>
<td>Enhancement of emergency response measures</td>
<td></td>
</tr>
<tr>
<td>7. Enhancement of emergency response</td>
<td></td>
</tr>
<tr>
<td>Common challenges</td>
<td></td>
</tr>
<tr>
<td>8. Energy technology strategy</td>
<td></td>
</tr>
</tbody>
</table>

For each initiative, the underlying philosophy, general goals, and concrete actions are described. For the sake of brevity, outlined below in Table 3 are those concrete actions deemed applicable to discerning energy security strategy towards the Middle East and specifically Iran. Each of these actions will be weighed against geo-political and geo-economic motivations, in an attempt to determine the overall balance.

### Table 3: Applicable Concrete Actions Proposed

<table>
<thead>
<tr>
<th>Initiative</th>
<th>Concrete Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Nuclear power nation plan</td>
<td>• (4) Active participation in creating a global framework for the compatibility of the expansion of nuclear power generation with nuclear nonproliferation</td>
</tr>
<tr>
<td></td>
<td>• (6) Support for international deployment of the Japanese nuclear industry</td>
</tr>
<tr>
<td>5. Comprehensive strategy for securing resources</td>
<td>• (1a) Strengthen a comprehensive relationship with resource countries</td>
</tr>
<tr>
<td></td>
<td>• (1b) Enhance assistance to Japanese natural gas</td>
</tr>
</tbody>
</table>

---

20 METI. New Energy Strategy Digest p. 15-16
21 METI. Shin-kokka enerugi senryaku, p. 46.
22 METI. Shin-kokka enerugi senryaku, p. 50-2.
and oil development firms

- (1c) Diversify supply sources
- (1d) Promotion of actions so that the Japanese government (and related systems) and the plans guiding the securing of resources act as one
- (1e) Promote transparency and stability of the energy market

Securing Resources

As is visually obvious from the number of associated concrete actions, the key initiative for this discussion is the “Comprehensive Strategy for Securing Resources.” Exposition of the “comprehensive relationship” (Point 5-1a) offers “technology, economic development, small and medium business development, education, and water development through overseas development assistance (ODA) and economic partnership agreements (EPA)” as methods to expand the bilateral relationship beyond the buying and selling of energy. As the Middle East currently accounts for only 7% of Japan’s overall gross ODA (Figure 6), room does exist for the region to receive a greater share. However, the higher per capita incomes in the region due to natural resource revenue and Japan’s traditional focus of ODA in Asia will qualify what could be given.

Figure 6: Japan’s Gross Bilateral ODA by Region

23 METI. Shin-kokka enerugi senryaku, p. 50.
24 The DAC lists Iran as a “lower middle income country.” Saudi Arabia graduated to “high income country” in 2004, but will remain as an “upper middle income country” pending its 2006 status. UAE and Qatar are not on the DAC’s list of ODA recipients for 2005-2007.
25 OECD, DAC
Japan has granted a net average of $48MM in ODA to Iran each year over the past decade, though this overall figure is slightly misleading because the composition has changed over this period. The focus on loans in the late 1990s has meant that interest and loan repayments have detracted from grants, technical cooperation and other types of aid granted in recent years (Figure 7). This shift toward grants and technical cooperation is more in line with Germany’s, Iran’s largest donor, profile as shown in Figure 8.

Figure 7: Japan’s ODA to Iran by Type

Figure 8: Germany’s ODA to Iran by Type

While total development aid given to Iran by Japan is a mere drop in the bucket for Japan (less than 1% of Japan’s total aid budget), the amount is significant to Iran. After Germany, which in 2004 provided 31% of total development aid received by Iran, Japan ranked second

26 OECD, DAC statistics online
with 15%. This ranking of number one and two donors has remained constant for the last decade (see Figure 9), with Germany averaging 46% of total aid given and Japan averaging 22%. Thus, the ODA currently given by Japan, while small in comparison to total Japanese giving, is significant to Iran.

**Figure 9: ODA Received by Iran by Donor Country**

The strategy to give aid to energy-supplying countries suggests a geo-political perspective: bilateral aid may grant preferential access to resources. If it is possible to secure influence in resource-producing countries through bilateral assistance such as ODA, Japan should be in a secure position with Iran. However, as noted by Ken Koyama and Amy Meyers Jaffe, the link between ODA and preferential treatment in energy markets is weak, if it exists at all. Studies have shown that energy sales decisions are made on an economic basis: the seller, Iran, will offer its oil to the most attractive bidder. Thus, this geo-politic strategy towards a geo-economic decision may be mismatched.

Japan’s energy strategy to strengthen the “comprehensive relationship” with countries such as Iran, though, does not focus on ODA alone, but also seeks to encourage the private sector to participate. The “comprehensiveness” desired would insinuate the participation of companies outside the energy industry as well as within. However, in multiple conversations and scanning various articles, I have yet to find an example of a significant

---

27 OECD, DAC statistics online. ODA defined as Grants + Net Loans + Technical Cooperation + Emergency Aid - Interest Paid. *Other includes other bilateral donors, not multilateral institutions such as UHCR


29 Some debate has recently arisen if this applies to China or not. Speculation exists that Japan’s ODA may not influence oil procurement because it cannot offer what Middle Eastern governments desire: military aid. However, this debate will not be explored in this paper.
investment by a non-energy-related company, suggesting very limited interest from Japanese non-energy firms for FDI opportunities.30

As one interviewee simply put, Japanese companies are averse to risk. Thus, given that they have easy access to US and European markets, which are significantly larger than those of the Middle East, why would they wish to enter even if they were more disposed to risks?31 I would add to this that operating in China, which is significantly closer and with which Japan shares a significant trade volume, offers its own challenges and risks; thus, it should not come as a surprise that non-energy sector firms have yet to snap up the chance of, for instance, opening a factory in Iran.

While the motivation for private company participation seems to stem from a geo-economic desire to increase financial ties (e.g., joint ventures or FDI) between Japan and Iran, the reality is far from actualization. The future, then, will tell how pure the geo-economic motivation is: if the government simply allows businesses to chart their own courses, and investment ebbs and flows as companies deem viable, then indeed market forces are at work. However, if the government perceives that private businesses must invest in order to ensure access to resources, and to this purpose offers various incentives to encourage such activity, then a geo-political perspective lurks just behind economic activities.

The second action to secure resources entails “enhanced assistance” for Japanese resource development firms (Point 5-1b). Three inter-related policy concepts worthy of exploring are connected with this action: creating a core Japanese development firm, promoting flag oil development, and support of development and flag oil firms through state-backed financing (so called “risk money”) and advisory services.32 All three of these are linked in with Japan’s current major energy strategy in Iran: the development of the Azadegan oil field.

The creation of a “Japanese major” – or at the very least a “Japanese independent” – is believed to be an important aspect of Japan’s energy security because such a company is thought to guarantee a supply to Japan in event of a crises. While Japanese trading and refining companies bring a significant portion of oil to Japan where it is refined (predominately by Japanese refiners) for the local market, the system relies on foreign

30 For instance, along the lines of Renault’s JV with the Automotive Industry Development Company (“FDI in Iran...”) or the possible mobile network build out by Turkcell (“Majalis, GC Move...”).
31 Interview with manager in charge of procuring crude from Middle East for refineries in Japan.
32 In Japanese: chukakuteki-kaihatsukigyo (a core Japanese development firm), jisyu kaihatsu (flag oil development), and risk money / risk taking competency.
companies to develop 85% the crude. The most common explanation for why a Japanese oil development company never formed has its roots in past government policy: in particular, state-backed financing schemes fostered a “one project – one company” set up, which discouraged Japanese oil companies from developing a full portfolio necessary to a “major.”

However, starting in 2001, Prime Minister Koizumi embarked on a “broad energy sector restructuring program” which resulted in the dissolution of JNOC and other oil companies, including Inpex, receiving its assets. This industry restructuring has set the stage for a “Japanese major,” and analysts are suggesting Inpex may be the front runner, especially following a merger with Teikoku Oil Co.

If a Japanese development company of significant size is formed, then it follows that the flag oil percentage would likely increase. Thus, one of five numeric goals offered in the New National Energy Strategy is to increase flag oil from 15% in 2004 to 40% in 2030 (Figure 10). For comparison, the Liberal Democratic Party has reported that France and Italy, two other “countries lacking domestic resources,” are currently operating at 98% and 55%, respectively, flag oil percentages, significantly higher than Japan.

---

33 Saudi Aramco purchased a “strategic holding” in Showa Shell in 2004, a “first” in Japan’s refining and marketing sector, “[giving] Japan access to more Saudi oil.” Source: “Japan: On the Prowl.”
34 Miyamoto, Yoshifumi. “Sekiyu Jyoryu...”
36 Gulf News. “Japan Inc. Looks...”
37 Asanuma, Naoki. “Inpex, Teikoku form Japan Oil Major”
38 The other four are: reducing energy usage efficiency (GDP / energy used) by 30% from 2003 to 2030; reducing oil reliance (oil as % of PES) from 47% in 2003 to 40% in 2030; reducing transportation sector oil reliance from 98% in 2000 to 80% in 2030; and increasing nuclear power generation share from 29% in 2004 to 30-40% in 2030.
39 Liberal Democratic Party. p 10
To achieve these goals (the creation of a Japanese major and a nearly 3x increase in flag oil), one company, likely Inpex, will either have to develop new fields or assume operatorship of existing fields.\textsuperscript{41} Azadegan, one of the largest recent new oil field discoveries, offers a prime opportunity for Inpex to take the lead development position and not simply act as a minority stakeholder, the predominate historical mode of operation for Japanese E&P companies.\textsuperscript{42} While Inpex has also recently pursued other development opportunities, none match the potential scope of Azadegan, suggesting this project, which could provide up to 6% of Japan’s oil imports, could be viewed as the centerpiece for this Japanese major strategy.\textsuperscript{43}

Discussions concerning Japanese development of Azadegan began only two months after Saudi Arabia denied the renewal of Japan’s development of the Khafji field, \textsuperscript{44} “Japan’s most significant upstream oil investment.”\textsuperscript{45} While nothing official has been written connecting these two events (namely, that the Azadegan contract was pursued because of the loss of Khafji, so that the flag oil rate could be maintained), the timing is too close to simply dismiss

\textsuperscript{40} METI. New National Energy Strategy Digest, p. 26
\textsuperscript{41} “In an interview with the Financial Times, Naoki Kuroda, Inpex president, says the group, created by the government in 1966 to drill for oil in Indonesia, is emerging as the “core company” described in a 2003 government white paper.” Source: “Japan Inc. Looks...”
\textsuperscript{42} Azadegan is the “second-largest oil field discovery since the 19080s.” (Source: Vesely, Milan.)
\textsuperscript{43} Mondaq Business Briefing. “Japan and Iran Sign...”
\textsuperscript{44} Koyama, Ken and Goichi Komori
\textsuperscript{45} EIA, Saudi Arabia. The Arabian Oil Company (Japanese) “operated two offshore fields (Khafji and Hout) with 300,000 bpd in production.” Kuwait also failed to renew Japan’s development of its part of the neural zone in 2003, though Japan reached an agreement with Kuwait to purchase 100,000 bpd through 2023.
as a coincidence. This highlights how a desire to “own” resources is not too far beneath the surface, reinforcing the geo-political drive behind the strategy of developing a “Hinomaru Major” and subsequently increasing the flag oil rate.

Imagining geo-economic theories for the development of Azadegan is not too difficult, but it seems that they are unlikely to be the driving source. For instance, one could argue that by pursuing the opportunity in Iran, Inpex negotiated with a country where the Majors either cannot pursue E&P activities because of direct US sanctions, or fear to do so because of secondary sanctions.\footnote{46} The logic follows that because Inpex would have bargained against fewer companies and against those also lacking the deep pockets that the Majors have, it may have been able to receive preferential terms. However, given the criticism of the buy-back contract structure prevalent in Iran,\footnote{47} the skepticism of the Japanese press on the terms of the deal,\footnote{48} and the recent doubling of the estimated development cost from $2B to $4B,\footnote{49} this argument appears to fall flat.

The development of Azadegan would bring much needed investment to Iran’s aging oil facilities; indeed, the IEA estimates that Iran requires “at least $160B over the next quarter century” to expand energy exports.\footnote{50} Japan’s investment would seem to satisfy the “international investment, joint ventures, and global cooperation” requirements outlined for a geo-economic approach. However, I would question if attributing geo-economic motives to the investment confuses the intention and the outcome. The $4B is the cost of “a [Japanese] national project” that “is not purely a matter of economics;” the drive to secure energy resources for Japan will bring the technology and investment to Iran, not the desire to help upgrade Iran.\footnote{51}

It could also be argued that the contribution to relaxing the current tightness of supply that will result from developing Azadegan illustrates a geo-economic viewpoint. That doing so will contribute to stabilization of the energy market because more supply capacity will be brought online. However, this, too, rings hollow because of the bigger fear persisting in

\footnote{46} I am referring to the Iran-Libya Sanction Act (ILSA) which prohibits any company which has invested over $20MM in Iran from doing business in the US. While European companies have so far successfully appealed to the WTO to avoid the so called “secondary sanctions,” many still walk with trepidation.
\footnote{47} Inohara, Wataru
\footnote{48} “Inpex has to follow the Japanese government’s initiative [to develop Azadegan] even in a project whose profitability is questionable.” Source: “Merged Firm Aims to become Dominant Player.”
\footnote{49} Oilgram News, 1 August 2006. p 4.
\footnote{50} Leverett, Flynt. Also, one interviewee estimated that only one in thirty of Iran’s rigs have been updated since the Iranian Revolution.
\footnote{51} Hosoe, Tomoko.
Japan surrounding China’s E&P activities: that if Japan doesn’t develop Azadegan, China will, and then Japan will be losing out in the competition for resources between the two countries. Indeed, even Iran is sensitive to this dynamic having announced on June 6 that if Japan failed to make progress by August 22, it would seek other partners including those from China.\(^{52}\) This very present sense of competition with China illustrates the geo-political considerations at the top of policy makers minds; were the main goal geo-economic in nature, namely to develop more production capacity regardless of nationality, such competition would not be as prevalent.

As a final point for the creation of a Japanese development firm, the New Energy Strategy calls for an “the examination of various environmental improvements for the availability of the supply of risk money from an evaluation for the existence of an independent administrative agency.”\(^{53}\) In short, this means that the government appears to be reexamining its weakened role in the oil finance sector that resulted from JNOC’s restructuring and may strengthen JOGMEC’s financing position.

This again suggests a low level of trust in private sector companies to secure Japan’s energy security needs: why can a Japanese development firm not rely on private banks or trading companies to finance its projects? A cursory review of US independents such as Marathon suggests that these companies are able to find private financing, even if terms are not as attractive as the Majors have access to.\(^{54}\) If the answer to why Japanese firms must rely on the government for “risk money” is that private banks do not see too much risk in the proposed projects or do not have positive views on the return, then perhaps the proposed projects should not be pursued as they could represent poor business decisions. A sustainable Japanese independent will have to compete in the global energy industry; it should stand on its own two feet from the beginning.

The idea of state-backed financing is further supported by the call to establish “Guidelines for the Securing of Energy” (Point 5-1d) by 2007 in order that economic and political activities are coordinated.\(^{55}\) This calls for the “strategic joining” of government and related organizations for “resource finance and economic cooperation activities.” Clearly, the Strategy is calling for a place for the government in directing energy financial resources and other activities. If a geo-economic viewpoint is to be maintained, then great care will have to be taken to keep government policy distortions to a minimum.

\(^{52}\) “Iran Warns...” An agreement was reached on July 28th (“Iran, Japan...”).
\(^{53}\) METI. *Shin-kokka enerugi senryaku*, p. 50.
\(^{54}\) The combined Inpex-Teikoku company is “marginally behind the US’ Apache in scale” (Source: “Japan: On the Prowl”) and “roughly on par with CNOOC’s production level.” (Source: “Japan Inc Looks...”)
\(^{55}\) METI. *Shin-kokka enerugi senryaku*, p. 51.
The third point in the Comprehensive Strategy to Secure Resources calls for diversification away from Middle East resources (Point 5-1c), promoting exploration activities in Russia and the Caspian Sea region, followed by potential opportunities in Libya, Nigeria, South America and Canada.\textsuperscript{56} Indeed Japanese companies have been active in financing projects in Central Asia and bidding on development contracts in Nigeria. While such activities might suggest a down playing of activities in the Middle East, in favor of spending resources, this is unlikely to happen given that approximately two thirds of all proven oil reserves exist in the Middle East.\textsuperscript{57}

Geo-political and geo-economic drivers are mixed in this strategy. On one hand, a wider set of energy suppliers would certainly ease energy security concerns, and it appears from comments by analysts that current development investment activities outside the Middle East are economically sound, supporting a geo-economic mindset. However, should conditions change and these opportunities pursued simply because of their non-Middle East location, then the geo-political factor gains strength. Policy makers should keep an eye towards what value is assigned to the risk due to location, to ensure that decisions continue to be economically sound.

The promotion of a stable and transparent energy market (5-1e) requires little elaboration. Indeed, such a market is a key pillar in support of geo-economic view to policy formation and action. The concrete action proposed for the government in relation to maintaining an open market relates to information flow: “promoting intelligence sharing through multilateral meetings and dialogue between energy suppliers and consumers to develop measures and policies based on energy supply and demand statistics and projections.”\textsuperscript{58} This action does not propose government intervention in any manner aside from supporting dialogue, furthering the geo-economic position.

Sharing of information, though, goes beyond Japan outlining its demand projections, so suppliers understand its needs, and supplier countries reporting production projections, so consuming countries understand the supply. Specifically with the case of Iran, a dialogue must also take place regarding relationship with the US, the UN and Iranian domestic trends. Each country will of course not commit to a specific course of action to leave flexibility of movement, depending on future international and domestic developments. However, dialogue should also be supported to ensure that private companies can make informed decisions regarding such issues as the future reliability of oil volumes for exports or potential

\textsuperscript{56} METI. Shin-kokka enerugi senryaku, p. 51.
\textsuperscript{57} 61.9%. BP Amoco. BP Statistical Review of World Energy
\textsuperscript{58} METI. Shin-kokka enerugi senryaku, p. 51.
changes in buyback contract structure. The current opacity surrounding Iranian domestic political decision-making process hinders the ability to assess political risk in economic models. In addition, from the Iranian side, doubts may exist concerning how closely Japan is aligned with the US. While some Japanese perceive that Japan is viewed as a separate entity from the US, given Japan’s close alliance with the US in Iraq, it is not difficult to see how Japan’s previous relative independence in the Middle East could be compromised. In conclusion, in politically sensitive areas such as Iran, economic decisions cannot be divorced from political realities; thus energy markets must have sufficient information about political developments in order to truly be stable and transparent.

Nuclear issue

Any current discussion of Iran cannot avoid the nuclear issue, especially given fears that Iran’s nuclear program and other conflicts such as that between Lebanon and Israel could generate further unrest throughout the Middle East. It goes without saying that hopes are high for a peaceful diplomatic resolution, and UN members appear to be patiently negotiating, despite a denied request for response prior to the G8 summit and refusal of the P5+1 proposal. The relationship between Iran in Japan in the context of the current Iranian nuclear dispute and of Japan’s nuclear energy strategy brings to the surface two main points: one a representing a failure and the other a future opportunity.

First, one of the nuclear initiatives raised in Japan’s New National Energy Strategy calls for “active participation in creating a global framework for the compatibility of the expansion of nuclear power generation with nuclear nonproliferation” (Point 4-4). By supporting responsible nuclear power generation – whether in neighboring China or further afield Iran – Japan is contributing to its own energy supply security by lowering the strain on other power generation sources (notably oil and gas) and lowering global emissions. Iran also obviously desires nuclear power generation capability, so the intersection between Japan’s and Iran’s energy security strategies is fairly straightforward.

The question must be asked, though, how Japan, despite its current seat on the UN Security Council, was not party to the P5+1 proposal or did not drive forward a proposal of its own. This represents a missed opportunity for a country that is currently professing a desire to play a larger role in international politics and has a strong record of non-proliferation activities. If the answer is because it feared a loss in oil exports or repercussions against the Azadegan development project from taking a tough stance against Iran’s defiance of IAEA guidelines, then geo-political motivations have a strong hand in energy policy. However, it could alternatively represent the weak political and economic stance from which Japan must
progress if it wishes to contribute to this field. Unfortunately, the answers to such questions will take time to discern, and answers will likely change depending on the course of action Iran pursues.59

The second potential connection between Japan and Iran found in Japan’s energy strategy depends on the peaceful resolution of the nuclear issue. If the international community no longer fears Iran’s use of nuclear power (granted, this is a big if), opportunities may exist for the “international deployment of Japanese nuclear companies” (Point 4-6). Japan, with its commitment to peace and nonproliferation, could be an internationally trusted partner to assist in continued development of a civilian nuclear power industry. To reiterate, though, the current situation is far from this point. Geo-political factors, in this instance, will supercede any economic opportunities that may exist for investment by Japanese companies.

Going Forward

METI outlined the following activities that the government “must endeavor to prepare the environment” for realizing the eight issues and associated concrete actions:

<table>
<thead>
<tr>
<th>Table 4: Joint Activities to Foster Realization of Goals60</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Facilitation of the formation of strong corporations</td>
</tr>
<tr>
<td>2. Effective and efficient application of political resources, such as budget and taxes</td>
</tr>
<tr>
<td>3. Undertaking public hearings, public relations, and education related to energy</td>
</tr>
</tbody>
</table>

I agree that these goals do indeed cut across issues and actions identified in the strategy. Certainly, regardless of if the government policy under question is energy or education, the efficient use of government resources and increasing public understanding should be of high concern to any democratic government (Activity 2). I also put forth the following suggestions when implementing these activities, especially with regards to Japan’s energy relationship with Iran. As will be obvious, my views are formed based on my education in the US, emphasizing free markets, free trade, and minimal government involvement, and stressing privatization of companies.

59 On August 7th, Nikkei Weekly quoted Foreign Minister Aso Taro as saying on August 1st that "we have no intention to change our position (on Iran's nuclear issue) just to protect our interests in the Azadegan oil field," adding "Our top priority is (resolving) the nuclear (problem)." This suggests that at the current time, non-proliferation is winning out over interests in securing Azadegan oil. (Source: "Tokyo to Persuade...")

60 METI. Shin-kokka enerugi senryaku, p. 64-5.
First, I recommend caution when “facilitating the formation of strong corporations.” JNOC’s huge debts brought about much needed upstream restructuring in the 2000s. The deregulation of the refining industry in the late 1990s is just now showing the positive effects of a rationalized and efficient industry practices. Strong Japanese trading houses already exist for financing overseas development and importing necessary oil. If government policy supports the current moves towards privatization and rationalization, little concern needs to be raised. However, if government policy reverts to creating something similar to the JNOC-era “safety net,” then the industry will be back where it started and companies will still not be “exposed to the real world.” This lead to weak companies the first time; to facilitate a strong corporation, the government will have to let it compete on similar terms to other corporations and avoid the tendency to intervene.

In addition to this, the government still owns a 29% stake in Inpex Holdings, which generally appears to be the front-runner candidate for the core development company. This could easily allow government policy to influence what ideally should be economic investment decisions. For example, if the nuclear situation with Iran is resolved, the government may again push for the development of Azadegan, to enable it to reach its stated goal of 40% flag oil consumption. However, Azadegan’s crude is relatively heavy, and, while Japanese refiners are able to process this type of oil (indeed, as light crude becomes scarcer refiners globally must process heavier crude), their preference (like that of most refiners) is for lighter crude that is relatively free from metals. Since Japanese refiners source all their fuel on the open market, they might prefer to source crude elsewhere for easier refining and better profits, unless government incentives tip the balance in favor of heavier crude. In this case, one can hope that the decision (if made) to develop Azadegan oil field takes this into perspective, and is not to increase flag oil.

Secondly, limited government resources may be put to better use on efforts to ensure China and India act as responsible players in the energy market, rather than developing a Japanese major which could be left to the private sector. Alternatively, as related to Iran, Japan and China could jointly develop oil or gas fields. I recognize this suggestion is far fetched, given the current sense of distrust between the countries on energy matters, and is dependent on a

61 Clark  
62 World Refining  
63 Clark  
64 Chan  
65 To clarify, I am speaking hypothetically of such policy incentives to process the heavy Azadegan crude. No such suggestions have been made, though if flag oil development is to be a priority over refiner profits, one could imagine such a policy scenario to compensate refiners for processing the heavier crude.
host of private and public sector decisions; however, in theory, such cooperation could significantly lessen the sense of competition for resources (and thus geo-political fears) and help ensure investment reaches necessary locations (thus raising geo-economic cooperation).

Thirdly, I would also urge that any public information campaigns stress the importance of the energy market. If the public fully understands how energy is bought and sold, then it will have more faith in the current system and will see the benefits of a geo-economic approach to energy. The logic of flag oil or the rhetoric of Chinese competition may be easily grasped by the public and certainly offers enticing sound bites for politicians (even in the US!). However, true stability – security – lies in the ability to purchase the desired amount of fuel at a fair price, which requires well functioning market mechanisms. The importance of the energy market, then, should be the, albeit more complicated, target message of public information. Thus, public opinion about opportunities in Iran would not be formed around “we should develop it because otherwise the Chinese will,” but around an idea that “an increase in supply anywhere, by anyone, will increase supply (and lower price) on the market for everyone.”

Finally, towards Iran, I would urge the attempt to decouple foreign assistance funds from securing oil resources. I recognize that a pragmatist will argue that any funds from a government will by nature have a political agenda and only funds from private philanthropic organizations or NGOs can be fully altruistic. However, were Japan able to separate humanitarian assistance and development activities from the amount of energy obtained, it could go a long way to building trust with the receiving nation by lessening the geo-political implications of aid. Iran, for instance, would understand that the assistance would continue to flow, even if oil exports to Japan lowered for economic reasons. If Japan wants to take a more active diplomatic role in the stability of the Middle East, such trust is critical.

In Conclusion, for Future Research

On October 6, 2006, Inpex reduced its stake in the Azadegan project from 75% to approximately 10%, showing how geo-political realities influence geo-economic decisions. The Japanese government has expressed hesitation to “[extend] or [guarantee] debts for the development of … Azadegan … if the UN Security Council imposes economic sanctions on Iran,” significantly changing the economics of Inpex obtaining a loan. In addition, the failure to resolve uncertainties in Iran after months of diplomatic efforts, combined with heightened international sensitivity to nuclear issues following North Korea’s nuclear test on

---

66 Asahi Newspaper. “Azadegan-yuden de Nihon...”
67 Today.AZ. “Japan May Block...”
October 9, 2006, can only have increased the political risk factor faced by Inpex. Inpex’s statement that the decision to reduce its stake “was a business judgment made by a private company” is valid, but lurking behind this decision is more than “simply a delay in removing land mines” as claimed. Thus, the geo-political undercurrents have recently had a strong effect on economic decisions, and as long as tensions remain high will likely continue to do so.

As presented by Professor Magosaki, to understand the current nuclear situation with Iran, you must understand the current situation in the US towards Iran. This summer’s research on Japan’s energy strategy and how it relates to Iran was intended as a prelude to further research on how Iran effects US-Japan relations. The US has not had direct relations with Iran in over a quarter century; Japan during that time has maintained both diplomatic and private company actions. It would appear on the surface to me, then, that Japan is in an interesting position, given its close alliance with the US and continued activities in Iran, to serve as an intermediary. How so, though, remains open for research.

Entwined in this future research is the question of how Japan can succeed in taking a more active global role. Previous energy strategies – focusing on energy conservation, oil alternatives, national oil E&P, and building a reserve system – were predominately domestically focused. The New Energy Strategy, though, states that Japan “should now plan to prevent the incidence of a global energy crisis through strengthening wider foreign relations and international contributions” in the energy sector. Perhaps the energy sector, with its myriad of activities from non-proliferation to high finance to energy conservation, is where the US and Japan can agree on a more active position for Japan. If so, energy producing countries such as Iran will factor into this new role.

Also of interest for future research is how the US has influenced Japan’s actions in Iran. As mentioned in the outset, US perception is that Japan follows a relatively independent approach in the Middle East, a case point being the exploration of the $4B Azadegan development possibility. However, discussions at IEEJ this summer revealed a different view in Japan: that, as is the case in the rest of the world, Japanese actions in the Middle East and Iran are subject to their impact on the US-Japan relationship and US reaction, as is the case the world around. Thus, exploring this difference of view could lead to interesting insight into the current state of the US-Japan relationship.

In conclusion, I would like to thank IEEJ for the opportunity this summer to explore this topic.

---

68 Higashi, Kazumasa. “Inpex Deal...”
69 METI. Shin-kokka enerugi senryaku, p. 20.
especially given that the main goal was to further my understanding of how Iran fits into the US-Japan relationship and of possible areas of US-Japan energy security cooperation. Many open questions remain, but hopefully this outsider’s view of the New Energy Strategy and its relationship to Iran proves useful to ongoing research activities at IEEJ.
Bibliography and Works Cited


“Azadegan-yuden de Nihon Kaihatsu Shudoken Tebanasu Keneki 10% [Japan Relinquishes its Azadegan Development Rights to a 10% Interest].” Asahi Newspaper 6 October 2006.
http://www.asahi.com/business/update/1006/146.html


http://www.bp.com/statisticalreview


Eastcott, James. “Japan’s Downstream: Restructuring and Global Implications.” Middle East


Inohara, Wataru. Iran: Baibakk Keiyaku no Minaoshi no Ugoki to Tenbou [Prospects and

---. Iran: Konmei Fukamaru Iran no Sekiyo Tennengasu Doukou [Confusion Deepens in Movements in Iran’s Oil and Natural Gas]. Tokyo, Japan Oil, Gas and Metals National Corporation (JOGMEC), 14 November 2005.

http://www.iea.org/Textbase/stats/oecdbalancetable.asp?oecd=Japan&COUNTRY_LONG_NAME=Japan


“Iran Inks Deal with Sinopec, South Pars Bids Invited.” Oilgram News 84.145 (1 August 2006): 4.

“Iran, Japan to Finalize Azadegan Oil Deal by August 22.” Xinhua General News Service 28 July 2006.

Iran no Sekiyu Sangyo Kosaku Kozo [Construction of Iran’s Oil Industry]. Institute of Energy Economics of Japan: July 2004.

“Iran Warns It Could Cancel Oil Deal with Japan.” AFX – Asia 6 June 2006.


“Majalis, GC Move Against FDI.” Middle East Economic Digest 48.40 (1 October 2004).


“Tokyo to Persuade Iran to Accept UN Offer.” Nikkei Weekly 7 August 2006.


http://www.eia.doe.gov/emeu/cabs/pgulf.html

http://www.eia.doe.gov/emeu/cabs/saudi.html

“US Asks Japan to Halt Iran Oil Field Project.” Al Jazeera 31 March 2006.
http://www.aljazeera.com/me.asp?service_ID=10825


Contact: report@tky.ieej.or.jp