

With Asian oil demand expected to outpace that of the US and Canada by 2030, *Eric Fishhaut* looks at the sources available to these oil-importing nations and examines how they will affect market dynamics in the future

# Meeting demand in Asia

We have learned that Asia will play a growing role in the global oil market. According to the International Energy Agency (IEA), Asian oil demand in 2030 will exceed that of the US and Canada combined and will account for 26% of the world total.

The evidence continues to mount. In the first eight months of this year, China's imports were up more than 15% year on year, according to the Chinese General Administration of Customs. Imports of oil products rose nearly 26% year on year from January through to August, while oil production in China is expected to start declining very soon. Output elsewhere in the region, including for Indonesia, will be more or less flat over the projection period.

The fact is that the majority of Asia now depends on imports to meet its energy needs. With regional and global demand continuing to rise, this dependence seems to have changed the dynamic of the world petroleum market irrevocably. Even with energy conservation and other means of reducing the rise of consumption, it is hard to see any outcome other than higher prices in the absence of increased supply.

An examination of energy sources and distribution within Asia, however, reveals some quite interesting dynamics and perhaps some possibilities for an improved market.

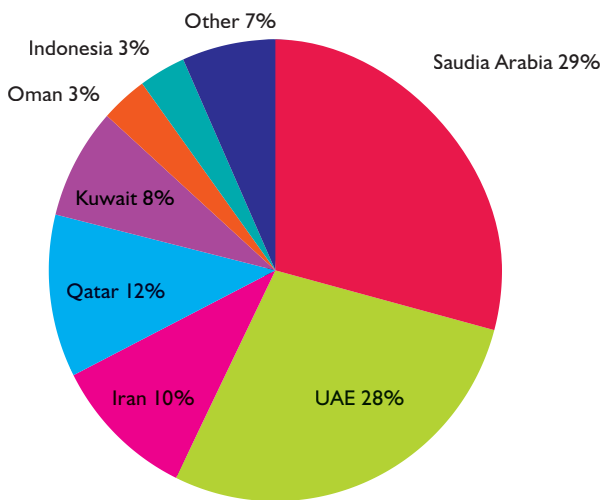
## Japan

Japan is dependent upon imports for about half of its energy needs, and oil is obtained mainly from the open market. During the first oil crisis of 1973, 78% of Japan's imports came from the Middle East. In spite of a reduction in its reliance on oil through the growth of alternatives like nuclear and natural gas, about 90% of the country's imports now come from that region (figure 1). The increase can be attributed to a reduction in exports from China and Indonesia following growth in internal consumption in those two oil-producing countries.

The Japanese government has released an interim energy strategy report predicting that the free market trade of oil will be reduced, and urging greater government involvement in developing reliable sources. Included in the proposals from the Ministry of Economy, Trade and Industry were the strengthening of co-operative relationships with producing nations, and increasing Japanese interests in new oilfield developments. The strategy includes specific goals, among which are to have 40% of petroleum imports coming from

**F1. Current sources of Japan's imported oil**

Japan relies on the Middle East for 90% of its oil imports. Recent figures show imports of approximately 125 million barrels per month.



Source: Japanese Ministry of Economy, Trade and Industry

oilfields controlled by Japanese interests by 2030, and reducing dependence on petroleum as a primary energy source to under 40%.

Currently only 15% of petroleum imports come from fields held by Japanese interests, mainly Cosmo Oil Co's interests in Qatar. The view of petroleum as a strategic resource was first pursued in the 1960s, with the Japan National Oil Corp serving as the main avenue for Japanese-controlled oilfield development interests. However, with prices relatively low and stable through the 1990s, the focus shifted away from development to buying stockpiles on the free market, and the Japan National Oil Corp was abolished in 2001 after accruing losses of about 600 billion yen.

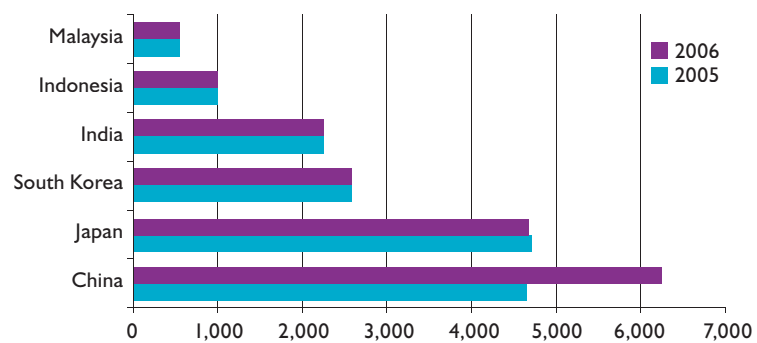
Japan experienced the uncertainty and instability that accompany oilfield interests in the Middle East when the Japanese-controlled Arabian Oil Company had oilfields in a neutral zone between Saudi Arabia and Kuwait. During the first Gulf crisis in the early 1990s, rockets from Iraqi forces rendered the oil complex inoperable. This helped to motivate the shift away from government involvement in 2000. Until that time, Japanese law dictated that all petroleum produced in controlled oilfields had to be imported to Japan. Today the law applies only in times of emergency, and about one-third of the production from controlled fields goes to buyers outside Japan – with some customers operating under long-term supply contracts.

Current thought and strategy in Japan is to increase participation in oilfield development. The intention is not just to physically control supplies, but also to invest in producer nations, as multinational corporations do, to help bring about more co-operative relationships and thus widen options when crises do arise. Japan also has the capacity and the means to make science and technology contributions that could improve productivity. But debate continues as to whether the approach should be via government-backed oilfield development or through the formation of and participation in consortiums – seen as the newer trend towards globalisation.

While still relying heavily on the Middle East for its oil needs, Japan has started to take crude from Sakhalin Island in the Russian Far

## F2. Estimated crude oil distillation in Asia\*

Refined fuel production capacity in Asia has shown little growth with the exception of China. Total capacity for the region is nearly the same as that of the United States.



\* Thousand barrels per day. Source: EIA

East. Recently Nippon Oil, Japan's biggest refiner, bought crude oil from the \$13 billion Sakhalin-1 oil and natural gas project (led by ExxonMobil) for the first time. The refiner bought 700,000 barrels of light, low-sulphur Sokol grade oil, the company said in a statement on August 23. The cargo is scheduled to arrive at Kagoshima, in southern Japan, around October.

## China

China Petroleum & Chemical, that nation's biggest refiner, is also importing more oil from Africa and Russia in an effort to reduce its dependence on Middle East crude. They join other large Asian refiners that have bought new grades of crude oil for the first time this year, including Nippon Oil, Indian Oil and SK of South Korea. Angola overtook Saudi Arabia as China's largest petroleum supplier this year. In May, China's oil imports from Angola soared to an average of more than 752,000 barrels per day, according to China's General Administration of Customs.

Refined oil from Africa and Russia typically yields more gasoline and diesel than Middle East supplies, making it more attractive in Asia with its fast-growing automobile market. Most spare oil production in the Middle East is so-called sour crude, which has a high sulphur content. Other new sources for China include Kazakhstan and Venezuela, displacing share formerly held by Gulf producers like Saudi Arabia, Oman and Yemen.

This trend will likely benefit private and

multinational companies drilling in Africa and the former Soviet Union, including ExxonMobil, BP, Total and OAO Lukoil. This contrasts with their exclusion from production in Saudi Arabia and other countries in the Middle East, where state-owned monopolies control the industry.

During the first half of 2006, Chinese imports from Africa rose 22% to 23.4 million metric tons, according to customs data. In

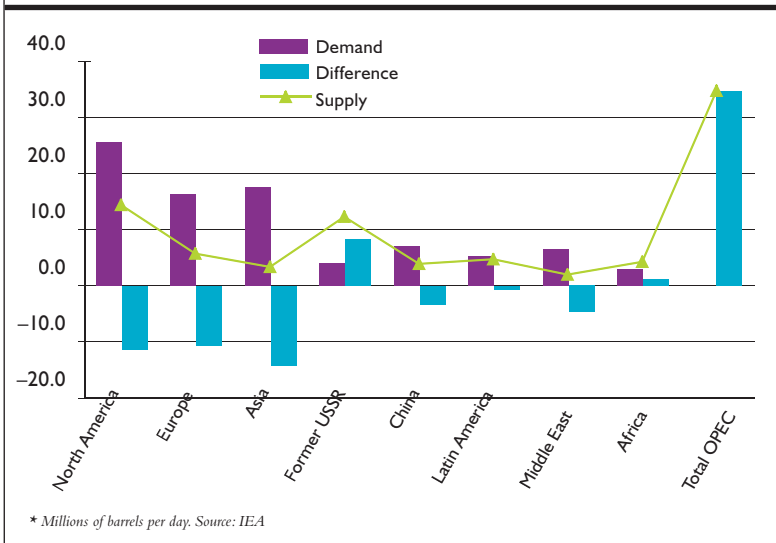
purchased Azeri Light from Azerbaijan and Erha. India's largest oil and gas producer, Oil and Natural Gas Corporation Ltd (ONGC), this year agreed to purchase ExxonMobil's 30% stake in Project Sugar Loaf, an oilfield located off the Brazilian coast.

Trends discussed at a recent international conference on India's oil and gas reserves indicate that the country will soon be one of the world's largest importers of crude oil – unless it acquires the technology to exploit its own vast natural resources. A government spokesman told the conference that India could in theory be self-sufficient in oil and gas, but lacks the revenue to develop its own fields. The government plans to counter this by offering financial incentives to encourage overseas investment. However, the country has had difficulty encouraging large-scale foreign investment because of its inadequate infrastructure.

Meanwhile Indonesia – South-east Asia's only Opec member – has failed since early 2002 to meet its Opec output quota, currently 1.425 million barrels a day. Recently the downward trend of production dropped below one million barrels a day, heading toward the rate of about 800,000 barrels that nearby Malaysia produces. In fact, imports have outgrown exports, and some say that threatens Indonesia's Opec status. But while Opec membership rules require countries to be net exporters, there is no time limit defined for status eligibility issues.

**F3. World oil supply and demand\***

Recent reports and estimates on global oil supply and demand indicate that the Asian region has the largest net negative difference between supply and demand as well as the largest demand growth over the most recent 12 months reported.



that same period, shipments from the Persian Gulf to China rose only 5.8% to 33.1 million tons. Angola, sub-Saharan Africa's second-largest oil producer, shipped 15 million tons of crude oil to China in the first seven months of the year, 13% more than Saudi Arabia.

**India and other players**

In India, refiners have seemingly adopted a diversification strategy along with seeking new oil assets abroad, in a bid to secure supplies for an energy-starved economy. Indian Oil, the country's biggest oil refiner, bought Girassol crude from Sonangol for the first time, according to Bloomberg. The grade is produced at a field operated by Paris-based Total. Indian Oil has also bought Nigeria's Erha crude this year. Hindustan Petroleum and Bharat Petroleum have

**Conclusion**

Clearly, the dynamics of the Asian petroleum market are evolving quickly, with awareness of and sensitivity to risks increasing amidst an ever-tightening supply/demand gap. Each country is involved in an ongoing struggle to secure the domestic fuel supplies they need to ensure long-term financial survival.

The region is no doubt experiencing true economic globalisation – the growing interdependence of countries through increasing international capital flows and volumes of transactions in commodities. While the future for this market may be difficult to predict, it's certain that whatever changes take place, the effects will be felt both regionally and globally. ER

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