IDSA ISSUE BRIEF

US Sanctions on Iran and their Impact on India

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Summary

Following the imposition of sanctions by the United Nations Security Council on June 9 this year, the US Treasury Department has imposed its own more stringent sanctions on Iran on June 16. Meanwhile, US Congress are getting ready to enact bills passed by both houses, targeting Iran's energy sector that will not only extend the existing 1996 Iran Sanctions Act (ISA), but are also aimed at targeting exports of refined petroleum products to Iran, the intention being to further cripple the Iranian economy. This article looks at the efficacy of the US sanctions and whether they will succeed in their endeavour.

After days of speculation, the United Nations Security Council imposed its fourth round of sanctions against Iran to increase pressure on the Islamic Republic to abandon its programme of nuclear fuel enrichment on June 9. The latest round of sanctions expanded those imposed under earlier resolutions – 1696 (2006), 1737 (2006), 1747 (2007) and 1803 (2008) – by placing new restrictions on Iran's import of conventional arms and bans all activities related to ballistic missiles that could carry a nuclear weapon, imposing a framework for inspection of any suspicious cargo of ships and aircraft in an attempt to block Iran's illicit smuggling activities, increases the pressure on banks to sever ties with companies related to Iran's nuclear programme, and expanded the list of individuals and entities whose assets will be frozen.

As before, doubts about the efficacy of fresh sanctions continue to abound, particularly as they were considerably watered down due to Chinese and Russian insistence. Moreover, till now they have not been successful in halting Iran's nuclear programme. However, the new sanctions are important in that they cleared the way for the United States and other nations to impose their own tougher domestic sanctions.

On June 16, the US Treasury announced the extension of sanctions on a number of Iranian organizations and individuals, which are linked to the country's nuclear and missile programmes. This was done to highlight for the international community Iran's use of its financial sector, shipping industry and Islamic Revolutionary Guards Corps (IRGC) to carry out and mask its proliferation activities, and respond to the Security Council's call on all states to take action to prevent their own financial systems from being abused by Iran.

As per Executive Order 13382, which is aimed at freezing the assets of proliferators of weapons of mass destruction (WMD) and their supporters thereby isolating them from the US financial and commercial systems, the Treasury included Post Bank of Iran for facilitating business on behalf of Bank Sepah between Iran's defence industries and overseas beneficiaries for which it was designated by the UN in 2007, IRGC entities and individuals, two individuals and two entities for their ties to the IRGC, and five Islamic Republic of Iran Shipping Lines (IRISL) front companies. The Treasury also identified 27 vessels as property blocked because of their connection to IRISL and updated the entries for 71 already-blocked IRISL vessels to identify new names given to these vessels as part of IRISL's efforts to evade sanctions.

The Treasury also identified 22 entities in the insurance, petroleum and petrochemicals industries which were determined to be owned or controlled by the Iranian government by adding them to Appendix A to the Iranian Transactions Regulations (ITR). The ITR prohibits transactions between US persons and the Government of Iran. These identifications allow US persons and others to identify Iranian Government entities and protect themselves against the risks posed by such entities.[1]

Meanwhile, the US Congress is working on imposing even tougher sanctions on Iran. Both houses passed individual bills earlier which seek to extend the existing 1996 Iran Sanctions Act (ISA). These are:

1. HR 2194, or the Iran Refined Petroleum Sanctions Act of 2009, which passed the House of Representatives on December 15, 2009. It seeks to add authority for the imposition of sanctions against those non-US persons (entities and individuals) that sell refined petroleum to Iran; provide shipping insurance or other services for the delivery of refined petroleum to Iran, or supply equipment to or perform the construction of oil refineries, pipelines and similar facilities in Iran.

2. S 2799 or the Comprehensive Iran Sanctions, Accountability, and Divestment Act of 2009, which passed the Senate on January 28, 2010. It is the Senate version of HR 2194 and includes the main elements of HR 2194 and also encapsulates a range of additional sanctions against Iran (or Iran's suppliers).

3. S 908, or the Iran Refined Petroleum Sanctions Act (IRPSA), which has the elements contained in HR 2194 and elements of S 2799. It was introduced in the Senate on April 28, 2009 and thereafter referred to the relevant Senate committee where it has remained. The provisions of S 908 have now been subsumed within HR 2194, as passed by the Senate. On March 11, 2010, the Senate passed HR 2194 with amendments that incorporate the additional sanctions contained within the original senate bill of S 2799.[2]

Under ISA, the President is required to impose two of any of the six available sanctions against persons determined to have engaged in activities sought to be deterred by ISA, the sanctions target(s). The six sanctions which may be currently imposed against sanctions targets under ISA are:

- denial of US Export-Import Bank credits for US exports;
- denial of licenses for US exports of military technology;
- denial of US bank loans in excess of $10 million per year;

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1 Fact Sheet: U.S. Treasury Department Targets Iran's Nuclear and Missile Programs, TG-747, June 16, 2010, US Department of Treasury, www.ustreas.gov/press/releases/tg747.htm

2 "The Friend of My Enemy is My Enemy," EconomicSanctionsInsight, Economic Sanctions, International Law Update, March 31, 2010, www.erenlaw.com/news/sanctions_update.htm

- prohibition on a financial institution serving as a primary dealer in US;
- government bonds and as a repository for US government funds;
- prohibition on participation in US government procurement; and
- restrictions on certain imports into the United States from the sanctions target.

The bills will authorize the President to penalize firms, including foreign companies and/ or governments who continue to do business with Iran. Recently, the US Government Accountability Office (GAO) released a report called "Firms Reported to Have Commercial Activity in the Iranian Energy Sector and US Government Contracts" which list 41 companies who have energy ties with Tehran (The list is attached at the end of the brief). The report listed a firm as having commercial activity in Iran's energy sector if three reputable industry publications or the firm's corporate statements reported the firm to have (1) signed an agreement to conduct business; (2) invested capital; or (3) received payment for providing goods or services in connection with a specific Iranian energy project. Of the 41 firms that were named in the report, seven had contracts with the US government.[3] Five Indian companies, namely, ONGC, Indian Oil, OVL, Oil India Ltd and Petronet LNG Ltd, were also included in the list. However, as in previous cases of US sanctions, the report states that "the Secretary of State may waive the sanctions if the Secretary determines it is in the national interests of the United States to do."[4]

Apart from national entities, non-government companies that were doing business with Iran include Reliance Industries Limited (RIL), which was exporting refined petroleum products to Iran, and the UK-based Hindujas, which has invested in Iran's Upstream sector. It is important to mention here that Iran currently imports around 30 per cent of its petroleum products, which though down from 40 per cent until a few years ago, is substantial. Though the Hindujas are mentioned in the GAO list, RIL has been left out as it has stopped business activities with Iran since May 2009.

Previous US sanctions

This is not the first time that Washington has imposed sanctions against the Islamic Republic. Soon after the take-over of the US embassy in Tehran in November 1979 during the Iranian

3 Iran Sanctions: Firms Reported to Have Commercial Activity in the Iranian Energy Sector and U.S. Government Contracts, United States Government Accountability Office, Testimony Before the Homeland Security and Governmental Affairs Committee, U.S. Senate, May 12, 2010, www.gao.gov/ new.items/d10721t.pdf

4 Ibid.

revolution, President Jimmy Carter issued Proclamation 4702, imposing a ban on the import of Iranian oil into the US, which was followed by several other such proclamations covering a gamut of sectors. However, following the release of the American hostages, most of these were revoked. But a few months after the 1983 bombing of the US embassy and marine barracks in Lebanon, the Reagan Administration declared Iran "a sponsor of international terrorism", thereby making Iran ineligible for various forms of US foreign assistance. More specifically, with regard to the energy sector, a ban was imposed on US imports of Iranian crude oil and all other Iranian imports in October 1987. Again, in October 1992, the Iran-Iraq Arms Non-Proliferation Act was signed into law which included provisions concerning dual use items which could be used for military purposes, based on concerns that Iran was developing weapons of mass destruction. However, it was not till the Clinton era that unilateral sanctions were initiated under the 'Dual Containment" policy targeting both Iran and Iraq.

In March 1995, 10 days after the US oil firm Conoco had signed a $1billion contract to develop the Sirri A and E oil field, President Clinton issued Executive Order 12957, banning US contributions to the development of petroleum resources in Iran. Two months later, a second Executive Order – 12959 – was issued, expanding the previous sanctions to include a total trade and investment embargo on Iran. Interestingly, these sanctions were imposed only after Washington was severely criticized by the EU countries for allowing US companies to import $4 billion worth of Iranian oil, while they were being pressured to cooperate with the US containment policy. At the same time, the Administration was being subjected to pressure from the Jewish lobby – America Israel Public Affairs Committee (AIPAC), which was pushing for comprehensive US sanctions against Iran as well as secondary sanctions against foreign companies seeking to invest in Iran's petroleum sector.

In 1996, the Iran and Libya Sanctions Act (ILSA) was passed with almost no opposition in both houses. The Act was imposed on both domestic as well as foreign companies which invested $40 million in Iran's energy sector (this was later cut to $20 million a year later), the purpose being to reduce Iran's ability to export oil and gas, thereby constraining funds for the development of WMD and support of international terrorism.

However, there was substantial opposition to unilateral sanctions and the expectation was that a pro-oil Administration under President George W. Bush would not renew ILSA when it expired in August 2001, partly because of rumblings within the US regarding the efficacy of the sanctions and partly because of improved relations with both Libya and Iran under Khatami. It therefore came as a surprise to many when President Bush extended it for five years till 2006, and also changed the legislation to ISA, after dropping sanctions against Libya. The next year, in October, the Bush administration again imposed wide-ranging sanctions which targeted three Iranian banks, nine companies associated with the Iranian Revolutionary Guards Corps (IRGC), and several individuals, as well as the IRGC. Two years later, in October 2009, the US Treasury also sanctioned Bank Mellat in Malaysia and its chairman.

EU sanctions

The EU too is all set to impose new sanctions on Iran based on "deepening concerns about Iran's nuclear programme." The move came a week after the UNSC sanctions and a day after the US added Iranian individuals and firms to a blacklist.

The decision was taken despite objections from Sweden, which is against using sanctions as an effective foreign policy tool, as well as from Spain, Cyprus and particularly Germany which has extensive business interests in Iran's energy sector. Russia too has criticized both the European and US action, saying the extra sanctions would undermine the Security Council and efforts among its members to act cooperatively on Iran.

The sanctions are targeted at key sectors of the gas and oil industry with prohibition of new investment, technical assistance and transfer of technologies, equipment and services in particular, and will target insurance companies, oil firms and shipping lines linked to Iran's atomic or missile programmes as well as the IRGC and Iran's defence minister Ahmad Vahidi.[5]

Will the sanctions succeed in deterring relations with Iran?

Though the latest round of UN, US and EU sanctions are driving several European firms that were till now engaged in Iran's energy sector into reducing their operations or renouncing contract renewals, doubts persist whether the sanctions have achieved their target – the denial of access to foreign capital and equipment for the maintenance and expansion of oil production and to deny Iran funds to develop WMD and support Islamic groups abroad. Nor have the sanctions prevented the construction of international oil and gas pipelines in Iran, which according to some analysts was the focus of the sanctions. On the other hand, several studies suggest that they have hurt Western energy firms due to lost business opportunities, and have even contributed to the lack of flexibility in the global oil supply system. If the sanctions have at all worked, it is not as much due to US sanctions as they were due to the unattractive contracts being offered by Iran.[6] Furthermore, the

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5 "EU set to impose new sanctions on Iran," EU Business, 17 June 2010, www.eubusiness.com/news-eu/summit-iran-nuclear.57j

6 Herman Franssen and Elaine Morton, "A Review Of US Unilateral Sanctions Against Iran," Middle East Econonic Survey, Vol. XLV, No 34, 26-August-2002, www.mafhoum.com/press3/108E16.htm

sanctions, if at all they had an impact, it was mainly in Iran's LNG sector because of embedded US technology in vital parts of LNG downstream plants. Currently, only US and European companies like Royal Dutch Shell and Total are capable of undertaking LNG trains, and much of the relevant technology remains subject to US export controls. While some European companies say they have the capability of carrying out LNG projects without using US-controlled technology, none of them are prepared to do so in Iran due to a mix of commercial and political considerations. As a result, the most important new investments in Iran's upstream oil and gas sectors are being undertaken by China's national oil companies, which are not yet able to develop LNG trains on their own. But this could work against the US as non-US companies could exploit this by developing LNG systems and challenge US dominance in the long run.[7]

There are several reasons for the sanctions having limited, if any, impact. There was a sense that the sanctions, while targeting Iran's economy through its vital energy sector, was half hearted at best, with several loopholes embedded in the legislations that allowed foreign firms to conduct business with Iran without encountering any American backlash.

Even in the 1996 version of ILSA, there was a clause that allowed the President to waive sanctions if the country to which the firm belonged or originated had agreed to undertake strong measures to inhibit Iran's activities in support of terrorism and acquisition of WMD or if the US President determined that a waiver would serve US national security interests. Given that several European companies were doing business with Iran, EU governments expectedly opposed ILSA and adopted or threatened to adopt counter legislation to prevent their companies from complying with ILSA, including taking action against US firms. As a result, some European projects, such as the $2 billion Total-Gazprom-Petronas project for developing Iran's South Pars field were exempted from any punitive US action albeit with the caveat that future exemptions would be for exploration and production activities only but not for pipeline projects.

The most recent H.R. 2194 and S. 908 bills too retain certain conditions whereby persons who invest above the $20 million threshold total in one year, but in combinations of multiple investments of less than a quarter of the total threshold each are exempted from sanctions. The bills also maintain presidential waiver authorities, and in the case of H.R. 2194, a provision is included that does not require the President to apply sanctions for any targeted persons that are citizens or residents of a nation participating in the Proliferation Security Initiative (PSI). The general waiver authority in H.R. 2194 also retains the Presidential waiver clause in instances where doing so would be vital to American national security

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[7] Syed Rashid Husain, "Tehran and Washington continue to play hardball on global energy map," Arab News, April 25, 2010, http://arabnews.com/economy/article46989.ece

interests.

Moreover, with the demand for oil expected to increase as the economic recession starts winding down, need for Iranian supplies will grow. Already, lack of investment in Iran's upstream sector has seen its oil production coming down and if global supplies have to be maintained then upgrading Iran's energy sector would be seen as crucial in times to come. International oil companies, which are already facing fierce competition from national oil companies in acquiring contracts in several countries, would be putting pressure on their governments to allow them to do business with Iran.

Finally, there is little clarity whether *Iranian* investments in energy projects in other countries, such as in building refineries abroad would invite sanctions under ISA. Moreover, there is also a perception that despite statements on the need for more stringent action against Tehran, the Obama Administration is not averse to bringing Iran to the negotiating table. Hence the focus is on pushing the UNSC to impose sanctions while delaying energy-related domestic sanctions.[8]

Impact on India

Despite official statements reiterating the important position Iran holds, India has been adopting an ambiguous position on Iran of late. New Delhi has repeatedly voted in favour of the International Atomic Energy Agency's (IAEA) resolutions against Iran on grounds that a nuclear Iran is not in India's interests. However, it also emphasizes that it favours dialogue and diplomacy as a means of resolving the Iranian nuclear crisis.

More specifically on the issue of energy relations, India claims that Iran is an important partner as well as an important source for hydrocarbon resources and that it is keen to further strengthen existing ties. Iran is also one of India's largest suppliers of crude oil, and India in turn is also a major supplier of refined petroleum products for Iran. While the UNSC resolution does not affect India's oil trade with Iran, the US sanctions have had an impact.

The US has been applying pressure against Indian companies which have energy relations with Iran. The most prominent is the Iran-Pakistan-India (IPI) gas pipeline project. Iran and Pakistan have announced that they will go ahead with the project at a bilateral level for the time being.[9] India seems to have de-linked from the same though the government

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8 Kenneth Katzman, "The Iran Sanctions Act (ISA)," CRS report for Congress, Order Code RS20871, October 12, 2007, www.fas.org/sgp/crs/row/RS20871.pdf

9 Following the announcement of the recent sanctions against Iran, Washington has told Islamabad that it could be subjected to US sanctions if it went ahead with the pipeline project with Iran.

has not officially announced its withdrawal. India claims that security and pricing issues vis-à-vis Pakistan and Iran, respectively, are the main impediments to its participation, though there has been substantial pressure from Washington against proceeding with the project. Some analysts are of the opinion that as large reserves of natural gas have been discovered in India's offshore territory, India is not as concerned about imports. However, given India's projected huge and growing demand for gas, it will require import of gas, at least in the future, and Iran is an important source due to its status as the second largest reservoir of conventional natural gas. That is probably why India is not officially closing its option on the IPI project. As an Indian official who was closely involved with the negotiations said, barring a few issues, everything is in place for the project to be brought to fruition. As and when India feels the time is right for implementing the project, it will do so.

As for US pressure on India on withdrawing from the project, a look at the case of the natural gas pipeline from Iran to Turkey would be worth India's while. At the time, the US State Department had said that the project did not violate ISA because Turkey would be importing gas from Turkmenistan through a swap deal and not from Iran per se, and therefore would not be eligible for sanctions as it would not benefit Iran's energy sector directly. Recently there have been reports that India is interested in studying a project proposal by South Asia Gas Enterprise (SAGE), which envisages a West Asian natural gas gathering system connecting gas sources to the coast of the Arabian peninsula. From there, the SAGE family of pipelines plans to follow a route surveyed 15 years back and declared unviable at that time as techniques of deepwater pipe-laying and manufacturing had not matured. Now, with new technology and cheaper international gas prices, the project could be viable. Varying reports suggest that the gas could be sourced from either Qatar or Iran while the pipeline would originate in Oman, and would envisage an additional infrastructure investment of $3 billion as well as additional transportation tariff. The project is expected to take five years to be completed and will have a capacity of 31.1 million standard cubic metres of gas a day (mscmd).

A second project, once again proposed by SAGE, is also generating a lot of interest. During the visit of Turkmen President Gurbanguly Berdimuhamedov to India in April, the prospect of transporting gas from Turkmenistan to northern Iran with help from India and using the underwater pipeline option to transport gas to India from southern Iran was reportedly discussed. As both these projects involve bringing Iranian gas to India, they could be eligible for US sanctions. However, if like the Turkey-Iran pipeline project, it would be through swap deals, and not direct buying of gas from Iran, it could circumvent the sanctions. Nevertheless, the projects could be seen as unviable given the high costs as well as difficult technology involved.

With regard to Indian companies' stakes in Iran's energy sector, officials from the Indian firms say that the sanctions would not have an impact on their investments as they have not violated the US law. The Indian consortium comprising OVL-IOC-OIL, which have been awarded exploration rights in the Farsi block and the South Pars Phase-12 development, have not invested more than $20 million in any one year, and the barrier will be broken only when Iran awards them the contract to develop the field or if the Indians made investment in the South Pars fields. As of now, no investment has actually been made.

However, this is not the case in RIL's refined products exports as the company has large investment interests in the US which could be impacted by US sanctions. As a result, after the House and Senate had passed the bills, RIL had announced the termination of all contracts, though Iran claimed that it was still receiving supplies from India, albeit without specifying whether the sales were being conducted through third country or not. According to reports, Reliance's decision to terminate exports to Iran came after several US lawmakers urged the Export-Import Bank to suspend the extension of $900 million worth of financial guarantees to RIL to help it to expand its Jamnagar refinery on the grounds that it was assisting Iran's economy with the gas sales.

Moreover, RIL is in talks with US-based Pioneer Natural Resources to buy a stake in the shale gas assets of the firm. In April, Reliance had also bought a 40 per cent stake in the Marcellus Shale operations of Atlas Energy to form a joint venture at one of the most promising natural gas deposit regions in the US.

Conclusion

The general consensus is that as before, the current sanctions will not achieve their desired results for several reasons. With regard to imposing restrictions on exports of refined petroleum products to Iran, the government had begun the process of taking steps to attempting to minimize their potential impact. Since 2007, Iran has been developing a multi-pronged approach that (a) seeks to reduce domestic gasoline consumption, (b) increase domestic refining capacity, and (c) secure alternative gasoline import sources.[10]

The government is seeking to reduce domestic consumption by introducing a rationing system as well as cutting subsidies in 2007. Moreover, given that Iran has huge gas reserves, the government is trying to encourage the use of CNG for transport. In 2007, President Ahmadinejad passed a law requiring carmakers to manufacture dual-use cars that can run on petrol/diesel as well compressed natural gas. CNG now accounts for 10 per cent of all transportation fuel usage, a figure expected to increase substantially.

10 Brianna Rosen, Charlie Szrom, Maseh Zarif, "Gasoline Sanctions on Iran: How Will Tehran Respond?, " Iran Tracker, October 1, 2009, www.irantracker.org/us-policy/gasoline-sanctions-iran-how-will-tehran-respond

According to Noureddin Shahnazizadeh, head of the National Iranian Oil Refining and Distribution Company (NIORDC), Iran's average production of petrol over the last year was 44 million litres a day. If Iran manages to complete planned refinery projects over the next two years, its capacity would increase by an additional 26 million litres a day. The average capacity in the current year is expected to increase to 52 million litres a day, if refinery projects at Abadan and Tehran go ahead as planned, he added. Besides, Iran's gasoline reserves had increased by one billion litres over the last year, while Iran is reported to have raised its stockpile of gasoline to 2.4 billion litres by January 2010.[11]

Studies have shown that sanctions are expected to cut only 25 to 50 per cent of Iran's petroleum imports. This could be compensated by reducing domestic consumption, as well as increasing domestic refining capacity.

Finally, while several countries may halt exports of refined products to Iran, the gap could be filled by Central Asian countries, Venezuela, and China, all of which have indicated their willingness to do so. In September, 2009, Venezuelan President Hugo Chavez announced that Venezuela would provide 20,000 barrels per day of refined petroleum products to Iran. Media reports also state that China National Petroleum Corporation's (CNPC) trading unit, ChinaOil, has sent 600,000 barrels of refined products to Iran in two $55 million shipments in 2009, while the trading unit of Sinopec, Unipec, has also agreed to sell 250,000 barrels to Iran through a third party in Singapore. These sales are reported to have replaced Malaysian exports to Iran following US pressure.

Given that Chinese foreign policy has made the acquisition of energy resources a primary goal to ensure its energy security priorities and given China's extensive economic involvement in Iran, albeit through third parties to evade sanctions, it is only expected that Beijing will take advantage of the opportunity provided by the US sanctions regime. In the past China has done business with other sanctioned nations such as Sudan and North Korea. Hence, while Indian firms, both public and private, continue to be ambiguous about dealing with Iran, Chinese firms appear undeterred.

Despite years of sanctions, several countries appear undeterred from doing business with Iran, particularly in the energy sector. This is partly due to lack of punitive action on the part of the US through waivers. However, the Obama administration, while stating that the door for diplomatic negotiations with Iran will remain open, is planning more stringent action against both US and non-compliant countries. Whether these will succeed in deterring governments from doing business with Iran remains to be seen.

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11 "Iran oil refining capacity 'increasing'," Tehran Times, April 28, 2010, www.tehrantimes.com/index_View.asp?code=218427

Foreign Firms Publicly Reported to Have Commercial Activity in the Iranian Oil, Gas, or Petrochemical Sectors

Firm	Country	Sector
ABB Lummus	Not applicable	Refining, petrochemicals
Amona	Malaysia	Oil exploration and production
Belneftekhim	Belarus	Oil exploration and production
China National Offshore Oil Corporation	China	Natural gas
China National Petroleum Corporation	China	Oil exploration and production, natural gas
Costain Oil, Gas & Process Ltd.	United Kingdom	Natural gas
Daelim	South Korea	Natural gas
Daewoo Shipbuilding & Marine Engineering	South Korea	Oil tankers
Edison	Italy	Oil exploration and production
ENI	Italy	Oil exploration and production
Gazprom	Russia	Oil exploration and production, pipeline
GS	South Korea	Natural gas
Haldor Topsoe	Denmark	Refining
Hinduja	United Kingdom	Oil exploration and production, natural gas
Hyundai Heavy Industries	South Korea	Oil tankers
INA	Croatia	Oil exploration and production, natural gas
Indian Oil Corporation	India	Natural gas
Inpex	Japan	Oil exploration and production
JGC Corporation	Japan	Refining
Lukoil	Russia	Oil exploration and production
LyondelBasell	Netherlands	Petrochemicals
Oil India Ltd.	India	Natural gas
Oil and Natural Gas Corporation	India	Oil exploration and production, natural gas
OMV	Austria	Natural gas
ONGC Videsh Ltd.	India	Natural gas
Petrobras	Brazil	Oil exploration and production
Petrofield	Malaysia	Natural gas
Petroleos de Venezuela S.A.	Venezuela	Natural gas
Petronet LNG	India	Natural gas
PGNiG	Poland	Natural gas
PTT Exploration & Production	Thailand	Natural gas
Repsol	Spain	Natural gas
Royal Dutch Shell	Netherlands	Natural gas
Sinopec	China	Oil exploration and production, refining
SKS Ventures	Malaysia	Natural gas
Snamprogetti	Italy	Pipeline
StatoilHydro	Norway	Oil exploration and production, natural gas
Tecnimont	Italy	Petrochemicals
Total	France	Natural gas
Turkish Petroleum Company	Turkey	Natural gas
Uhde	Germany	Petrochemicals