

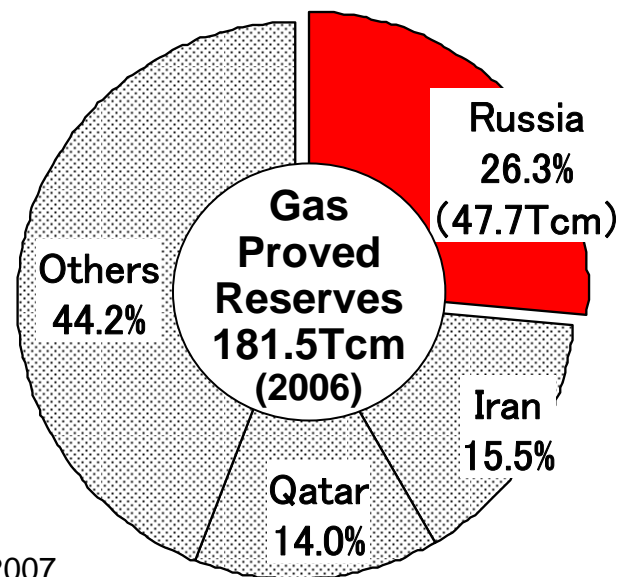
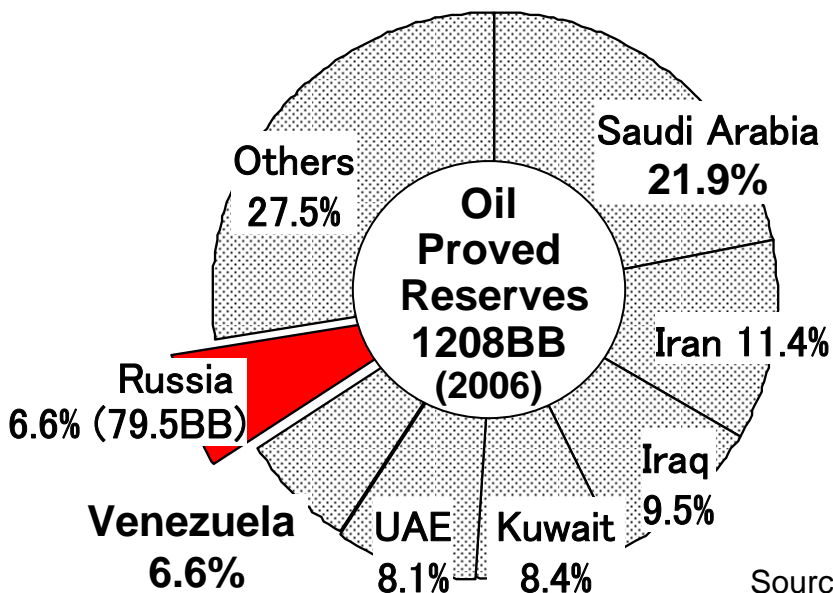
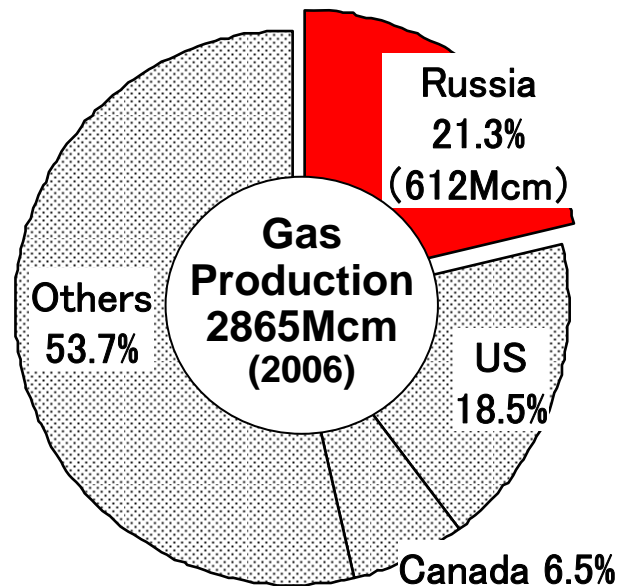
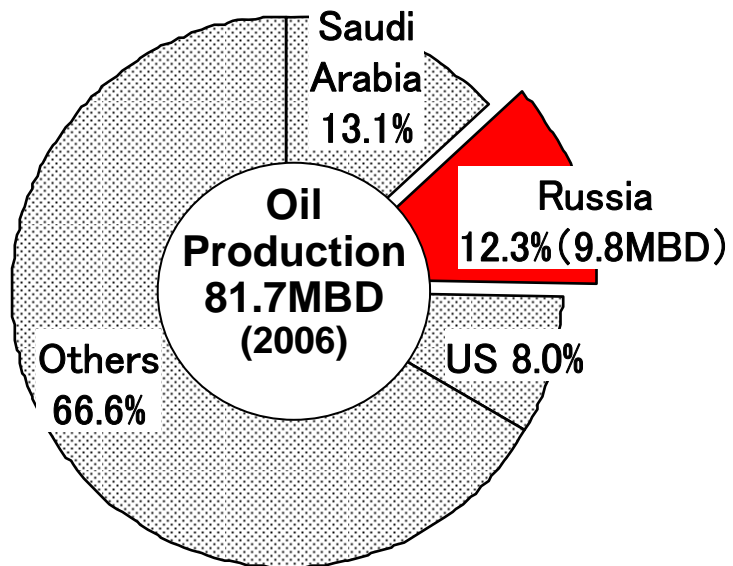


Strategic Relationship between Russia and Japan

Shin HOSAKA

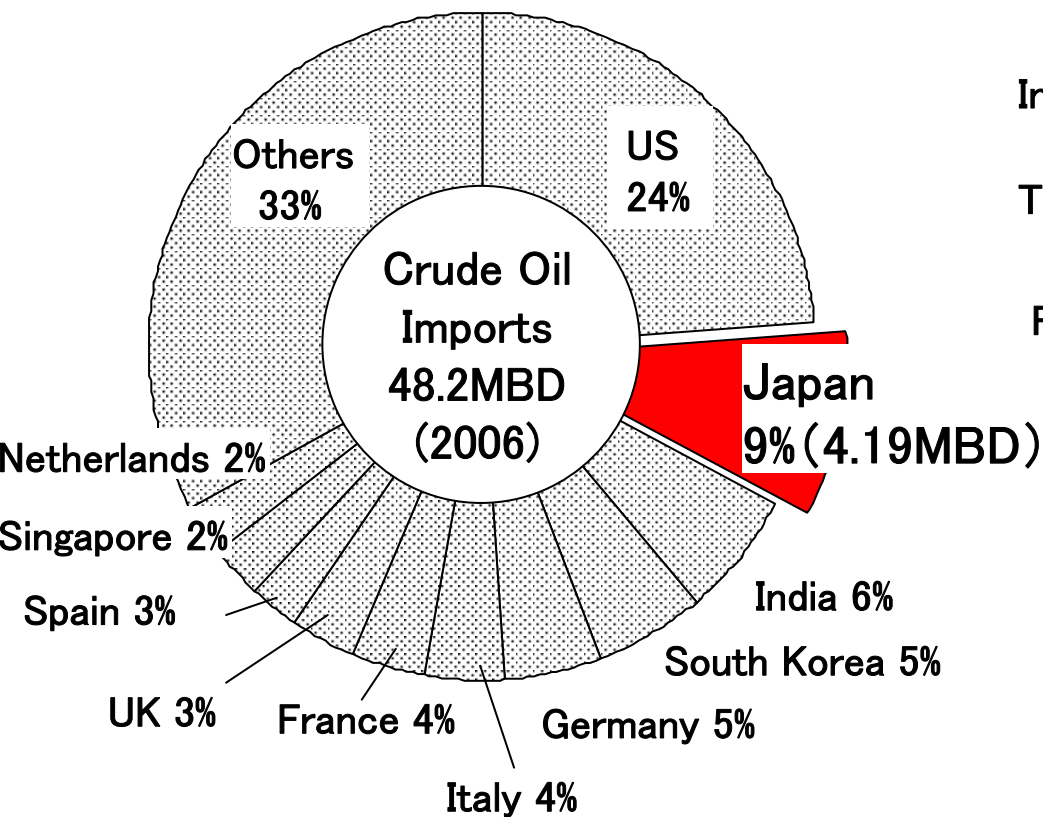
**Director of Petroleum and Natural Gas Division,
Agency of Natural Resources and Energy,
Ministry of Economy, Trade and Industry**

Oil & Natural Gas Production and Proved Reserves

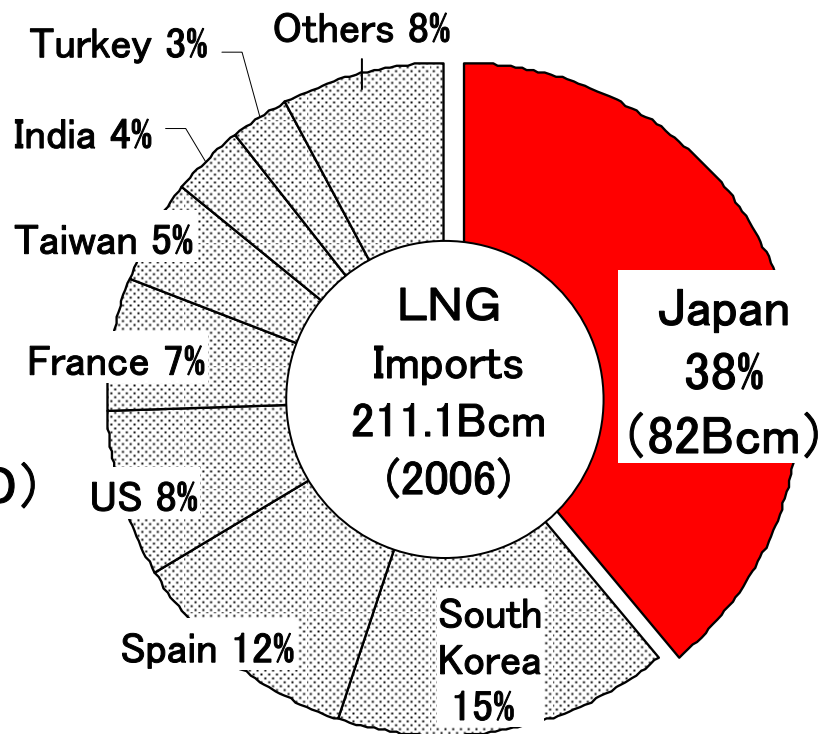


Source: BP Statistics 2007

Oil and Natural Gas Imports

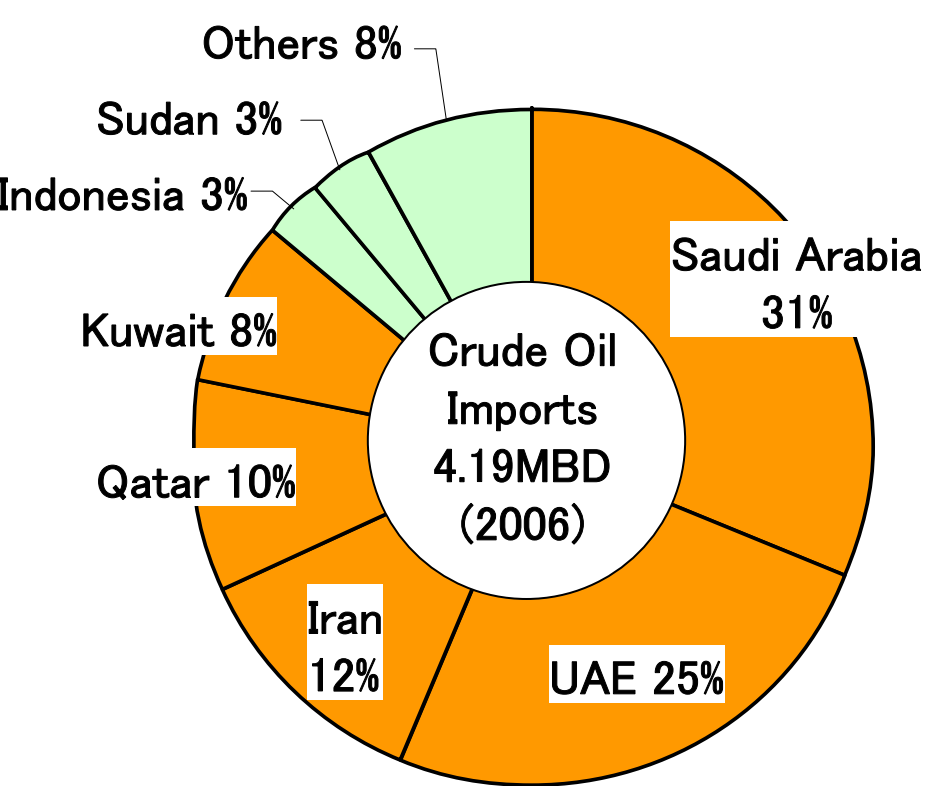


Source: OPEC Annual Statistical Bulletin 2006

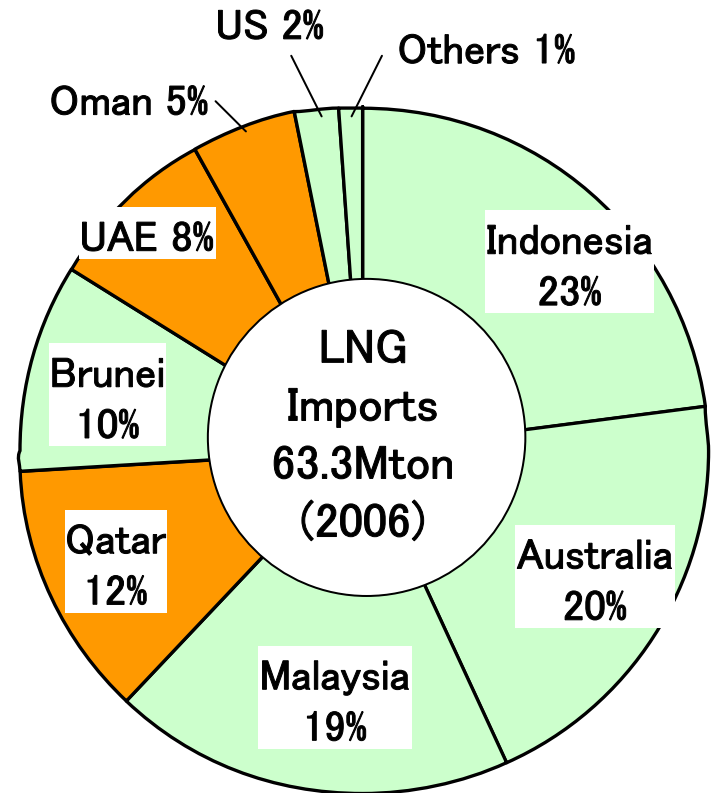


Source: BP Statistics 2007

Oil and LNG import countries of Japan



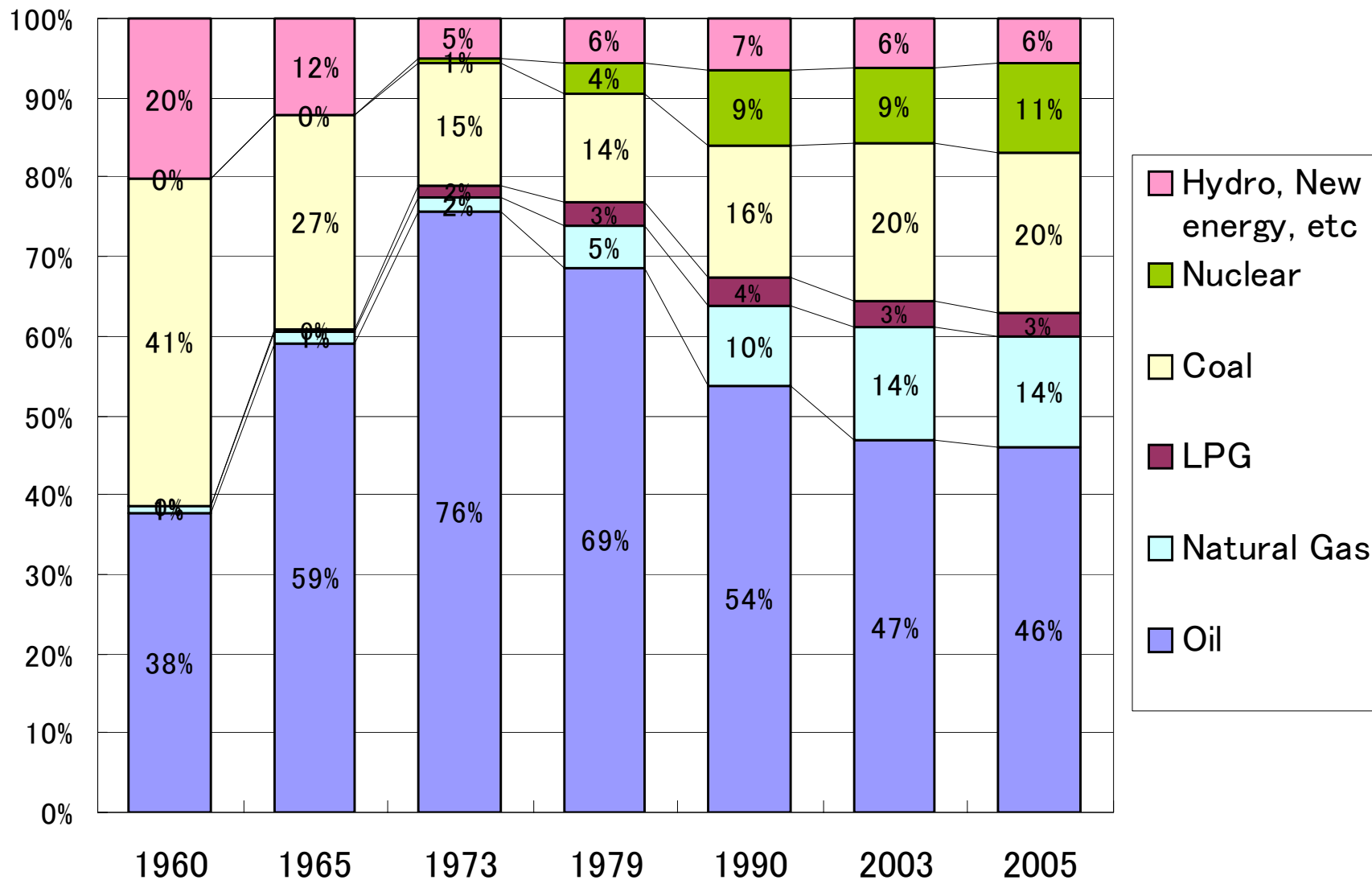
Source: Natural Resources and Energy, METI



Source: Trade Statistics, MOF

Energy Supply in Japan

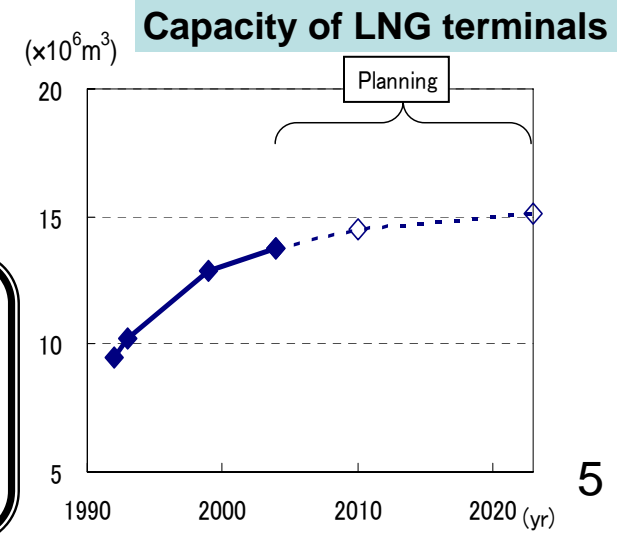
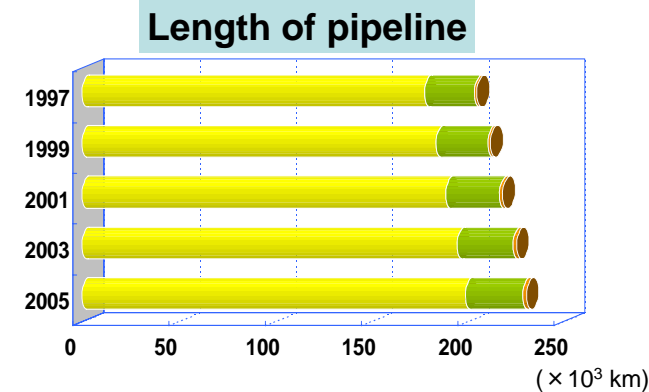
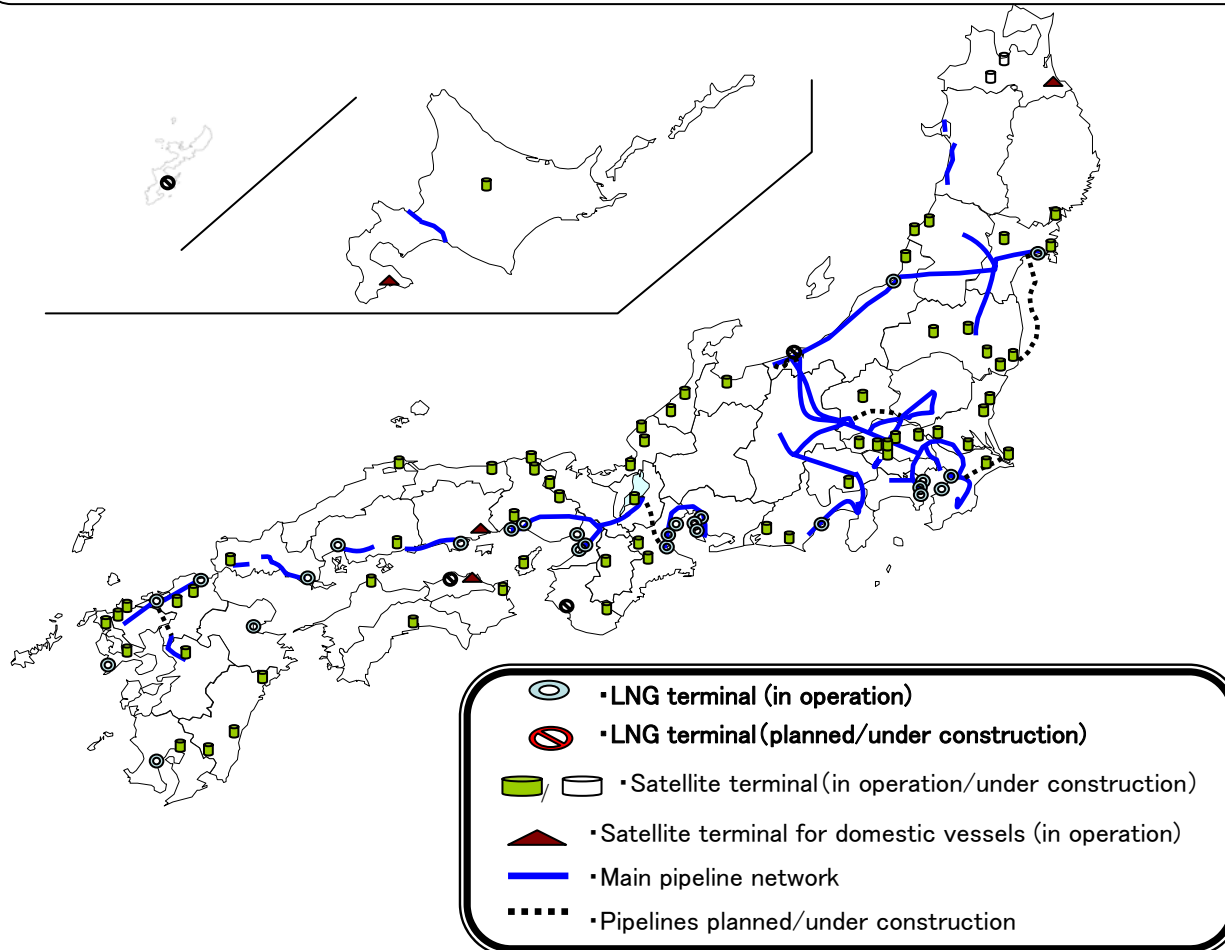
Trends in primary energy supply in Japan



(Source: Handbook of Energy and Economic Statistics, ANRE)

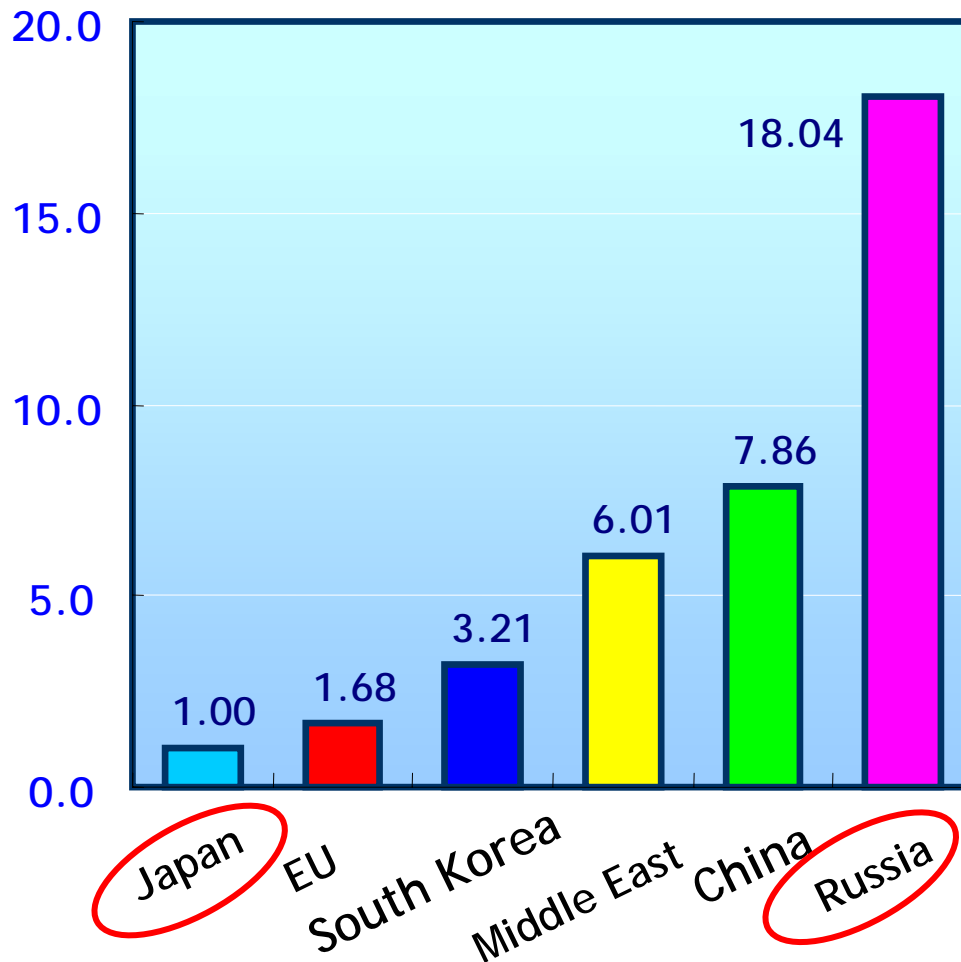
LNG Terminals & Gas Pipelines in Japan

- 27 terminals are in operation.
- There are several plans to increase the number of LNG terminals to meet the increasing demand.
- The length of pipelines is also increasing steadily.



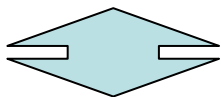
Primary Energy Supply per GDP

2000 price, barrel oil equivalent/USD, Japan=1 (2004)



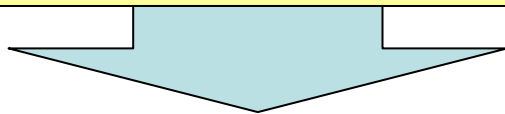
Energy Cooperation b/w Russia and Japan

- Russia is the No.2 crude producer; its gas reserves and production are the world's largest.
- Its aims to develop East Siberia and the Far East, and make inroads into the Asia-Pacific market.



Strategic, Mutually Beneficial Relationship Between Russia and Japan

- Japan has strong buying power—the world's 2nd largest crude importer and top LNG importer.
- An energy supply bypassing the Strait of Malacca is important to Japan.
- Japan's state-of-the-art technologies such as energy conservation are applicable to Russia.



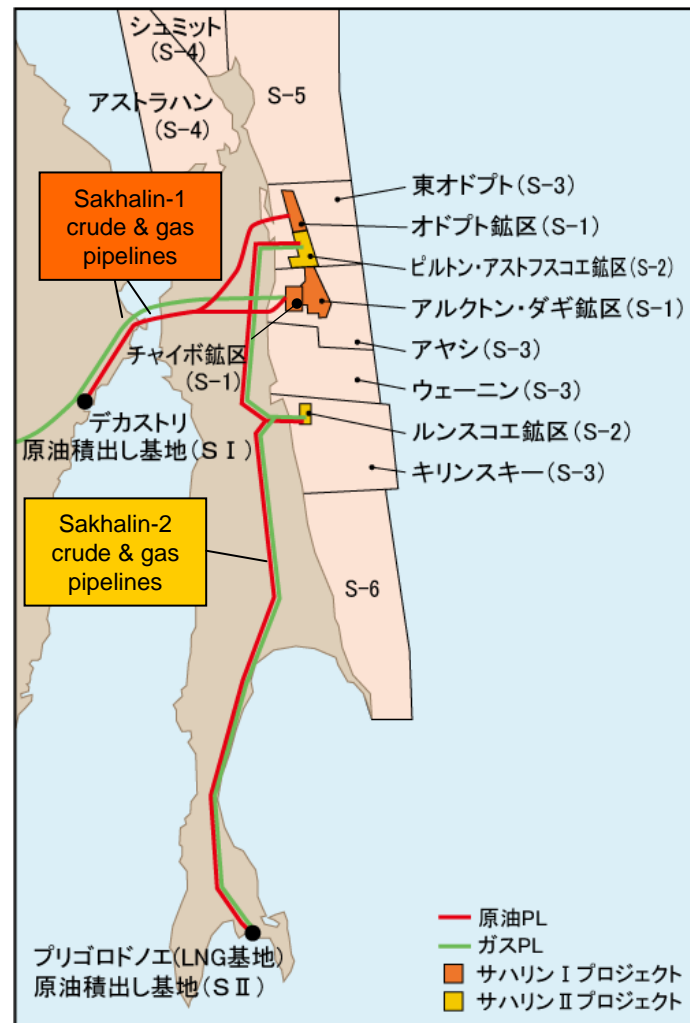
▶ In November 2005, Japan and Russia agreed to the following two documents, that would be the basis of Japan-Russia energy cooperation.

“Basic Direction of Long-Term Cooperation Between Japan and Russian Federation”

“Specified Items Concerning Cooperation in Individual Energy Sectors”

Sakhalin Project

		Sakhalin-1	Sakhalin-2
Max Output	Oil	250 thousand bbl/d (6% of Japan's imports)	180 thousand bbl/d (4% of Japan's imports)
	Gas	8 million t/yr (LNG equiv.) (13% of Japan's imports)	9.6 million t/yr (LNG equiv.) (15% of Japan's imports)
Participants		- Japan-US-India-Russia consortium (JPN) SODECO: 30% (US) Exxon Neftegas: 30% (operator) (IND) ONGC Videsh: 20% (ONGC subsidiary) (RUS) two firms affiliated with Rosneft: 20%	- Sakhalin Energy Investors: Gazprom : 50%+1 Shell : 27.5%-1 Mitsui : 12.5% Mitsubishi : 10.0% *Agreed on the ratio in December 2006, and completed the transfer in April 2007
Total Costs		12 billion dollars	20 billion dollars
Developing Plan		-Started exporting crude in fall 2006. - Basically agreed with Chinese firms to export gas to China in fall 2006, but the final decision on buyers has yet to come.	-Planned to produce crude year-around in the 2nd quarter of 2008. -Natural gas is expected to be produced in the latter half of 2008 in the form of LNG.





Cooperation b/w ANRE and GAZPROM

Outline of Joint Coordination Committee

Members

(Gazprom) Chair: Alexander Ananenko, Deputy CEO

(Japan) Chair: Shinsuke Kitagawa



Short-Term Action Plan (Gazprom's Proposals)

- 1) Establishing gas refineries in East Siberia and the Far East
- 2) Producing automobiles powered by synthetic fuels utilizing GTL and DME technologies
- 3) Marketing research on the sales of gas and gas chemical products in Japan and other countries
- 4) Cooperating in setting up Japan-Russia joint ventures for oil and gas production and machines
- 5) Researching alternative technologies for gas transportation (liquefied or gas hydrates) etc.

Schedule

- Creating working groups after the Japanese side examines the above plan from the viewpoint of short- and long-term importance and feasibility.
- Discussing detailed forms of cooperation in working groups on each side.

East Siberia / Pacific Pipeline Project

Outline of the East Siberia-Pacific Pipeline

From/To: Tayshet/Pacific coast

Total Length: 4,188km

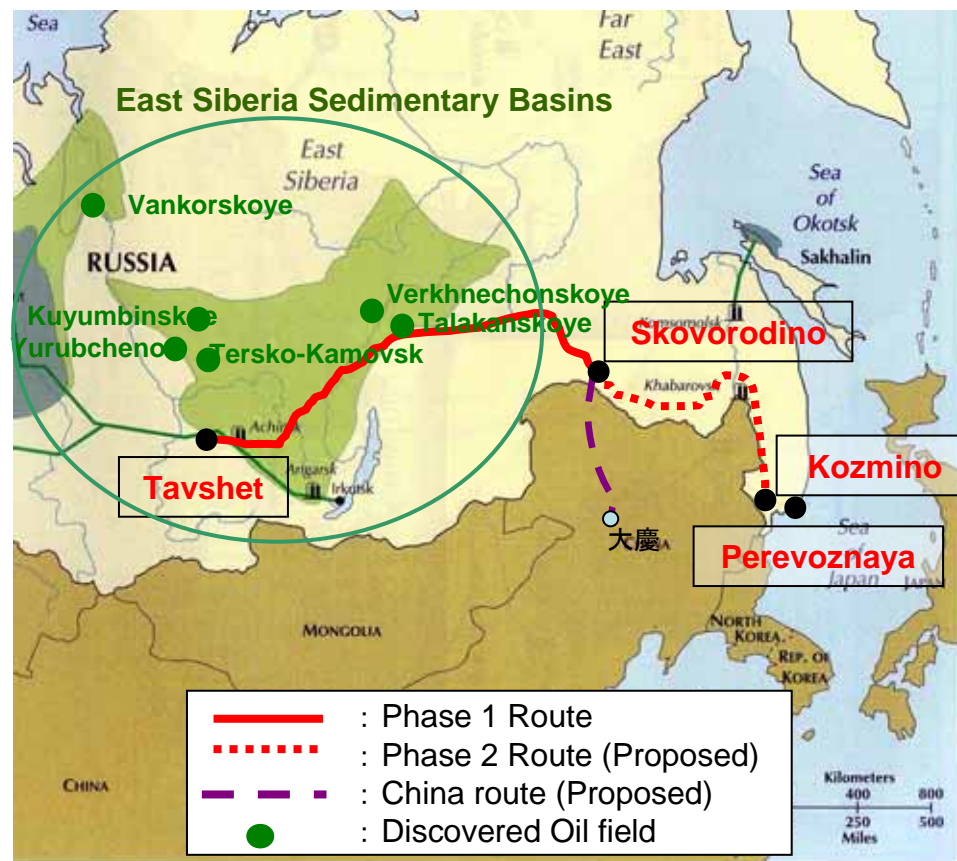
Phase 1 Tayshet to Skovorodino
(expected by 2008)

*Until Phase 2 completion, transport by train to the Pacific coast. China plans pipelines for its territory.

Phase 2 Skovorodino to Pacific coast
(Start work eyeing East Siberia development status)

Capacity: 50-80 million t/yr*
(10-16 million bbl/d)

*50 million t (1 million bbl/d) amounts to 24% of Japan's annual crude imports.



Thank you!