

Energy Finance in the Asia-Pacific Rim :Experience of JBIC

Takeshi SAKAMOTO
Senior Representative
Japan Bank for International Cooperation (JBIC)

**Ensuring Investment in Secure and Sustainable Energy:
Benefits of Multilateral Action
Luxembourg, 28 May 2009**



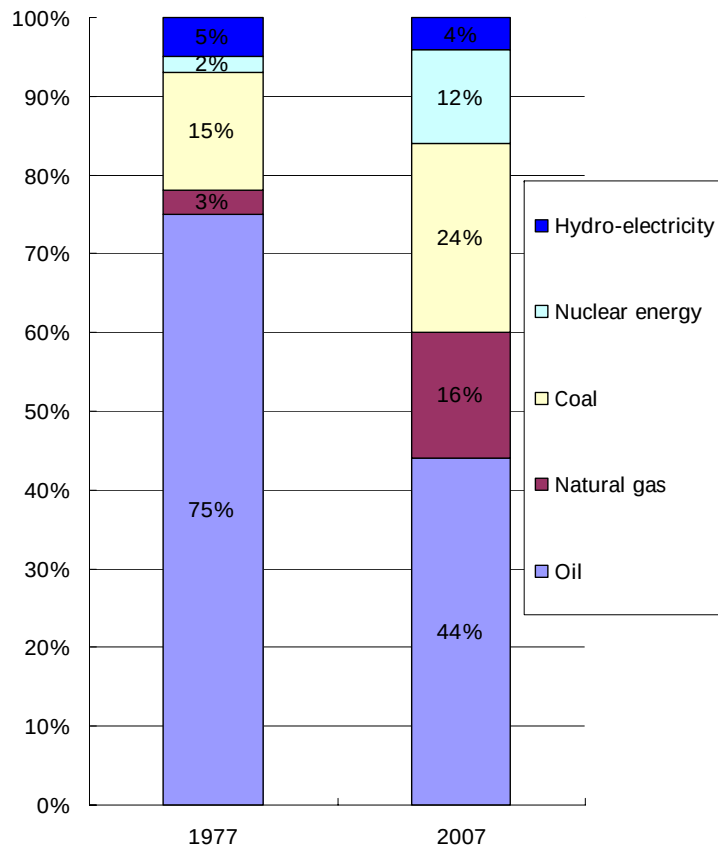
1. Outlook on Japan's Energy Situation

2. JBIC Financing for Energy Projects

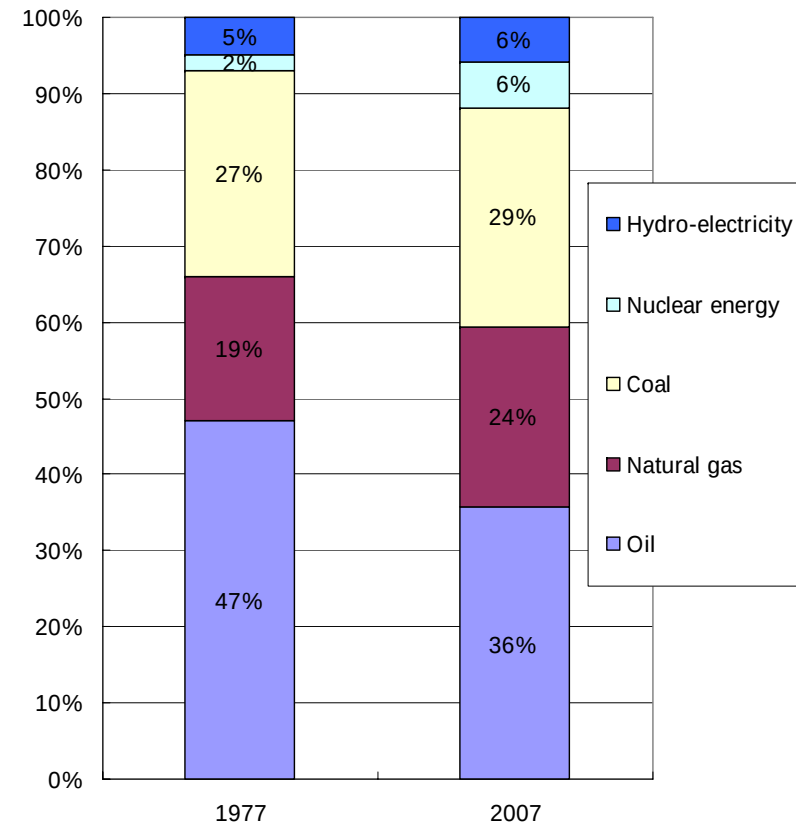
3. JBIC Initiatives

Diversification of Energy Source - Consumption by fuel -

Japan 1977 v.s. 2007

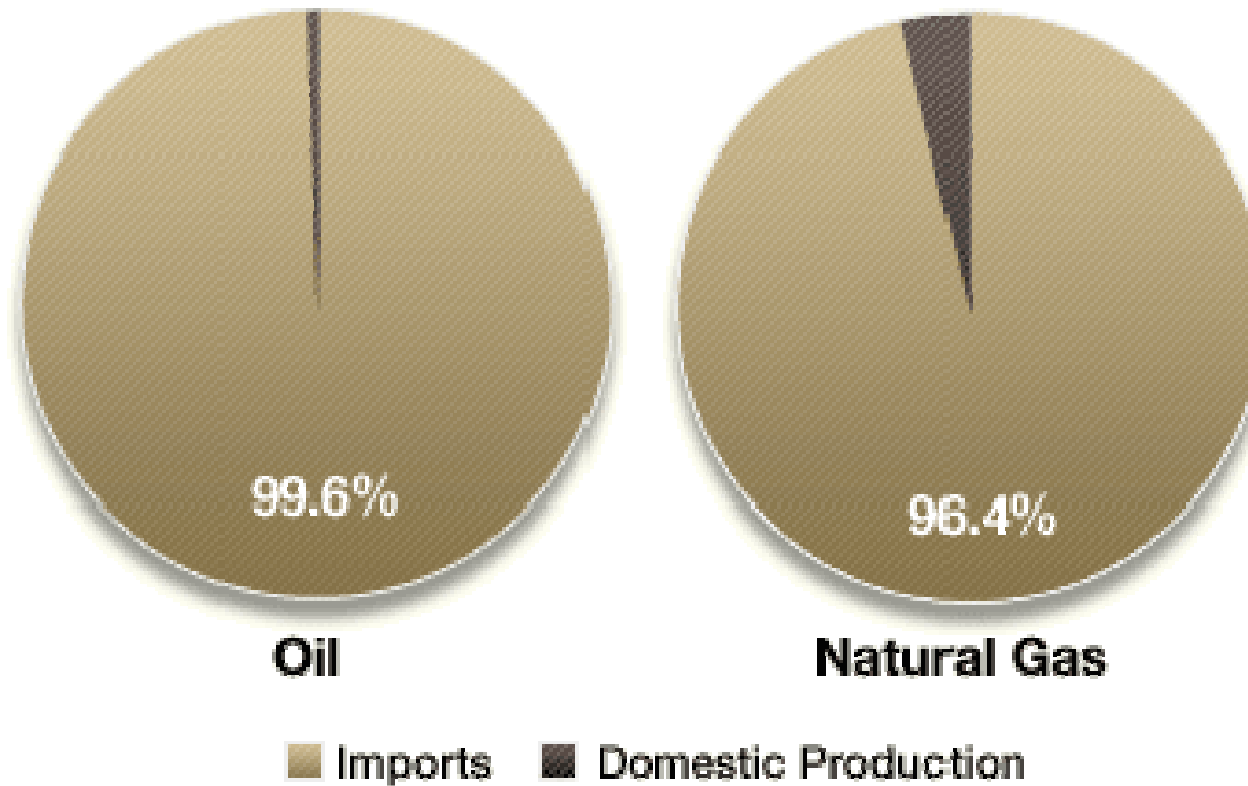


Total world 1977 v.s. 2007

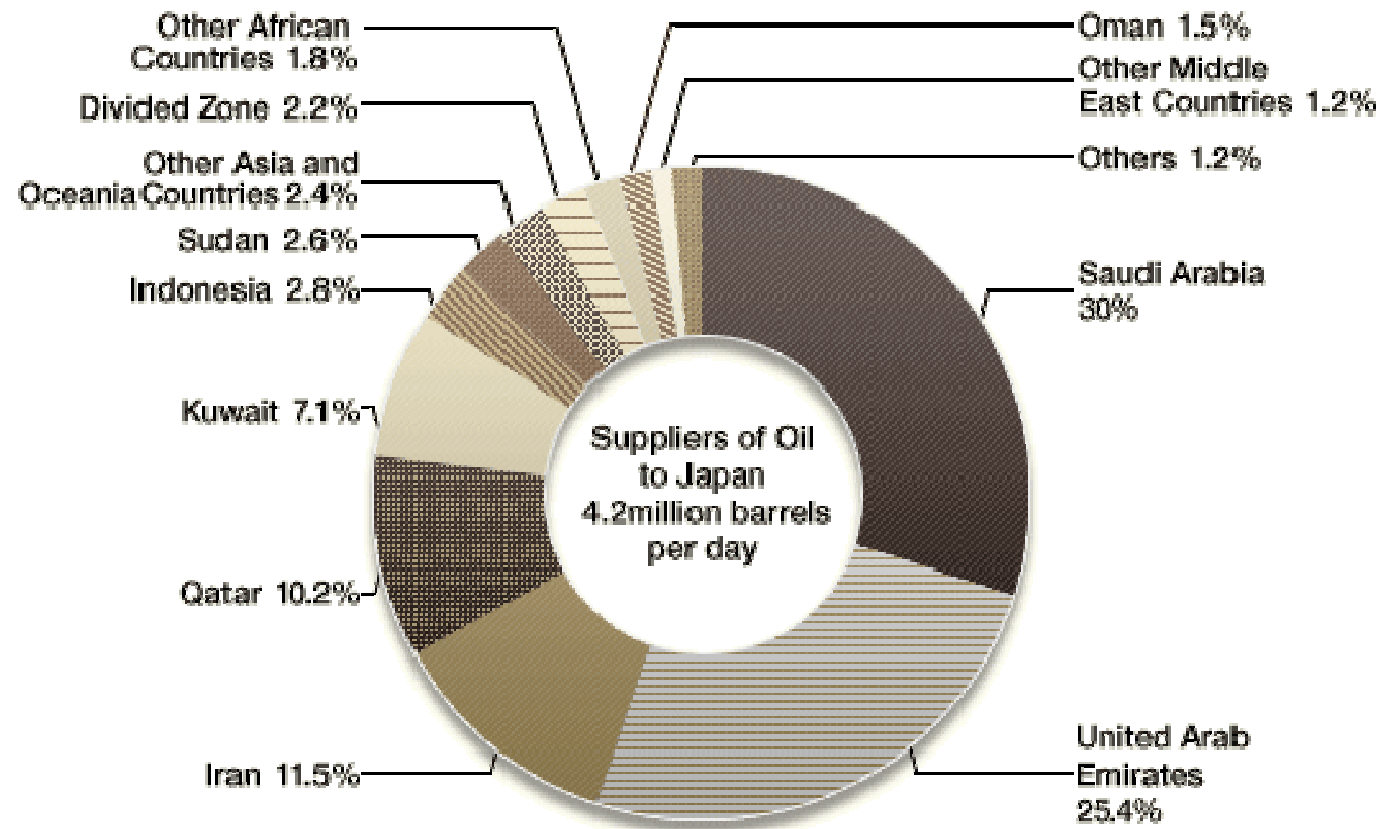


Source: BP Statistical Review of World Energy 2008

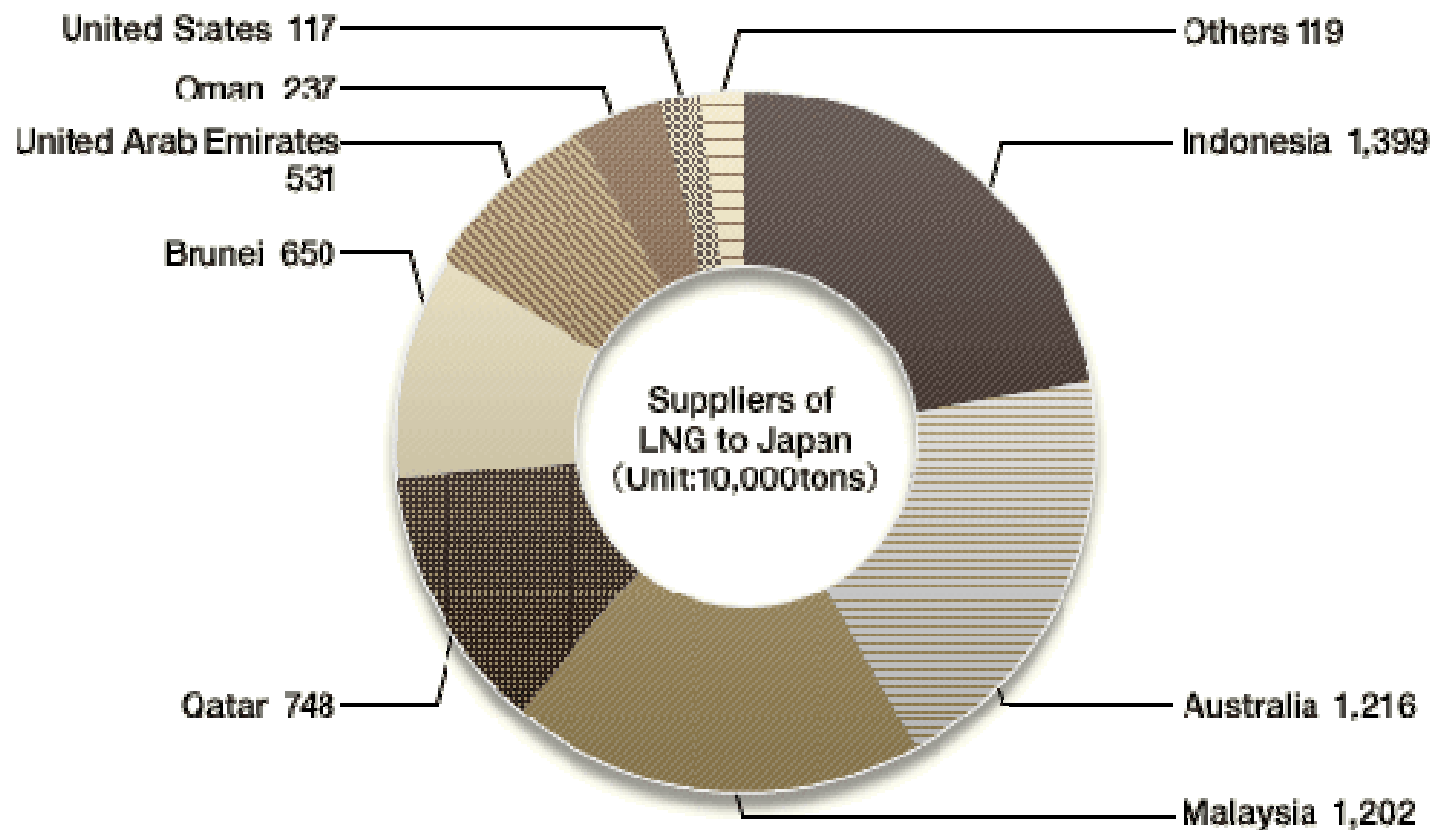
Japan's Dependence on Imports for Oil and Natural Gas (2006)



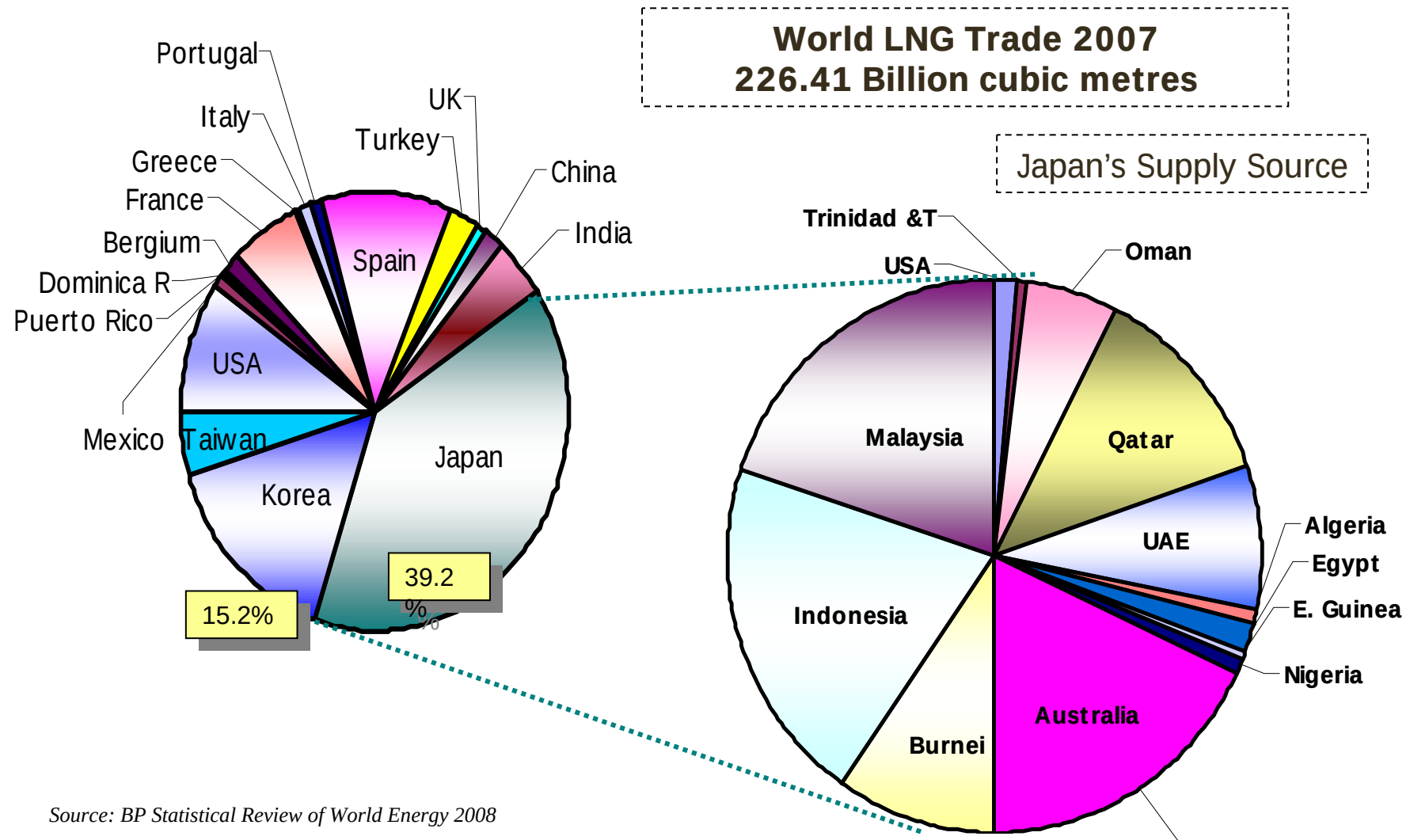
Oil and Natural Gas Supply Sources to Japan - Oil -



Oil and Natural Gas Supply Sources to Japan - Natural Gas -



Japan is leading the world LNG market



JBIC's Involvements in Imports of Natural Resources

Import			Dependence on Import	JBIC's involvement (Volume) **	JBIC's involvement (ratio)
Resources	Unit	Volume*			
Oil	(thousand B/D)	4,219	99.7%	776	18%
Natural Gas	(million ton)	58.5	96.5%	55.5	95%
Iron Ore	(million DMT)	123	100.0%	89	72%
Coal	(million ton)	166	97.3%	72	43%
Copper	(thousand ton)	1,250	100.0%	1,110	89%

*Oil;FY2003, Natural Gas;FY2003, Iron Ore;CY2003, Coal;CY2003, Copper;CY2003

**JBIC's involvements are estimated approximately (inclusive of indirect involvement).

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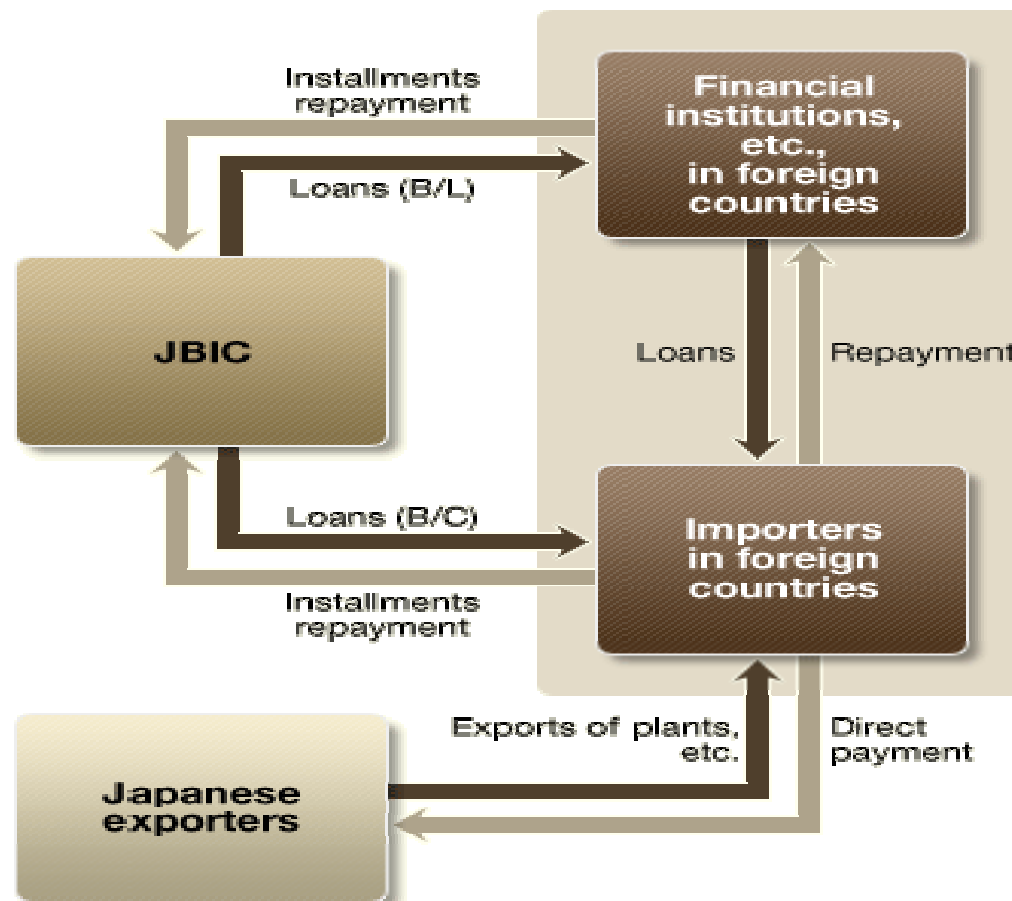
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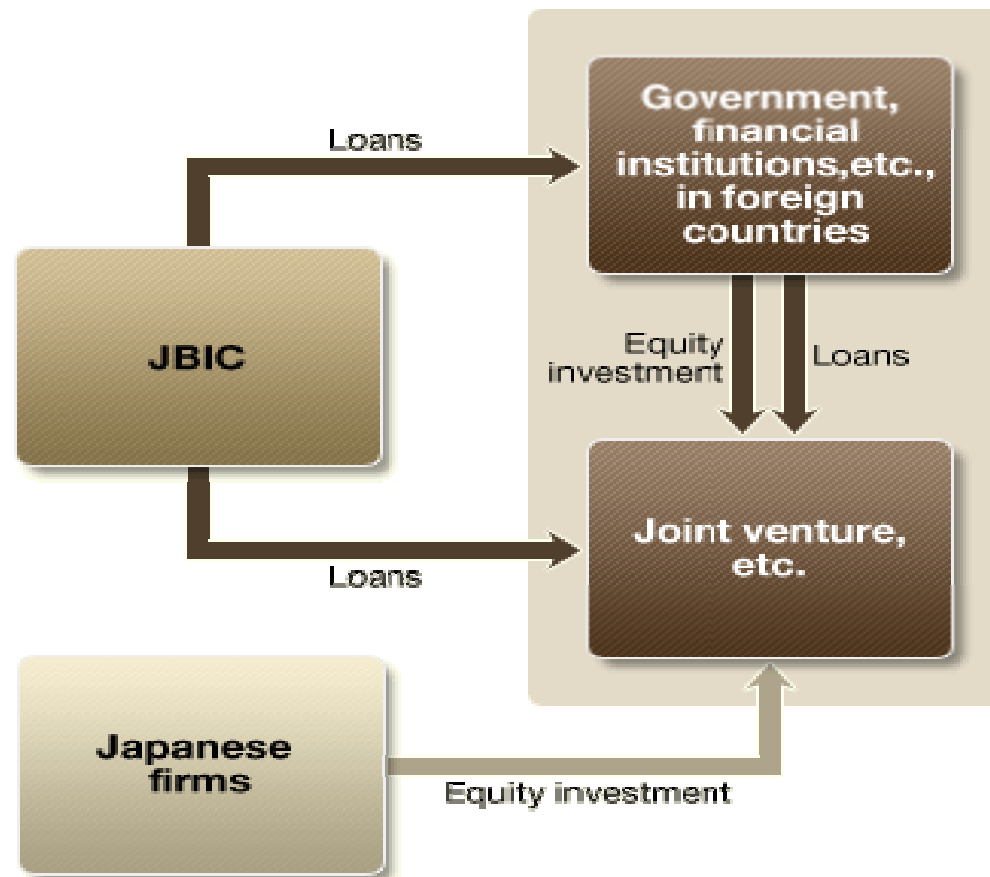
JBIC supports the following activities:

- Export related activities
- Non-Export related activities(untied)
 - Investment made by Japanese companies
 - Imports (oil, gas, raw materials)
 - Infrastructures supporting Japanese economy and diversification of sources of energy

Export projects from Japan (and other countries)



Overseas investment projects



Export & Investment from Japan

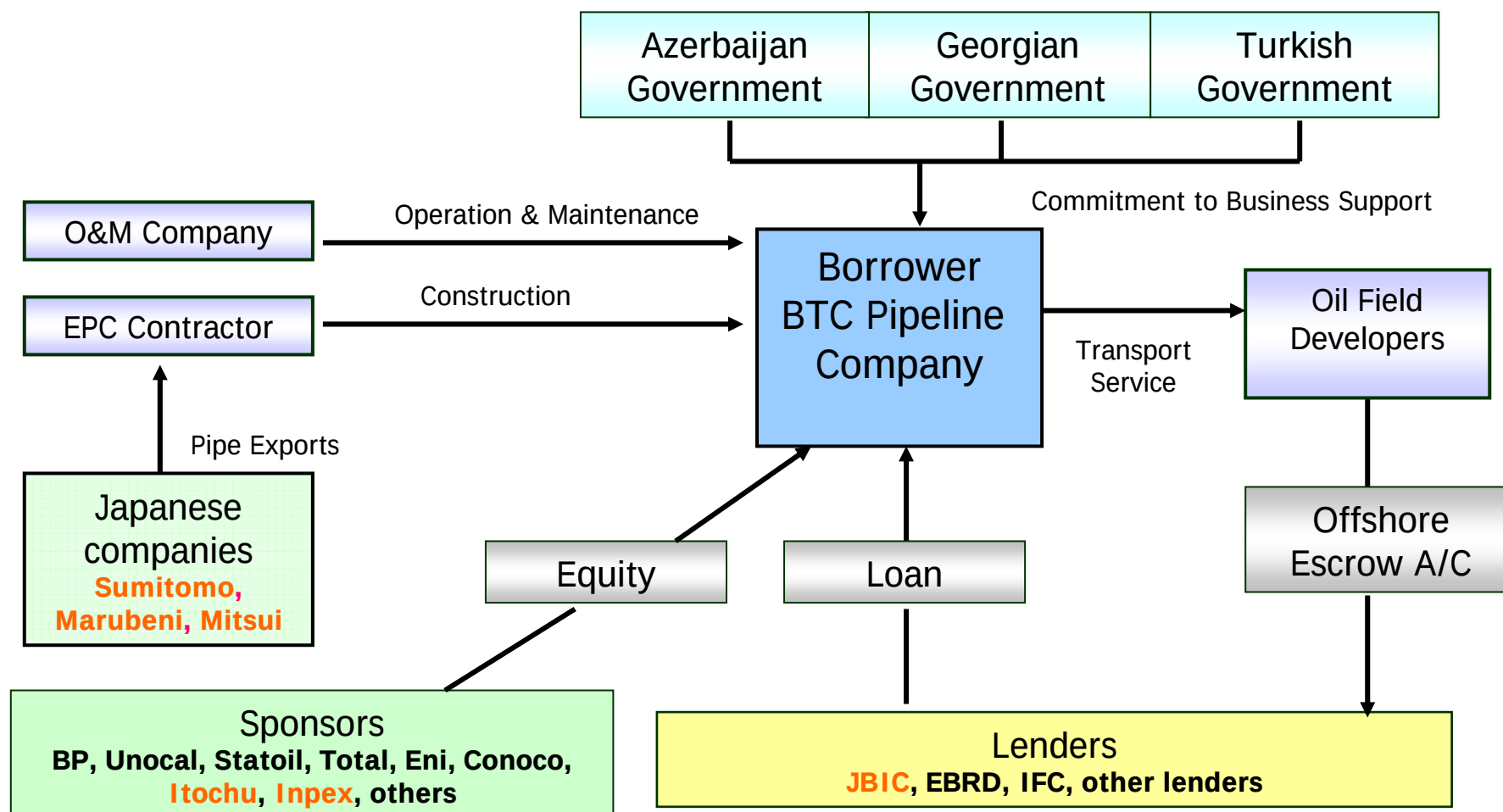
Baku-Tbilisi-Ceyhan (BTC) Pipeline



Image courtesy of British Petroleum p.l.c.

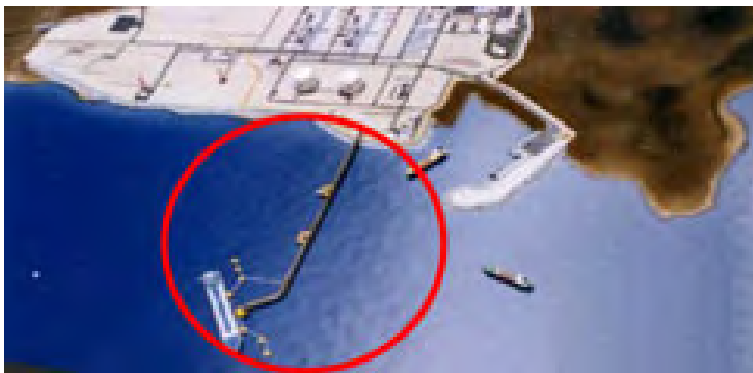
Export & Investment from Japan

Baku-Tbilisi-Ceyhan (BTC) Pipeline



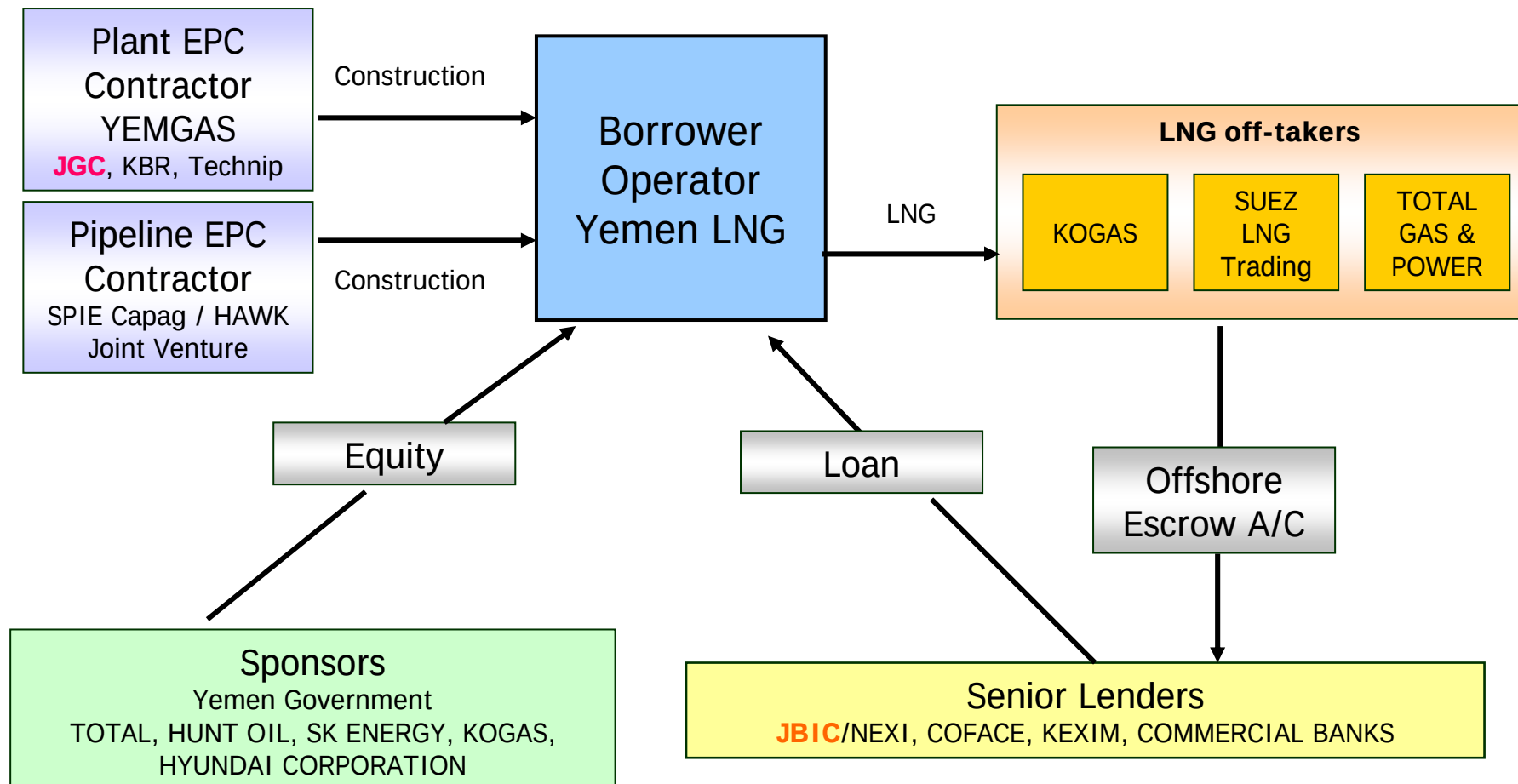
Export from Japan

Yemen LNG project



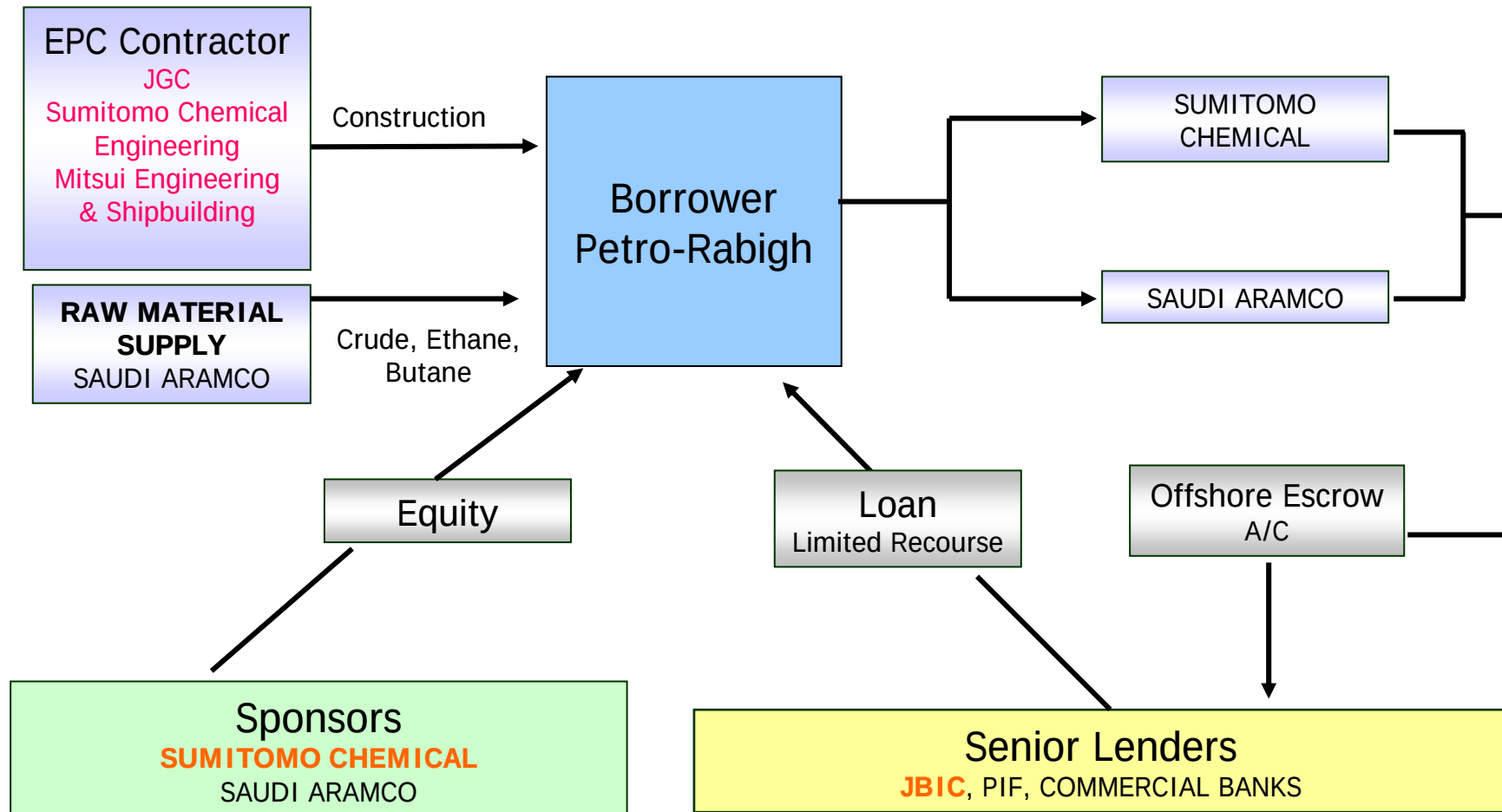
Export from Japan

Yemen LNG project



Investment from Japan

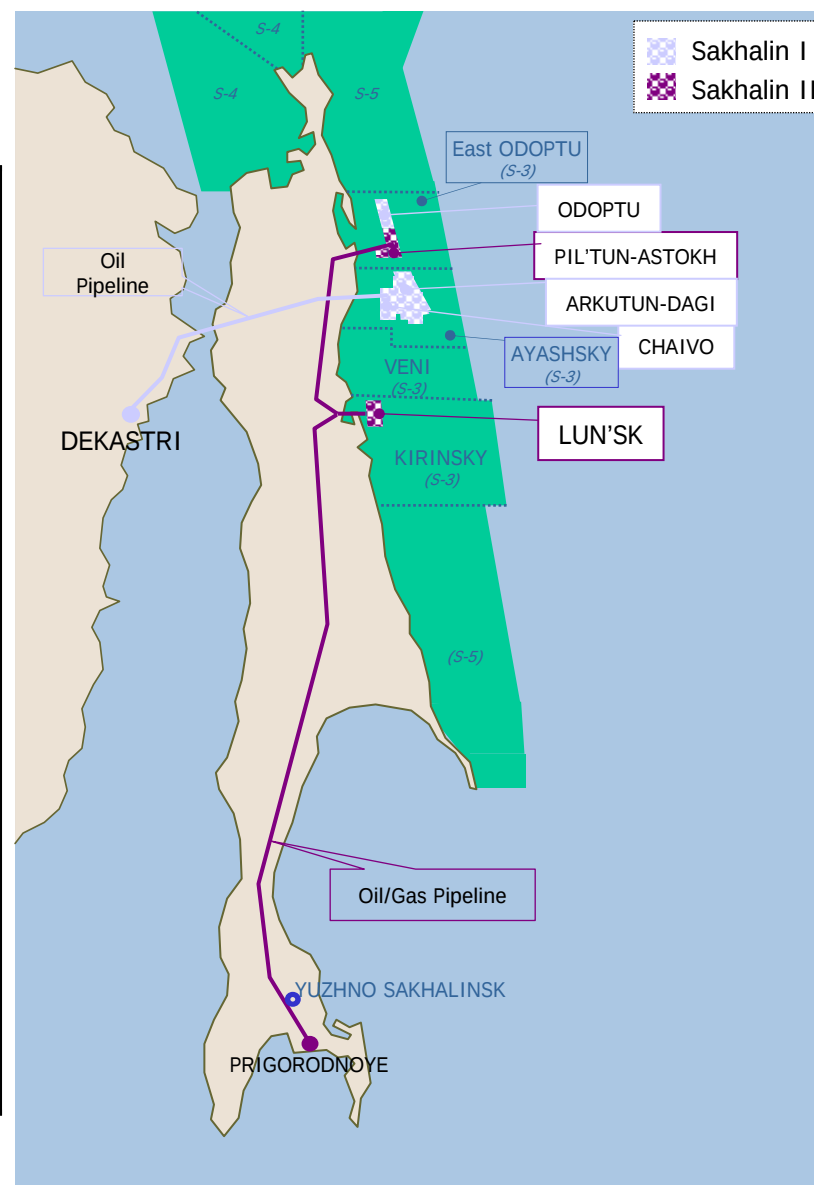
Petro-Rabigh project



Investment from Japan

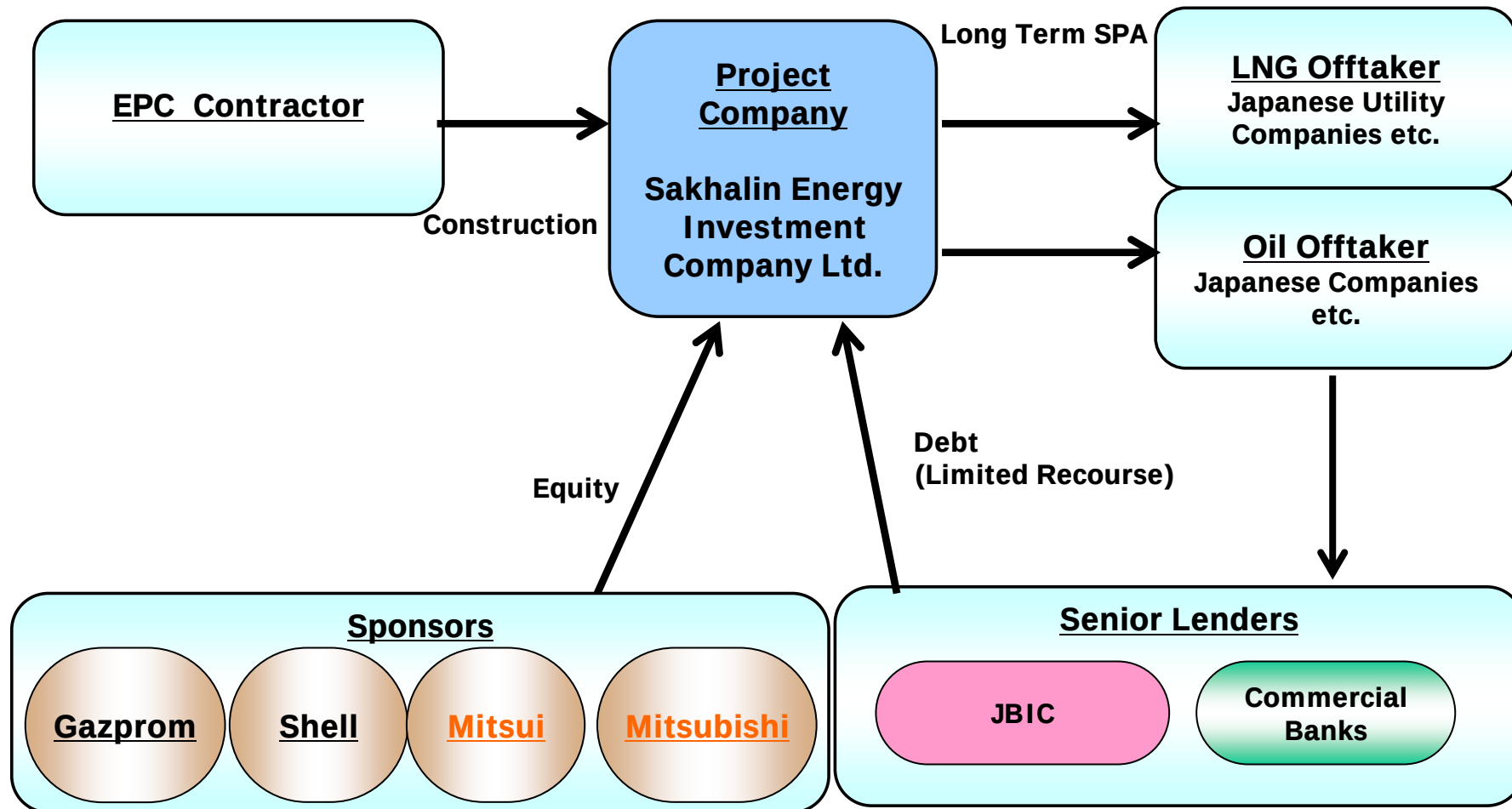
Sakhalin project

		Sakhalin I	Sakhalin II
Mine Site		Chaivo, Odoptu, Arkutun-Dagi	Piltun-Astokh, Lunsk
Estimated Recoverable Reserves	Oil	2.3 billion bbl	1.1 billion bbl
	Gas	17 tcf (LNG 340 million ton)	17 tcf (LNG 340 million ton)
Production Volume (peak time)	Oil	250 thousand bbl/day	150 thousand bbl/day
	LNG	-	9.6 million ton/year
Project Implementing Body		SODECO : 30% Exxon: 30% Rosneft: 8.5% ONGC: 20% Sakhalinmorneftegas: 11.5%	Sakhalin Energy Investment Company (Gazprom: 50%, Shell: 27.5%, Mitsui : 12.5%, Mitsubishi : 10%)



Investment from Japan

Sakhalin II project



Sakhalin II project is expected to produce

- around 9.6 million tons of LNG annually, of which more than 50% (equivalent to approximately 8% of Japan's total LNG imports) will be delivered to Japan
- with regard to crude oil, around 150,000 barrels will be produced per day (equivalent to some 4% of Japan's total oil imports), of which a substantial percentage will be supplied to Japan

JBIC, as a lender of Sakhalin II project

- JBIC conveyed stakeholders' views and concerns to Sakhalin Energy and requested appropriate environmental and social considerations.
 - ⇒ full use of double-hull tankers
 - ⇒ relocation of pipeline routes to avoid effects on endangered species
- JBIC now has to take responsibility for monitoring project implementation and especially environmental and social considerations.

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JBIC Initiatives midst of Financial Turmoil

Total Amount:
10 Billion USD
(As of March 31st, 2009)

LIFE

(Leading Investment to Future Environment)

5 Billion USD for 2 years

* *Clean Power Generation* * *Energy Efficiency Improvement*
* *Water* * *Urban Transportation*

Bank Recapitalization Fund

with IFC
2 Billion USD

Bilateral Support (MASF)

e.g. Guarantee for Bond Issue
by Indonesia (1.5 Billion USD)

Trade Financing Facility Enhancement

Create 6 Billion USD trade by providing 1.5Billion USD for 2 years

Joint Initiative with
ADB, IFC etc

Coordination with
NEXI Trade Insurance (16Billion USD)

Conclusion

- Introduction of natural gas and nuclear has reduced Japan's dependence on oil (75% in 1977 → 44% in 2007).
- Dependence on Middle East oil is very high (80%).
- Renewable energies/ alternative energies are expected to remain in the minor share (less than 10%).
- Natural gas and nuclear will steadily increase.
- JBIC should support the development and acquisition of natural resources, and the comprehensive relationship with resource producing countries.