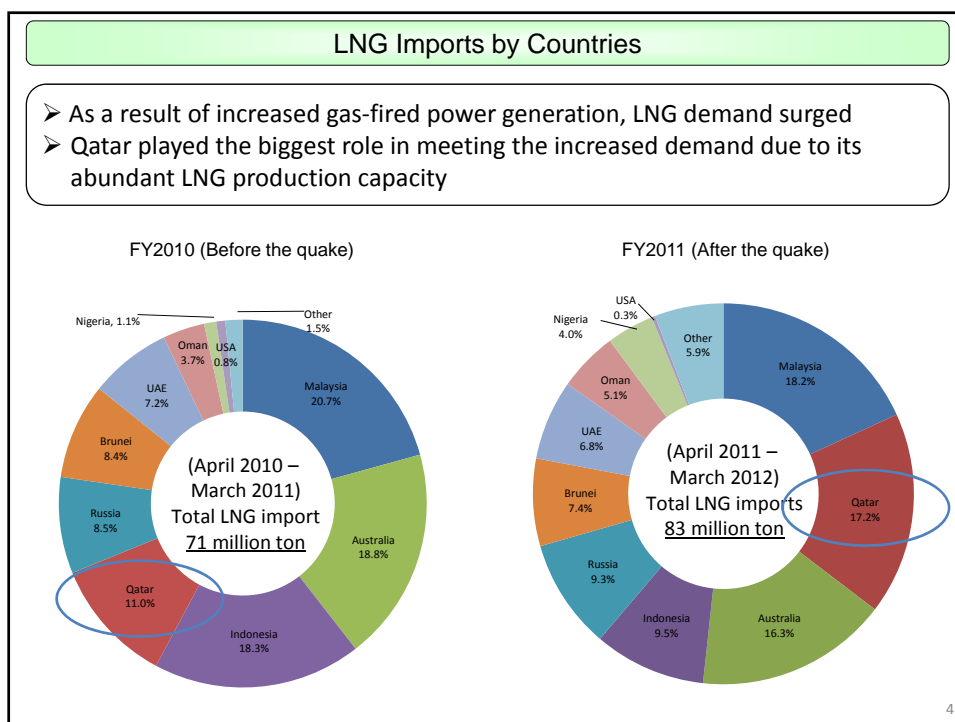
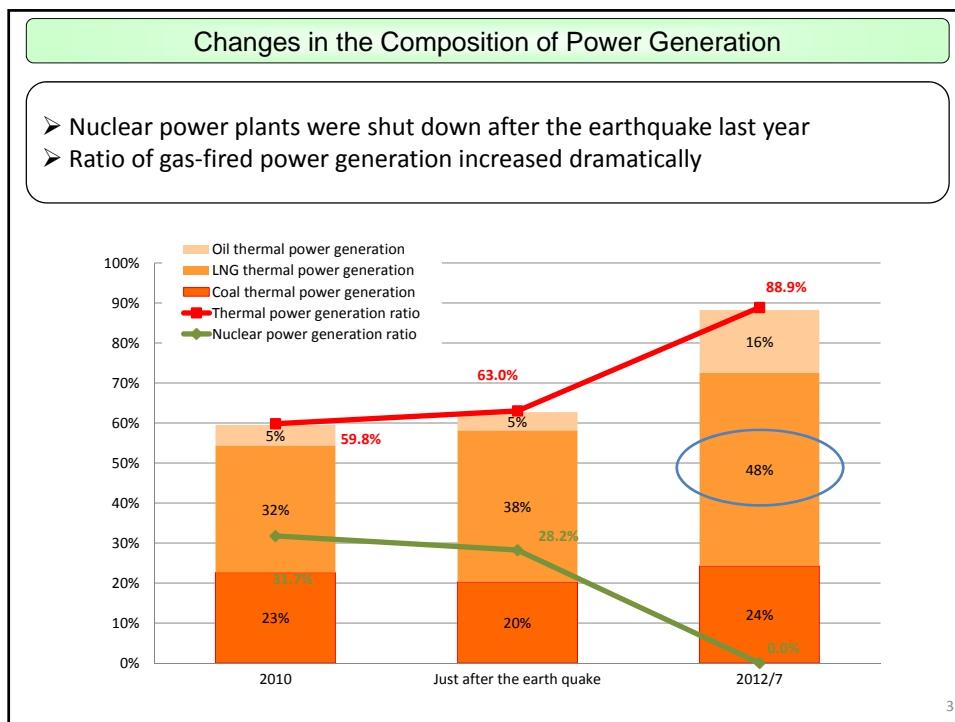
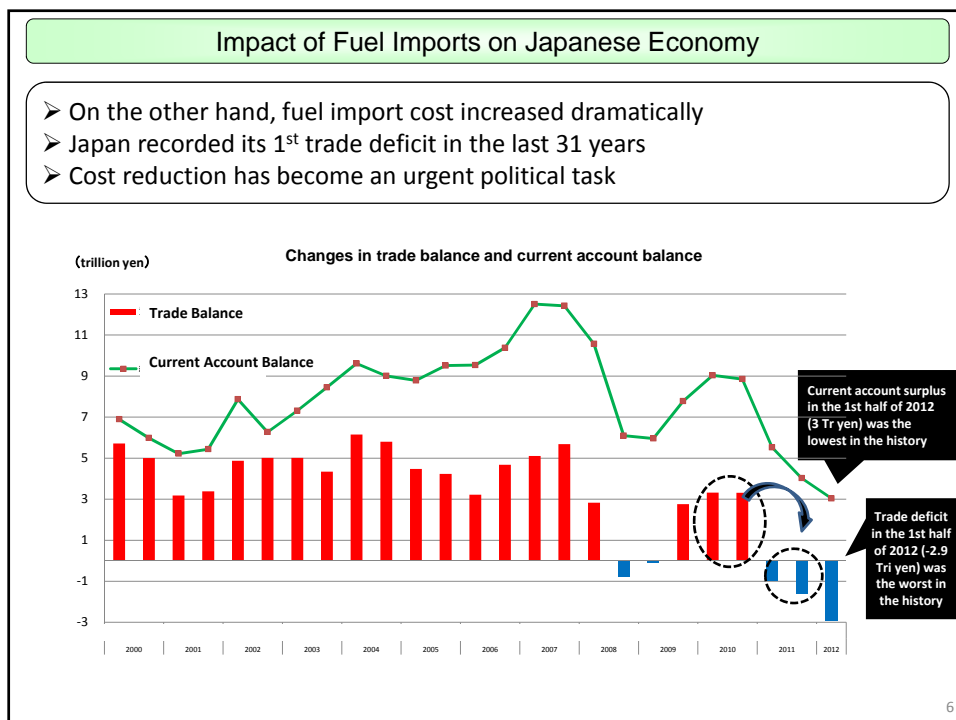
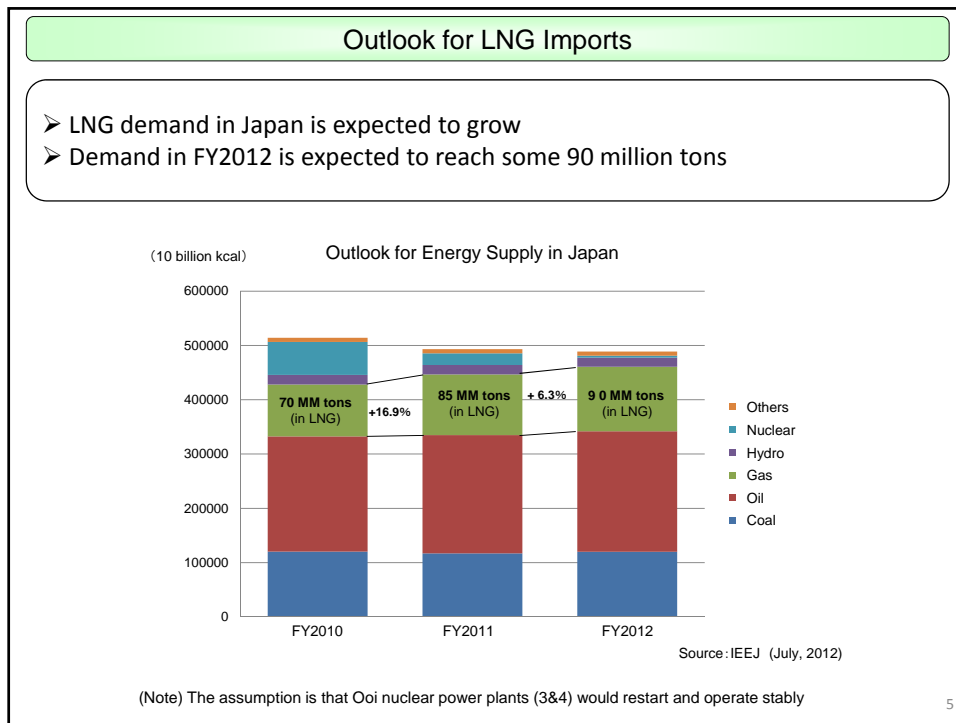


Challenges in Japan and Japan-Russia Energy Cooperation

22th Nov. 2012
Yasuhiro Matsuyama
Agency for Natural Resources and Energy,
Japan

1. Challenges in Japan





Action #1 LNG Import from North America

- Working towards securing low-priced gas from North America
- Japanese companies have already signed SPA/HOAs to off-take more than 15MM tons/year of LNG

Major LNG projects under consideration in North America

Several projects are under consideration. Among them, Mitsubishi together with Shell, etc. are considering the LNG project on the West Coast of Canada (expected to start exporting around 2020)

Sabine Pass (Cheniere Energy)
 • Liquefaction Capacity : 18MMT/year
 • Start Operation : around 2015
 • Export license for Non-FTA: Approved
 • Sales : Almost sold out (to other countries)

Freeport (Freeport)
 • Liquefaction capacity : 8.8~13.2MMT/year
 • Start Operation : around 2016
 • Export license for Non-FTA: Under Review
 • Sales : [Osaka Gas and Chubu Electric Power](#) respectively signed legally-binding SPA (2.2 MMT/year each)

Cove Point (Dominion)
 • Liquefaction capacity : 4~5MMT/year
 • Start Operation : around 2017
 • Export license for Non-FTA: Under Review
 • Sales : [Sumitomo and Tokyo Gas](#) signed HOA (2.3MMT/year)

Cameron (Sempra Energy)
 • Liquefaction capacity : 12MMT/year
 • Start Operation : around 2016
 • Export license for Non-FTA: Under Review
 • Sales : [Mitsubishi and Mitsui](#) respectively signed HOA (4MMT/year each)

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Action #2 Participation in Upstream Development

- Strengthened JOGMEC's function to supply risk money (revised the law)
- Supported Japanese companies acquire shale gas block in Canada.

Potential LNG projects where Japanese companies are involved in

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Action #3 LNG Producer-Consumer Conference

- Japan hosted the world's first LNG Producer-Consumer Conference in Tokyo
- Heated discussion on how the future market should be including price formation mechanism

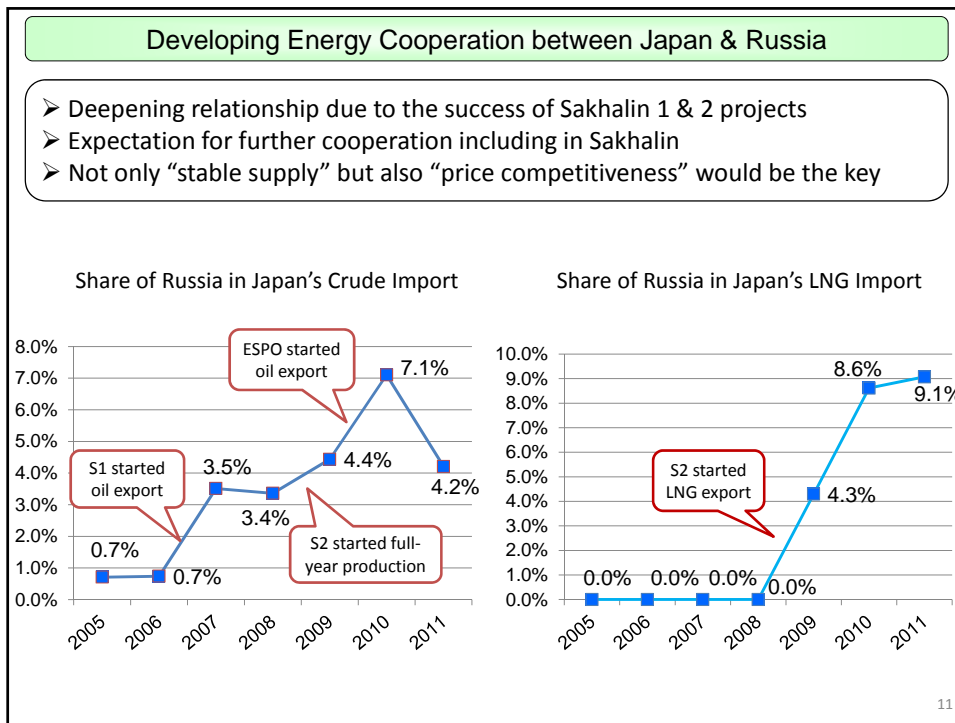


Presentations and discussions by major gas producing countries as well as IOCs



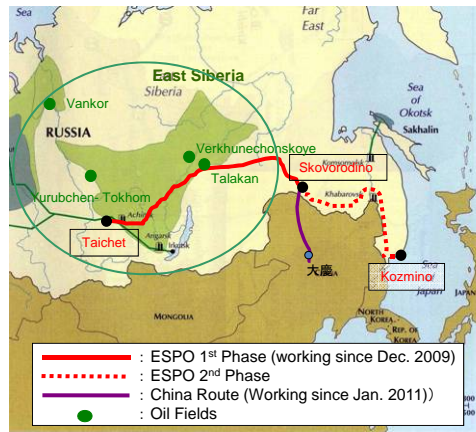
METI Minister Edano making remarks

2. Japan-Russia Cooperation



Joint Efforts #2 Joint Oil Exploration in East Siberia

- Japanese companies interested in joint oil exploration in East Siberia
- Development of ESPO as a background
- Tax incentive would be the key for further development in the area



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Joint Efforts #3 Joint Oil Exploration in East Siberia

- Joint exploration by JOGMEC & INK in East Siberia progressing steadily
- JOGMEC agreed with Gazprom-Neft on joint study in East Siberia

- JOGMEC & INK (3 blocks): Severo-Mogdinsky Block
Zapadno-Yaraktinsky Block & Boshetirsky Block
- JOGMEC & GPN (1 block): Ignyalinsky Block



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Thank you for your attention !

