



LNG supply and demand -A Japanese perspective-

November 25, 2014

Shinji FUJINO
Executive Director

Japan Oil, Gas and Metals National Corporation
(JOGMEC)

Japan Oil, Gas and Metals National Corporation (JOGMEC)

Established: February 29, 2004 [succeeded the functions of Japan National Oil Corporation(JNOC)]

President: Hirobumi Kawano

Capital: 641 Billion Yen (As of April, 2014)

Mission = around 6.28 Billion US\$ (1US\$=102Yen)

Securing Stable Supply of Oil, Natural Gas, Mineral Resources, Coal and Geothermal energy for Japanese Industries and Citizens

Activities

Oil & Gas Upstream
Investment and
Research &
Development



Metals Strategy &
Exploration, and
Technology
Development



Stockpiling



Mine Pollution
Control



Coal Strategy &
Exploration, and
Technological
Support

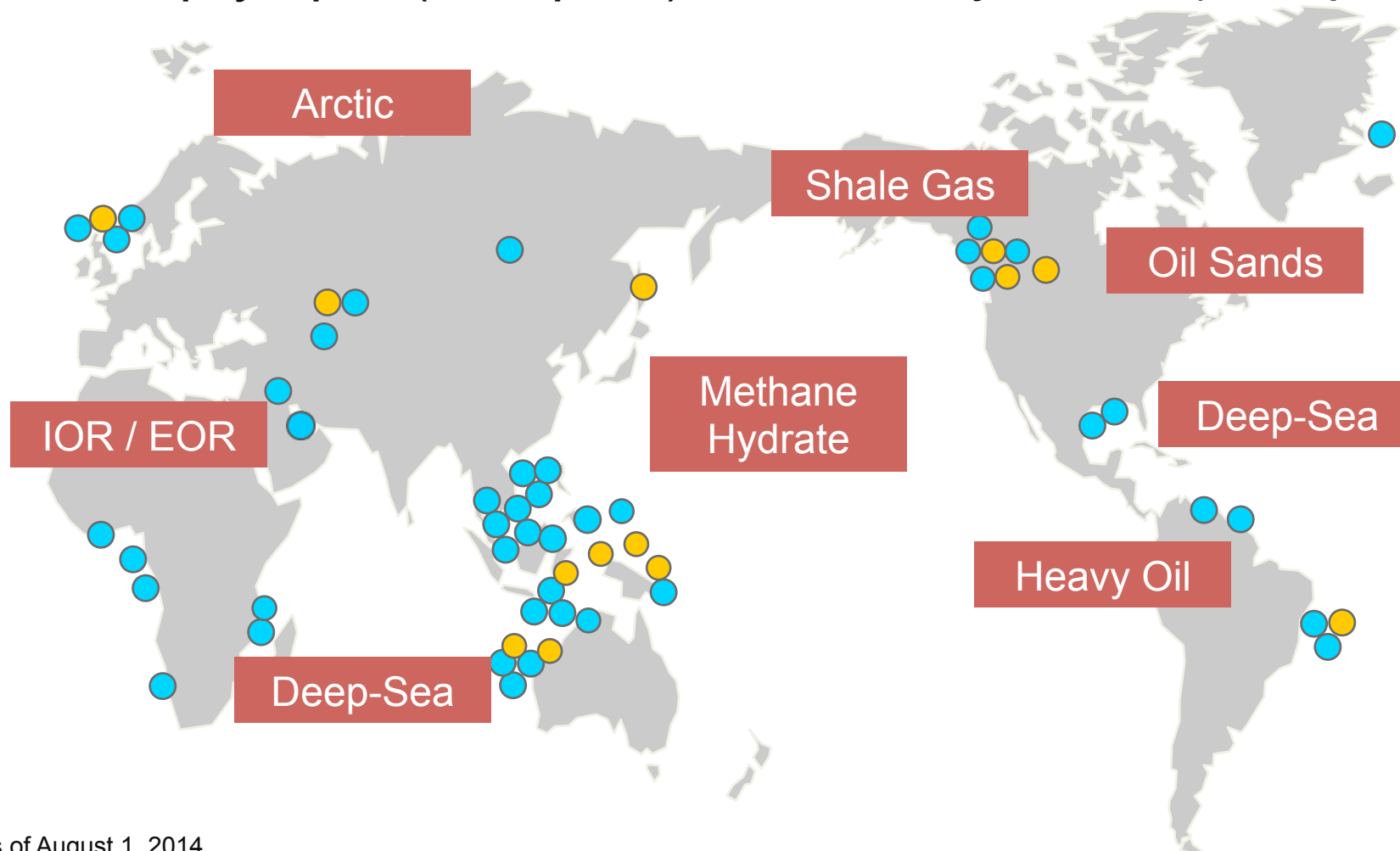


Geothermal
Resources
Development



Oil & Gas Exploration & Production supported by JOGMEC

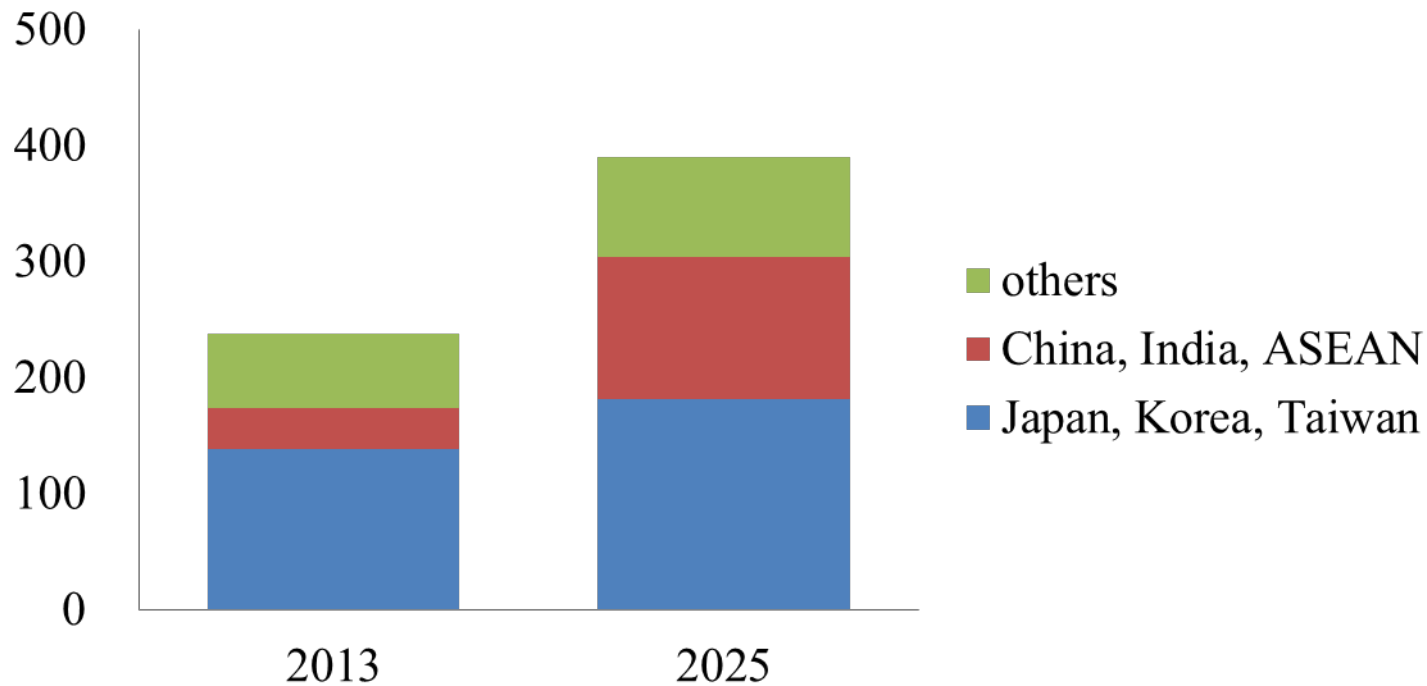
● Equity Capital (44 companies) ● Liability Guarantee (13 companies)



As of August 1, 2014

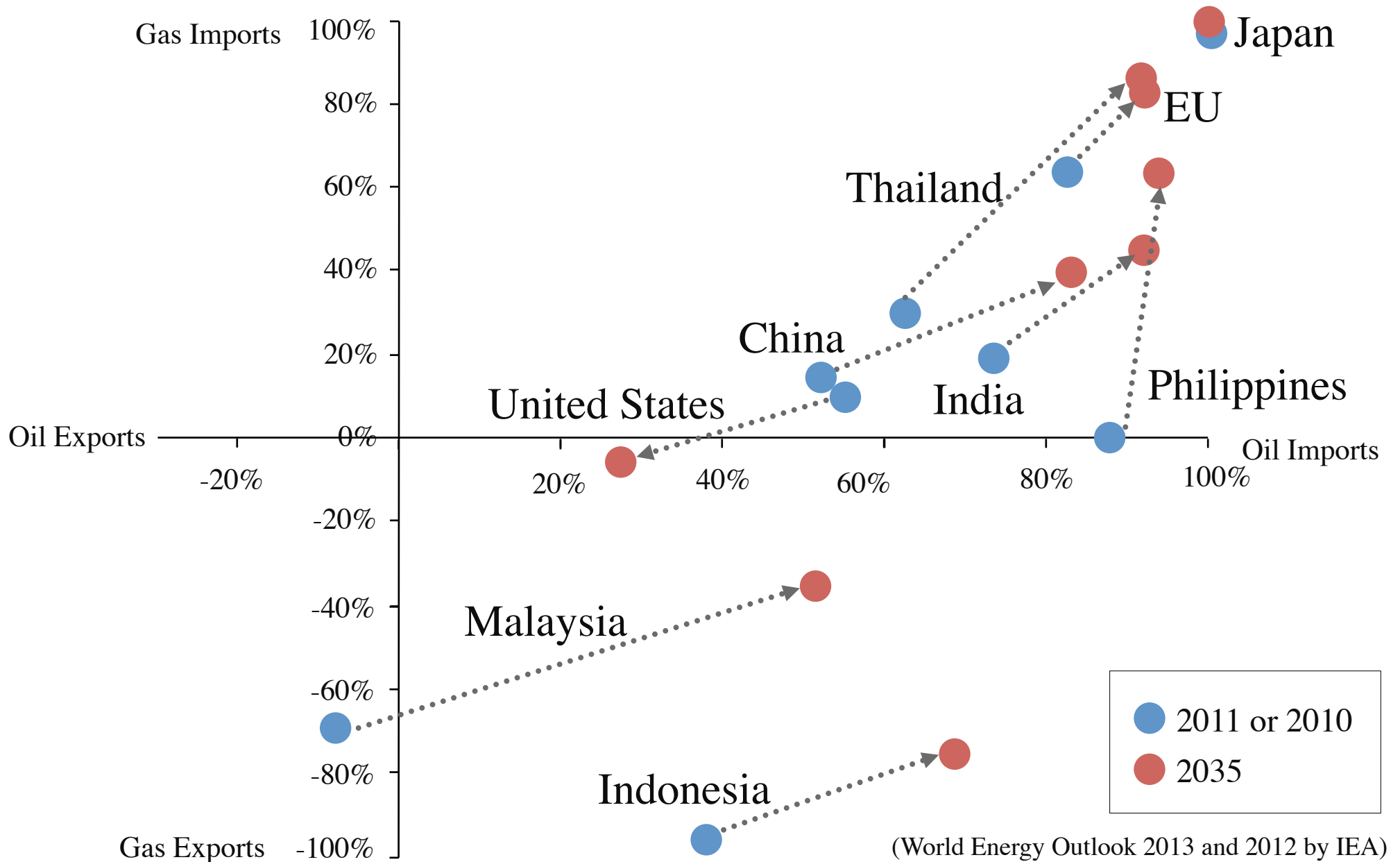
LNG Demand growth

LNG Demand Growth (MMton)



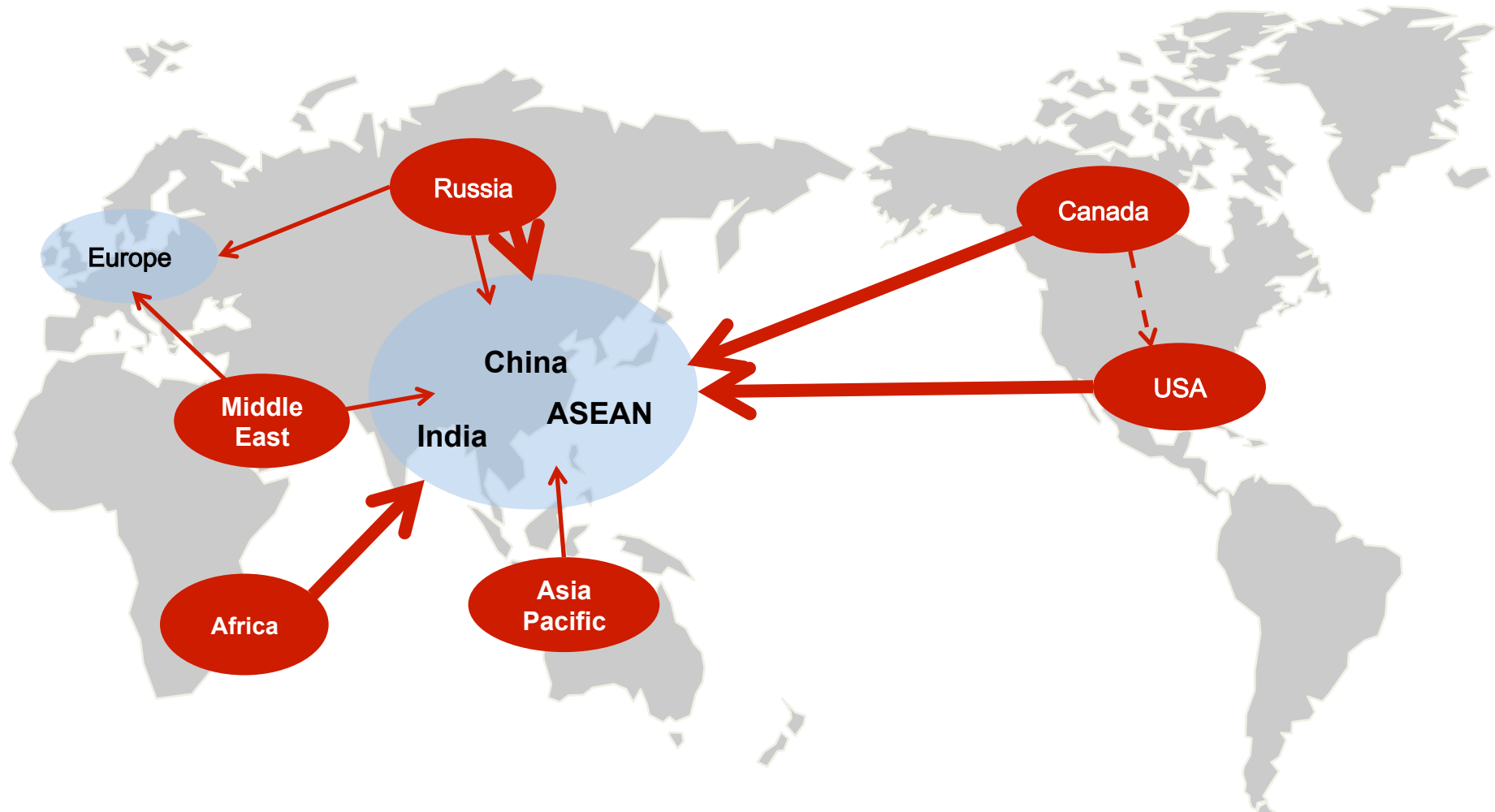
(Source: compiled by JOGMEC based on BP and METI)

Net Oil & Gas Import Dependency



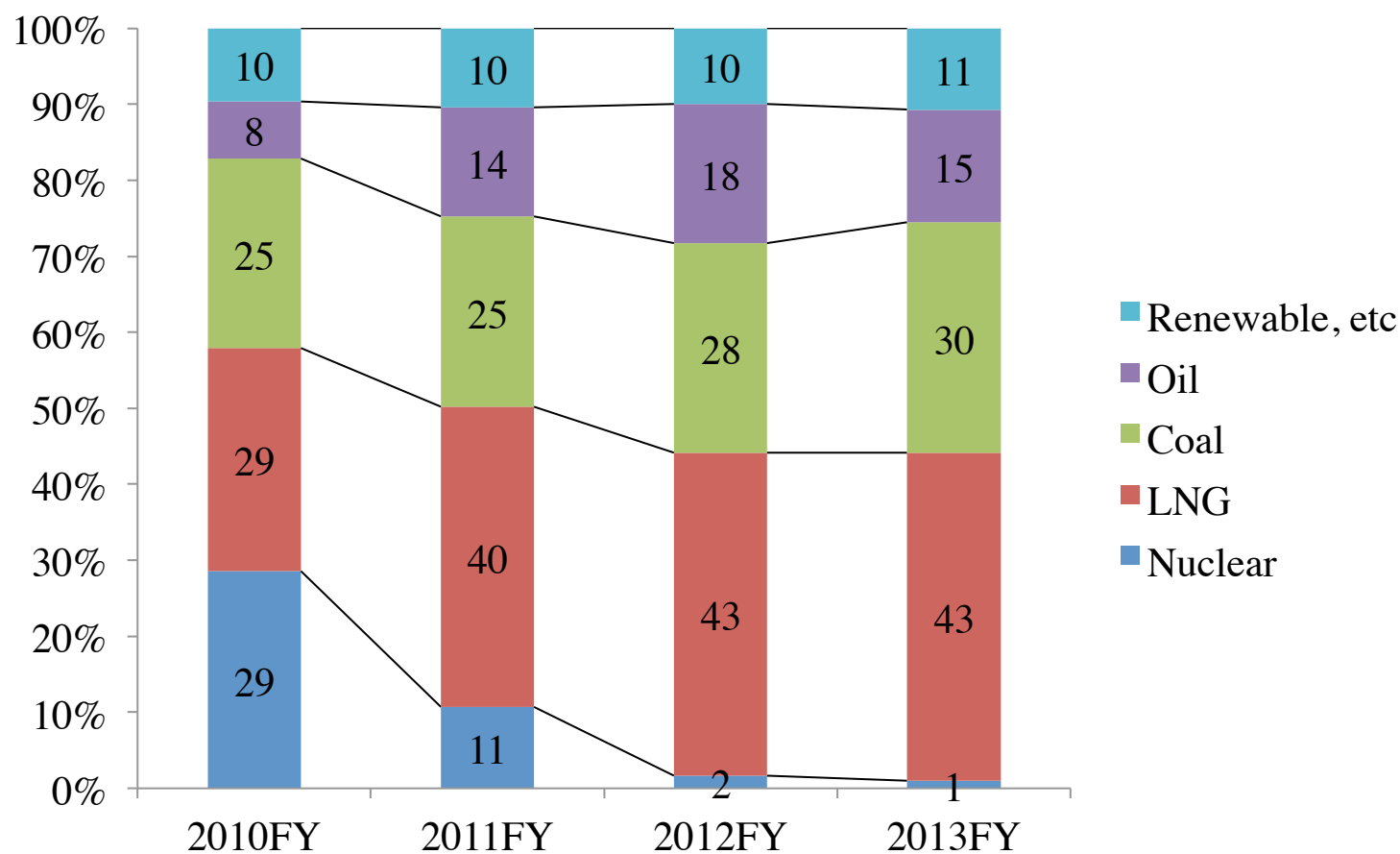
(World Energy Outlook 2013 and 2012 by IEA)

Gas Towards Asia

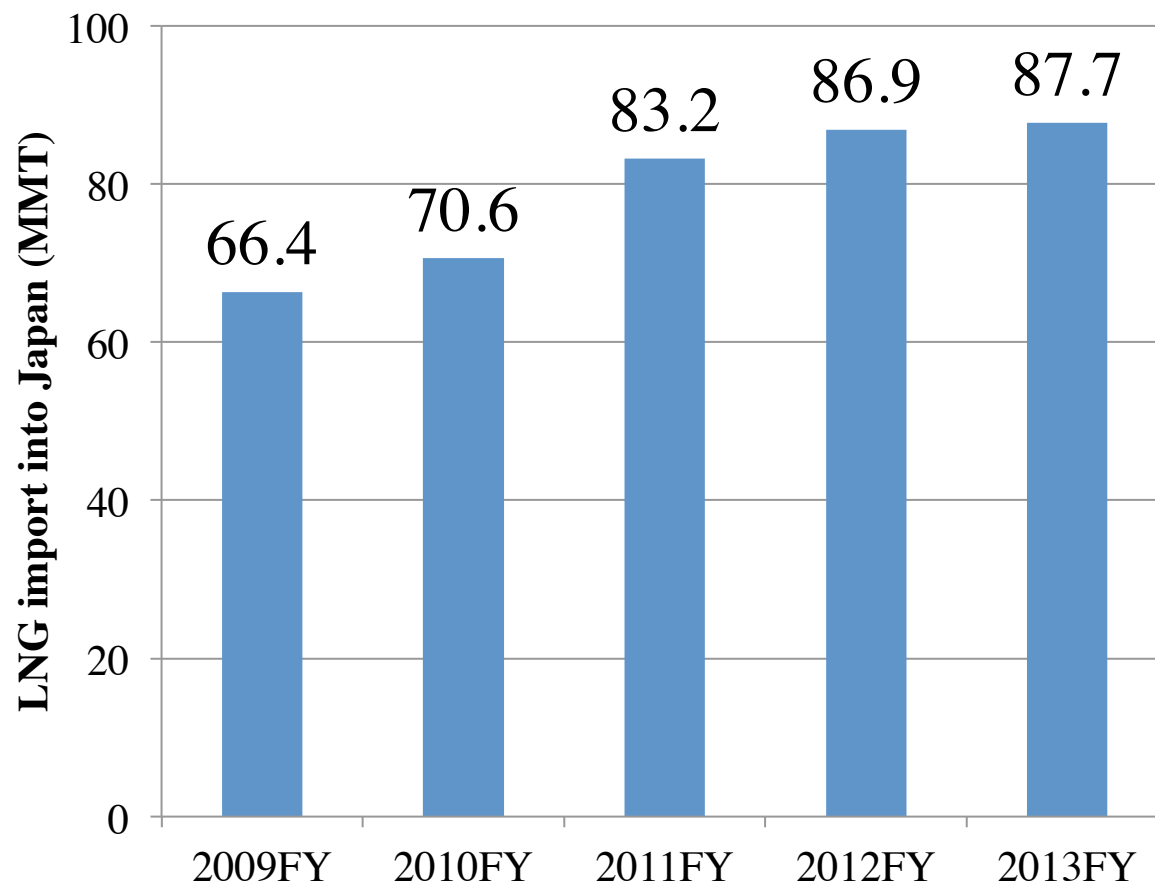


LNG compensates for nuclear power since TEPCO 1F-NPP accidents

Fuel Mix of Power Generation

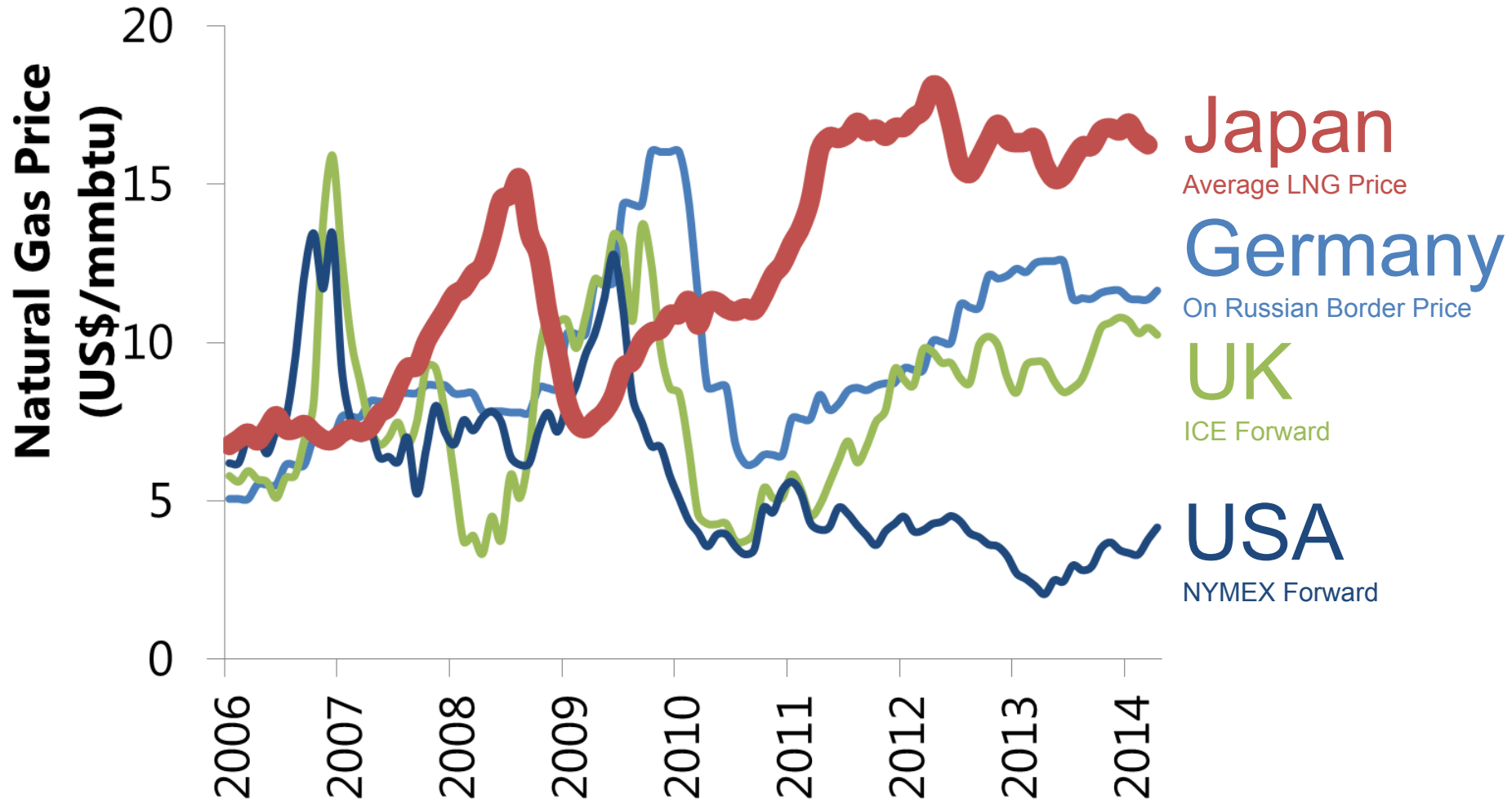


(Source: Compiled by METI based on "Outline of Electric Power Development in FY 2013" etc.)

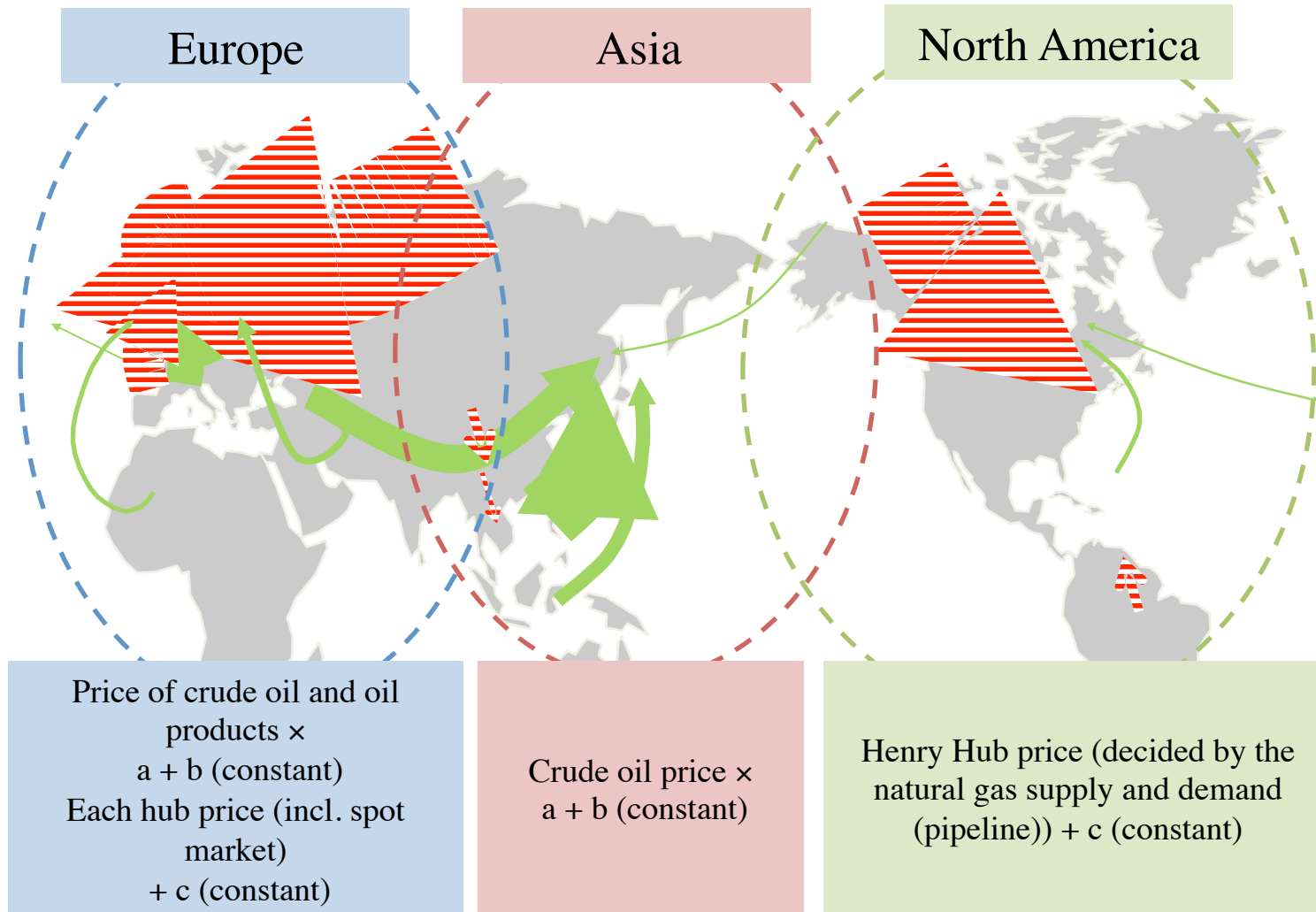


<Import Values>
FY2010: 3,549 billion yen
(US\$35 billion)
↓
FY2013: 7,342 billion yen
(US\$73 billion)

Source: Ministry of Finance, Japan



Regional Differential Pricing Systems

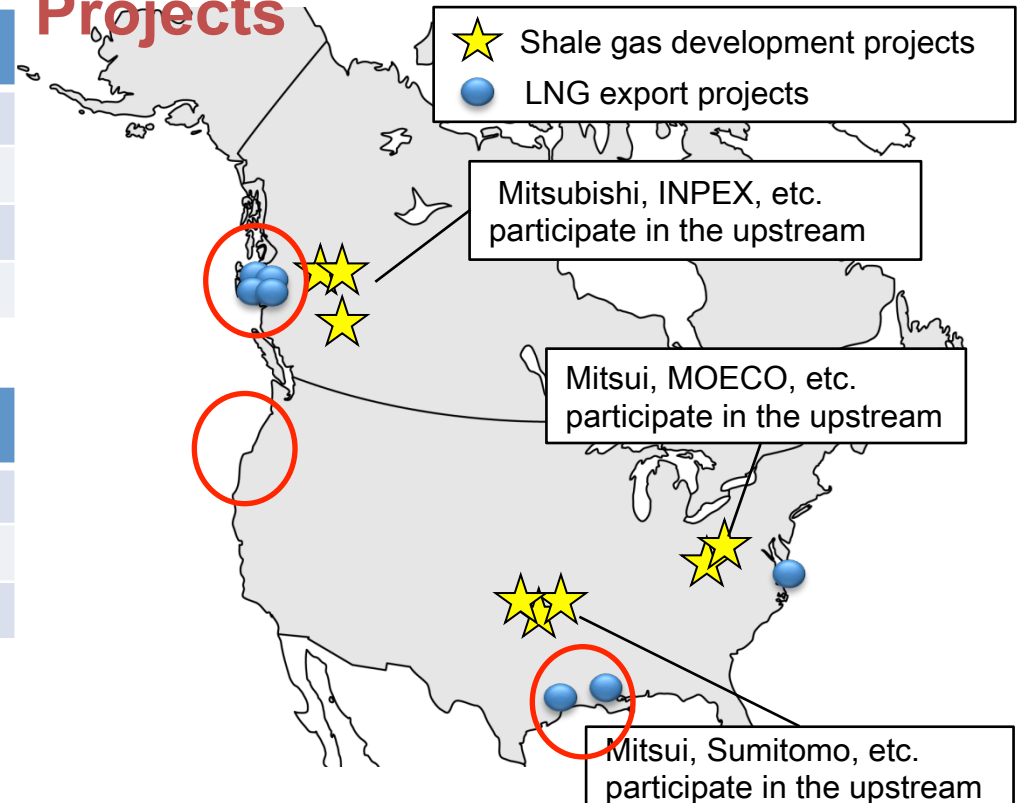


Japan companies' related LNG Projects

LNG Export Projects in Canada	Japanese Companies
LNG Canada (Shell)	Mitsubishi
Pacific Northwest LNG (Petronas)	Japex
Aurora project (Nexen)	Sumitomo and Tokyo Gas
Western Canada LNG (AltaGas)	Idemitsu

LNG Export Projects in US	Japanese Companies
Freeport (Freeport)	Osaka Gas and Chubu Electric
Cameron (Sempra)	Mitsubishi and Mitsui
Cove Point (Dominion)	Sumitomo and Tokyo Gas

Shale Gas Development Projects



Financial Support

4 projects
in the west of
Canada

Joint Research

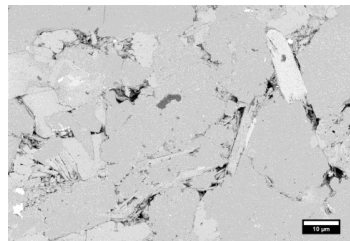
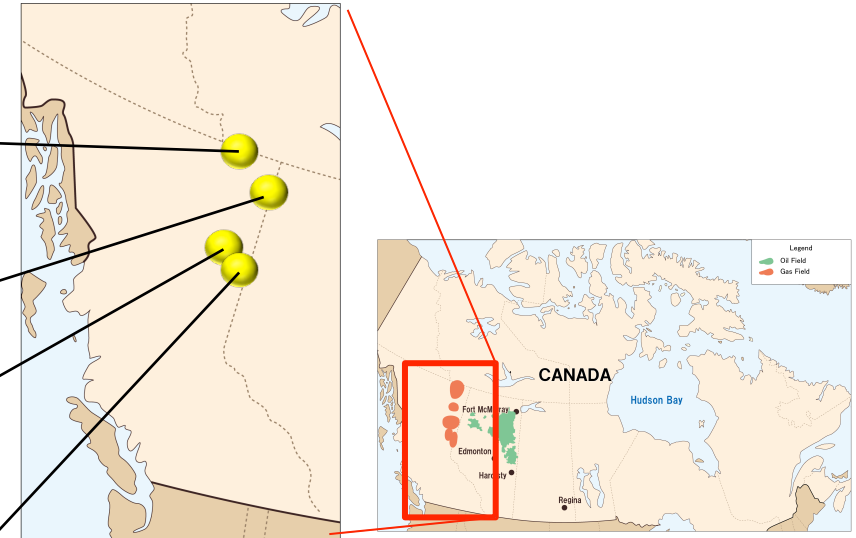
- Core Analyses
- Geomechanics
- Seismic

Mitsubishi Corp.
Cordova Basin

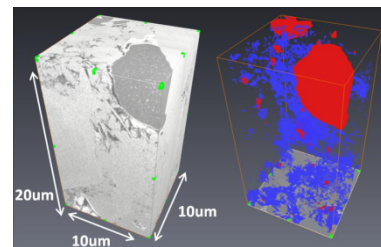
Mitsubishi Corp.
Cutbank Dawson
Land

JAPEX
North Montney
Land

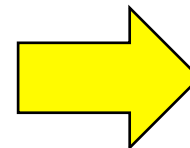
INPEX
Horn River, Cordova,
Liard



100 um



3D Model of shale pores



Increase of the asset values

- Cost reduction
- Productivity optimization

British Columbia New LNG Tax

Labor Issues

First Nations Issues

Economics

Technology

**Thank you very much
for your attention !**