

# **Policy Change in Japan Towards a Sustainable LNG Market**

## **LNG Producer-Consumer Conference 2014**

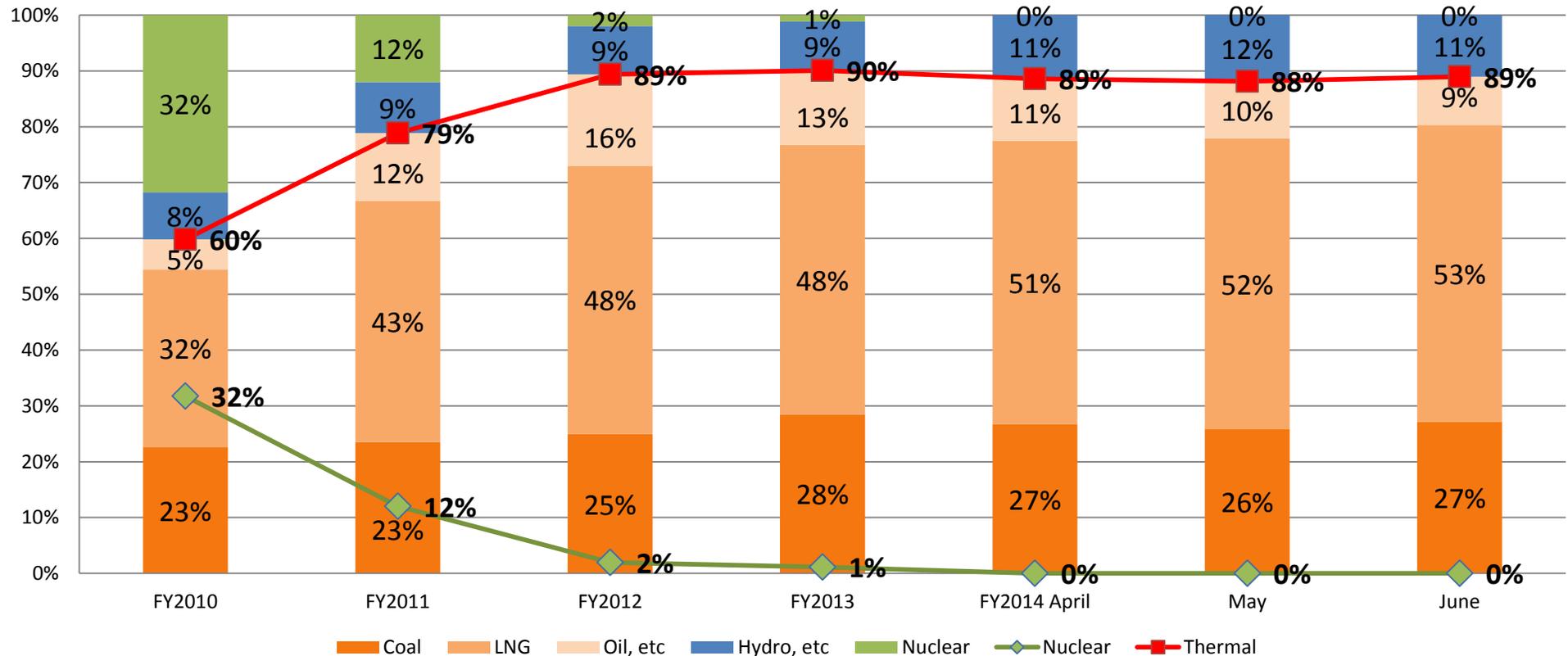
Takayuki Ueda  
Commissioner

Agency for Natural Resources and Energy  
Ministry of Economy, Trade and Industry of Japan

# High Dependency On Fossil Fuels For Power Generation

- The nuclear power ratio in domestic power generation has decreased after the Great East Japan Earthquake due to the long-term shutdown of nuclear power plants .
- On the other hand, the thermal power ratio has increased to 90%. Currently, LNG thermal power alone accounts for nearly 50% of domestic power generation.

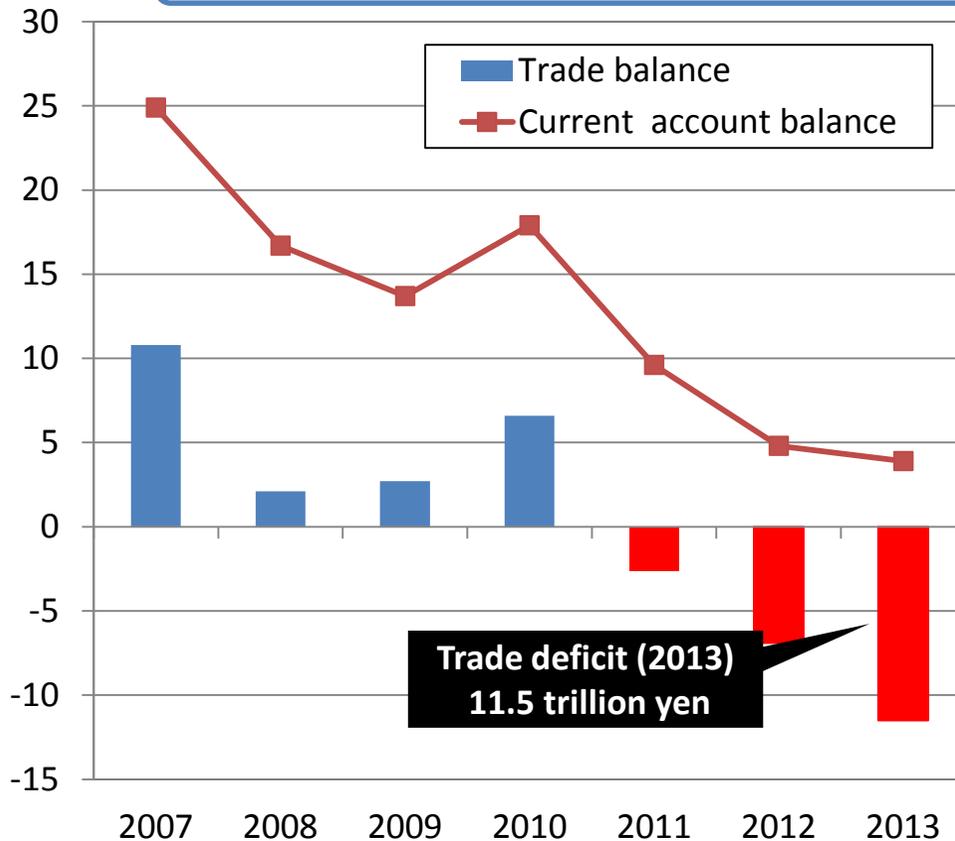
**Trend in Domestic Power Generation Ratio**



# Japan suffers a huge trade deficit

- The overall cost of LNG imports to Japan increased from 3.5 trillion yen (2010) to around 7 trillion yen (2013). ※1 trillion yen = \$10 billion
- Japan recorded a trade deficit for the first time in 31 years. The trade deficit for 2013 was 11.5 trillion yen, which is not a sustainable level for Japan.

Changes in trade balance and current account balance (trillion yen)

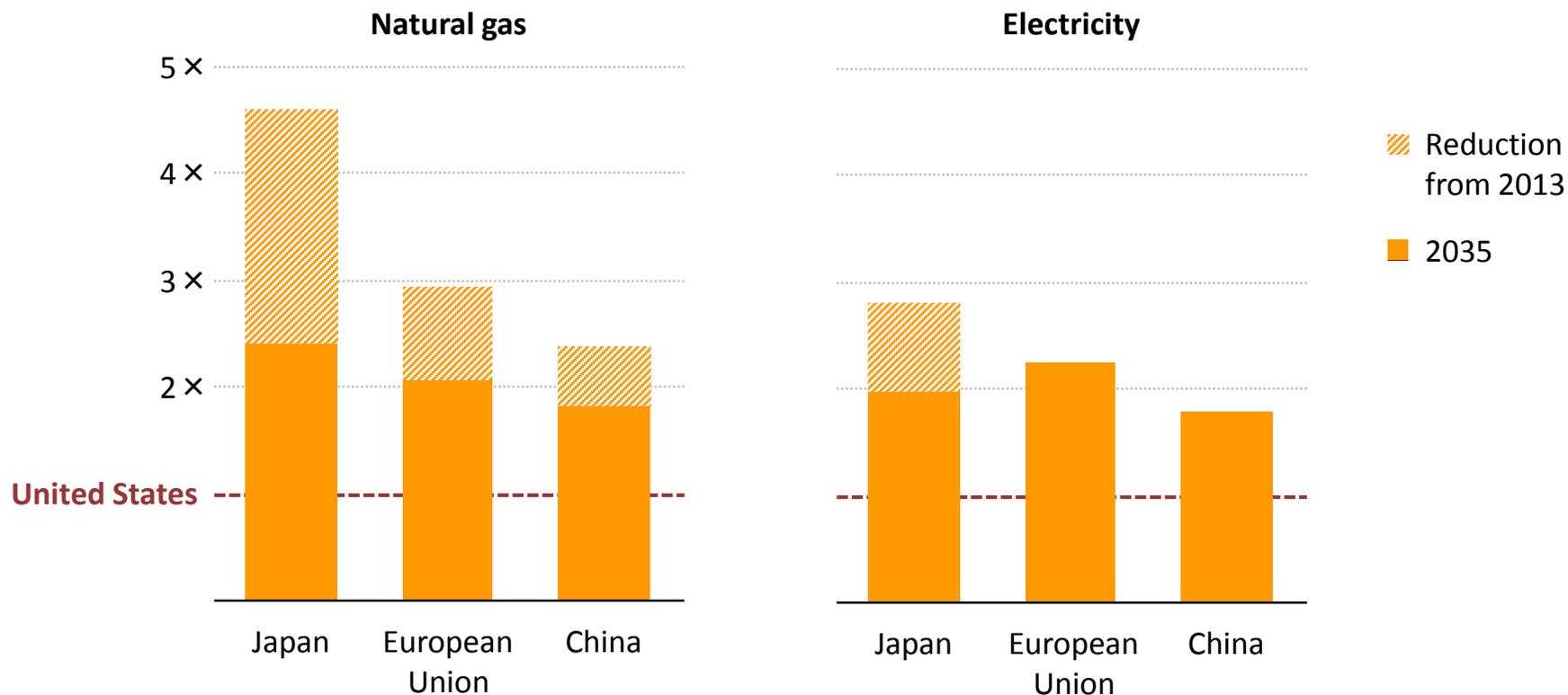


	2010	2013	Difference
Trade Balance	6.6	-11.5	-18.1
<b>Net Import Costs</b>			
LNG	3.5	7.1	+3.6
Crude Oil	9.4	14.2	+4.8
Petroleum Products	2.4	3.7	+1.3
Coal	2.1	2.3	+0.2

# Reducing fuel procurement cost is an urgent issue

- High energy costs in Japan have negative impact on the competitiveness of energy intensive industries.

## Ratio of industrial energy prices relative to the United States



Source: IEA

# Diversification of supply sources

➤ A series of new LNG projects are in progress, primarily in the Asia- Pacific region.

(Russia)  
Vladivostok LNG Project  
Far East LNG Project

(Canada)  
LNG Canada Project  
Pacific Northwest LNG Project  
Aurora LNG Project  
Triton Gas Project

Alliances among  
consumer countries

(Southeast Asia)  
PNG LNG Project

(U.S.A)  
Freeport Project  
Cove Point Project  
Freeport Project (Expansion)  
Cameron Project  
Sabin Pass

(Mozambique)  
Rovuma Area 1

(Australia)  
Ichthys LNG Project  
Wheatstone LNG Project

# Japan: LNG demand peaking out, while market reform is changing LNG procurement

- After the Great East Japan Earthquake, Japan's LNG demand increased by 24% due to the shutdown of nuclear power plants. (2010FY 71 MTA → 2013FY 88 MTA)
- However, it is unlikely that Japan's LNG demand will continue to increase. In fact, demand has flattened out and there are many forces that will drive down demand.
- Electricity and gas market reforms are the factor which will change LNG procurement.

## Forces that will drive down LNG demand

- Restart of nuclear power plants
- Progress in energy-efficient and conservation technology
- Introduction of renewable energy
- Population decrease

## Market reform changing LNG procurement

- Electricity Market Reform (Full retail competition, abolishment of retail tariff)
- Gas Market Reform (Full retail competition)

# Relaxation of Destination Clauses

- Existence of destination clauses leads to inefficiency and inflexibility of the gas market, which is a potential risk to global gas security.
- As the world's largest LNG importer, Japan intends to abolish such clauses for FOB contracts and relax them for DES contracts. In fact, many recent contracts by Japanese utilities have realized such goals.
- In the Rome G7 Energy Initiative (May 5-6) and the Brussels G7 Summit Declaration (June 4-5), the G7 countries agreed on the "Promotion of flexible gas markets, including relaxation of destination clauses and producer-consumer dialogue".

## Type of destination clauses

Destination free: Able to resell the purchased LNG cargo to both domestic and overseas market

Prior approval by the seller is NOT required to resell the purchased LNG cargo

Able to resell to overseas markets

Able to resell to domestic markets

Prior approval by the seller is required to resell the purchased LNG cargo

Unable to resell the purchased LNG cargo

