



**METI**

*Ministry of Economy, Trade and Industry*

# **Japan's Initiative for Creation of New LNG Market in Asia**

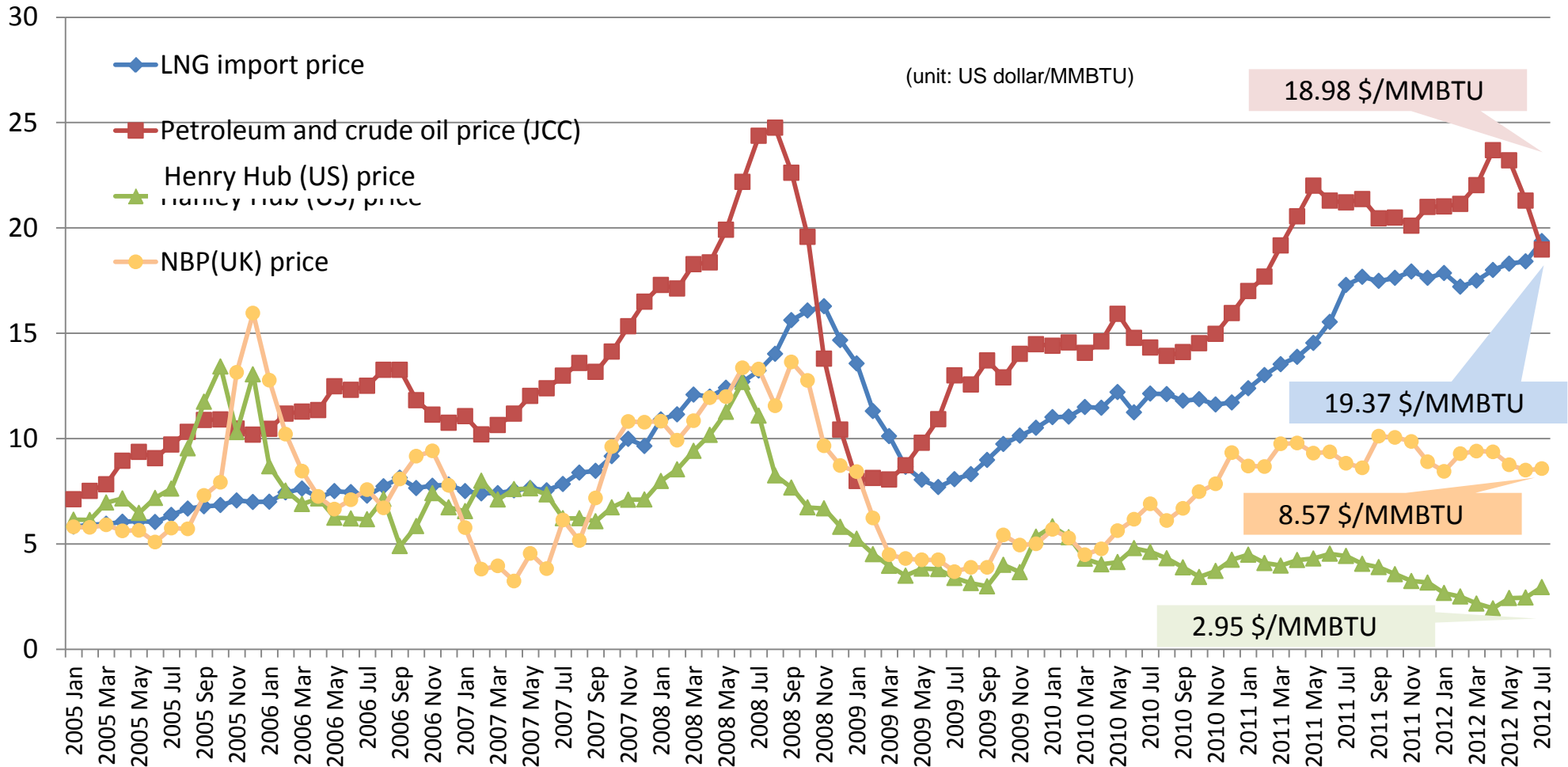
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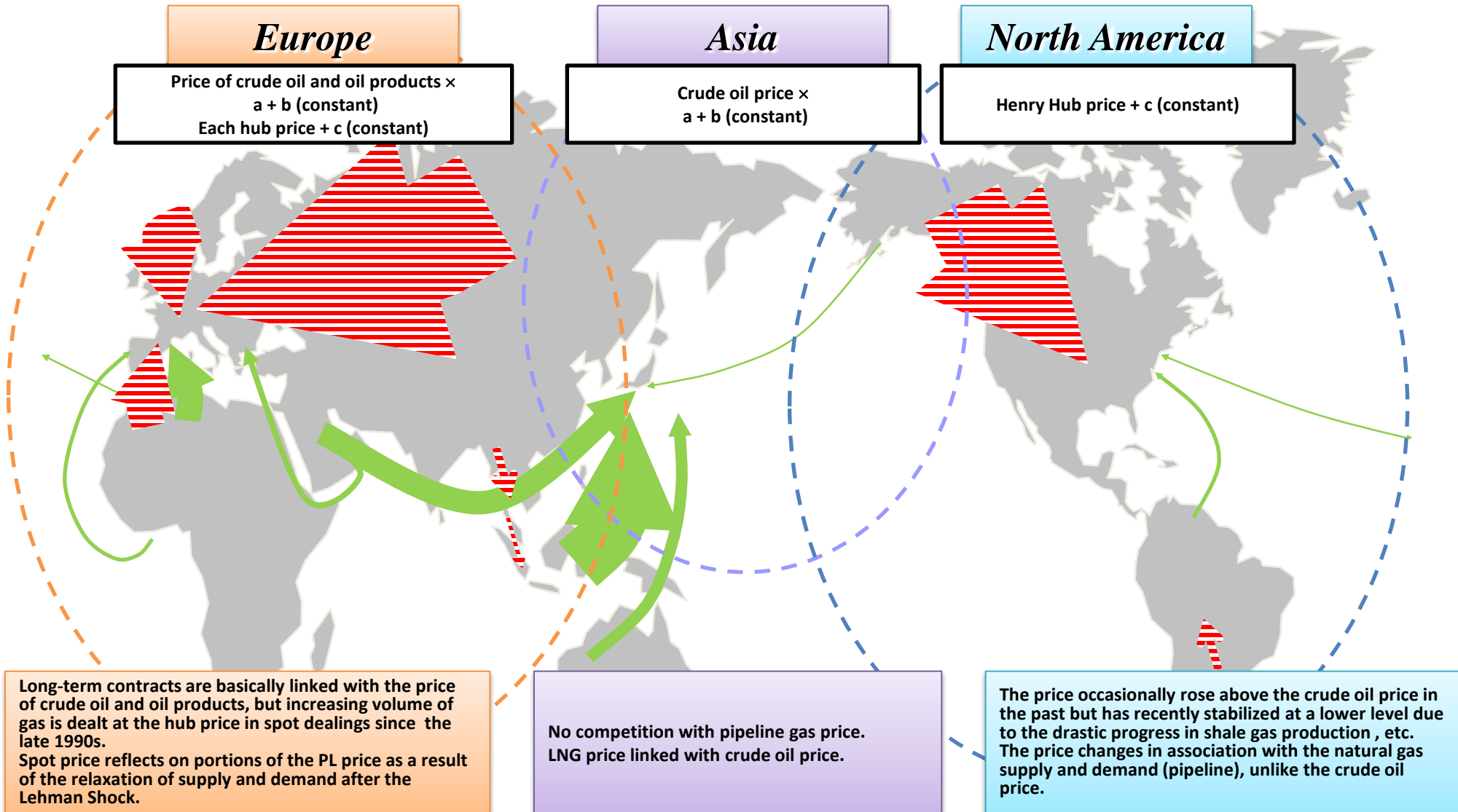
# 1-1 Natural gas price trend

- LNG import price of our country is linked to crude oil import price (JCC), and thus increasing.
- On the other hand, natural gas price in North America (the Henry Hub price) is decreasing as the supply and demand in the North American market has relaxed due to the increase in shale gas production.



# 1-2 Different pricing systems by region

- Currently, major LNG markets in the world are Asia, Europe and North America, each of which has a unique price mechanism for the region.

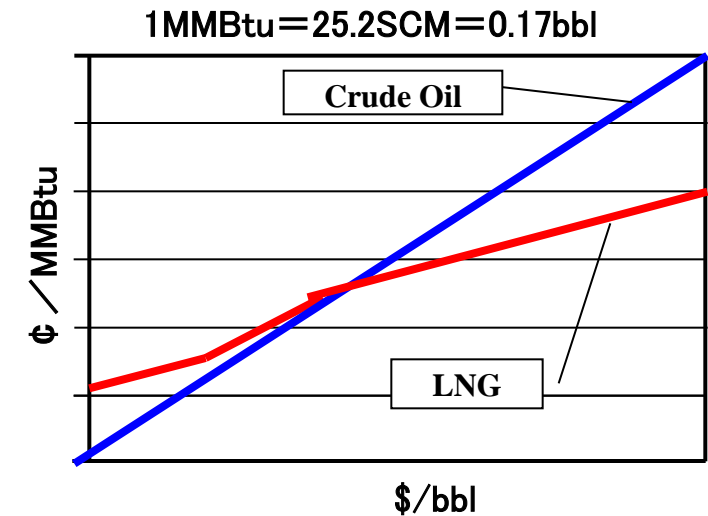


# 1-3 Pricing Mechanism of LNG (Japan/Asia in comparison to US)

## Japan/Asia

$$= a \times \text{JCC} + b \text{ (constant)}$$

- Japan' LNG Price is linked to JCC (average CIF price for imports of crude oil to Japan).
- It has relative advantage to oil price, by applying a gentler slope and an S-curve.
- But, facing the increase in global LNG demand and soaring oil prices, the seller is raising the price. It has been sharpened through the financial crisis and earthquake.

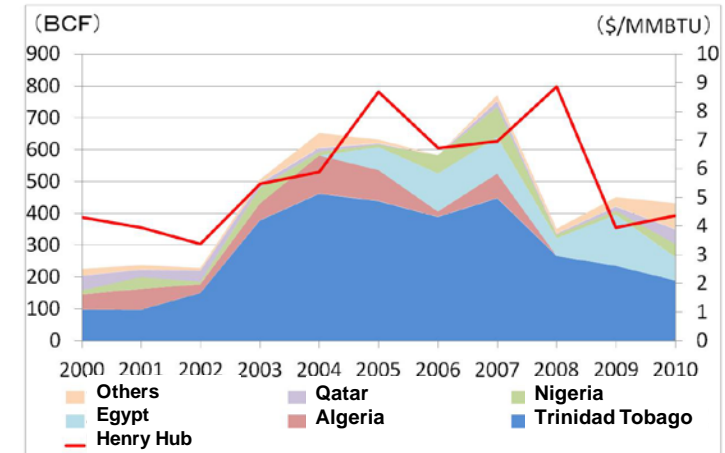


## US

$$= \text{Henry Hub price} - (\text{platform cost} + \text{pipeline transition cost})$$

- LNG price in US is a netback price (market value) which is pegged to Henry Hub, a major index for the pipeline gas price.
- Henry Hub fluctuates historically. In recent years, however, the gap between oil price and Henry Hub price has widened due to increasing shale gas output.

## LNG imports and Henry Hub Price



Source: EIA "Annual Energy Review" etc.

## 2-1 “LNG Producer-Consumer Conference”



Organizers : Ministry of Economy, Trade and Industry (METI) and the Asia Pacific Energy Research Centre (APEREC)

Date : 19th September, 2012

Participants: More than 600 attendees from 30 countries and economies.  
(10 countries out of 28 IEA member countries)  
( 4 countries out of 7 IEA key partner countries)

### List of Speakers

#### (Government)

- Qatar : Dr. Mohammed Bin Saleh Al-Sada, Minister of Energy and Industry
- Australia : Mr. Martin Ferguson, Minister for Resources and Energy
- Canada : Mr. Joe Oliver, Minister of Natural Resources
- Korea : Mr. Sukwoo Hong, Minister of Knowledge Economy
- USA : Principal Deputy Assistant Secretary, Department of Energy

#### (Private companies, etc.)

- Suppliers: Qatargas (Qatar), Pertamina (Indonesia), Gazprom (Russia),  
Major such as Exxon Mobil (U.S.) and Total (France),  
US newcomers (Cheniere Energy and Anadarko Petroleum), etc.
- Consumers: Chubu Electric Power, Tokyo Gas,  
CPC (National Gas Company in Chinese Taipei), etc.
- Others: JBIC, engineering companies, shipping companies,  
international organizations (IEA)



### Voice of Consumer countries



#### **Japan (Edano, Minister of Economy, Trade and Industry):**

We would like to enable understanding of the vision of the future of the LNG market.

For Japan, it is important not only to ensure a stable supply of LNG but also to procure it at a low cost. It is a challenge to consider a new pricing system to replace the current system which links the gas price to the crude oil price (gas-oil price link), which has lost its rationality, with one that will be beneficial for both producers and consumers. It is necessary for countries to communicate information and messages in this way.

#### **Korea (Hong, Minister of Knowledge Economy):**

Asian LNG buyers view the existing LNG trade arrangements as rigid contracts and pricing practices, which undermine the creation of efficient markets and the commoditization of Natural Gas.

Thus, both producers and consumers need to eliminate such obstacles for the development of the LNG market and this conference is the starting point toward a better future for consumers and producers.



### Voice of Supplier countries

#### **Qatar (Al Sada, Minister of Energy and Industry):**

Shale gas has uncertainties in terms of environment friendliness which need to be addressed. It is necessary to carefully watch whether the LNG export capacity of the United States will be sufficient from the perspective of the global market. In addition, as the consumer-producer balance of power is changing, we must pay adequate attention to the risk that gas price reduction will deter future investment in gas development.



#### **Australia (Ferguson, Minister for Resources, and Energy and Tourism Ferguson):**

Foreign investment is important for the development of Australia's LNG industry. In addition, an open and fair trading and investment will contribute to the energy security of the Asia-Pacific region.



# Voice of Potential Supplier Countries to Asia Pacific

### **Canada (Oliver, Minister for Resources and Energy):**

Canada is a country that can satisfy Japan's hope to secure long-term, stable procurement of energy. Combining the favorable investment environment and sound fiscal condition with world-class reserves of resources, Canada aims to supply more energy to other Asia-Pacific countries.



### **The United States (Elkind, Principal Deputy Assistant Secretary, Department of Energy):**

As for the supply-demand balance, the oversupply is being resolved, and after 2020, domestic supply will surpass the consumption rate and the United States could become a net exporter. The United States will decide whether to authorize export of natural gas in light of such factors as domestic gas supply and energy security.

For more information, please see the below link.  
[http://www.meti.go.jp/english/press/2012/0920\\_01.html](http://www.meti.go.jp/english/press/2012/0920_01.html)

## 2-3 Further Steps for Creation of New LNG Market in Asia

**Japan is starting a movement for a new LNG market in Asia.**

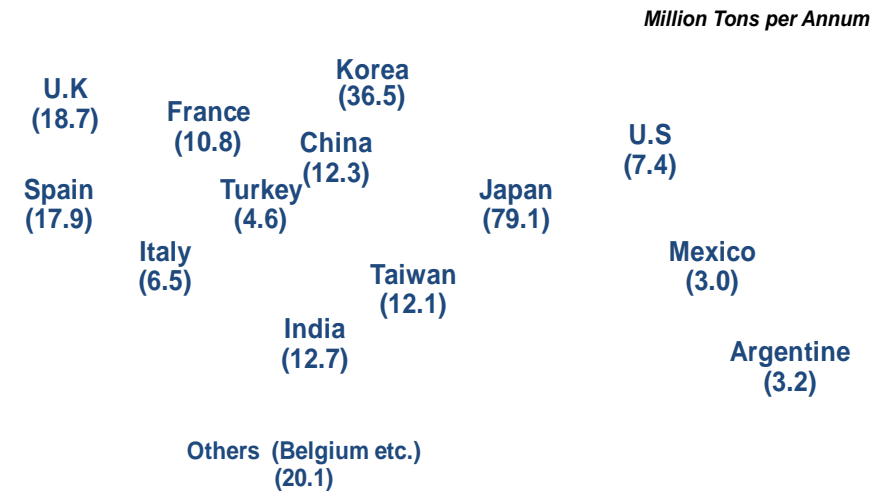
### *Japan-India Energy Dialogue*



**On October 10, Japan and India held the Japan-India Energy Dialogue .**

**We confirmed the cooperation for stable and low-cost supply of LNG and have started a joint study on “Pricing of LNG in the Asia Pacific market.”**

### *World's First LNG Futures Market*



Source: BP Statistical Review of World Energy

**A futures market is an effective measure to secure stable and low-cost supply of LNG.**

**Japan, the world's largest consumer of LNG, has initiated a study group - consisting of government and companies - to study the implications of the world's first LNG futures market.**