

Summary of expert consultations on gas between the Ministry of Economy, Trade and Industry of Japan and the Directorate General for Energy of the European Commission

In the context of the energy dialogue between Japan's Ministry of Economy, Trade and Industry and the Directorate General for Energy of the European Commission, Japanese and European experts have engaged in consultations on developments in the gas markets over the course of 2013. This cooperation had the aim of sharing respective views and analysis on the changes in gas markets in recent years, assessing how the markets should ideally function, and discussing ways government could support the transition towards more liquid and flexible global gas markets. The consultations were based on a gas market study and a study on long-term and short-term contracts in gas contracted respectively by the Ministry of Economy, Trade and Industry of Japan and the Directorate General for Energy of the European Commission.

The issues discussed were as follows:

1. Developments in Natural Gas in Japan and Europe

- **Natural gas is expected to remain an important fuel**
 - Reducing the environmental impact of energy usage and increasing energy security are challenges not only for Japan and Europe but for the entire world. With its relative environmental advantage and flexibility in terms of being able to balance renewable production, natural gas is expected to remain an important fuel in the energy mix of Japan and the EU.

- **Impact of high natural gas prices on the economy**
 - In Japan, LNG import volume increased significantly after the Fukushima Daiichi nuclear disaster in March 2011. With high LNG import prices, increasing LNG import volume is having a large negative impact on the Japanese economy in terms of a large trade deficit. The increase in the LNG import cost is imposing a heavier burden on the people and energy intensive industries due to high fuel costs.
 - Likewise, in the EU, high gas prices for retail and industrial customers have raised concerns about their impact on the economic recovery, competitiveness of the EU industry and the role of gas in the energy mix. Factors affecting energy prices in the EU, including those of natural gas, have become an issue of political importance.
 - In addition, import dependency of natural gas is growing in the EU. Therefore, promoting a fair and transparent international gas trade that ensures credible price discovery

mechanisms and a stable supply is a common issue for energy importers.

▪ **Downward pressure on import energy prices through increasing competition**

- In the EU, over the last couple of years relatively high-priced natural gas has been losing its competitive position against coal leading to investments in gas-fired power generation largely stopping and several existing plants being mothballed.
- While it is difficult to predict how the economics of each energy source will change in the future, it is very likely that sustained high natural gas prices will erode the use of natural gas in the energy mix. More competitively priced natural gas may however provide opportunities both in the EU and Japan, both in current uses and in new uses such as transport.
- In Japan, too, the liberalization of the electricity market and promotion of renewable energy is underway. Sustained high prices of existing LNG contracts are leading new investments in lower cost LNG projects and may eventually also lead to investments in fuel sources other than natural gas.
- Thus, for natural gas to continue to be the “energy of choice,” it is important to strengthen its price competitiveness.

2. Increasing the Competitiveness of Natural Gas as a Fuel

▪ **Increasing the credibility of the natural gas price**

- Natural gas price should be mutually acceptable and beneficial for producers and consumers. For producers, a price that enables them to recover the large long-term investments needed to develop gas resources is necessary. For consumers, a price which is competitive relative to prices of other energy sources is desirable. Extremely low or high prices can result in underinvestment and demand destruction, which is not beneficial either for producers or for consumers.
- It is essential to increase the credibility and transparency of the international natural gas prices. Oil-linked pricing for imported gas in Asia and continental Europe have been questioned by energy importers, mainly because the two fuels are no longer in direct competition either in Japan or Europe.
- A price that reflects supply and demand fundamentals of the natural gas market, would contribute to the sound development of the gas market, with benefits for both producers and consumers.
- Hub pricing is one of the pricing methods that can be regarded as credible and rational by both producers and consumers because it is expected to reflect market fundamentals, provided it is determined in a transparent manner. In both Europe and Asia, diversified

pricing options with more gas-to-gas pricing is becoming a clear trend. However, this does not mean that individual sellers and buyers are limited only to hub or LNG spot pricing.

▪ **Increasing the liquidity of the gas market**

- Difference in regional prices is currently much wider in gas than in oil or coal. That is not only because of the high cost of transporting natural gas and differences in the supply-demand balance but also because of the low liquidity of the international natural gas market.
- A liquid international gas market would optimize the global supply-demand balance efficiently, help stabilize prices through arbitrage and enhance emergency preparedness.
- Therefore, it could be useful to consider in the broader international context whether and how certain industry practices, such as destination clauses, prevent the development of a liquid international natural gas market. The EU has experience in applying competition law to address practices such as the use of destination clauses. Enhancing flexible procurement conditions is an area that players in the Asian gas market can learn from experiences in the European gas market.
- Nevertheless, notwithstanding the general aim for more flexible market structures, the relevance of longer-term commitments for a large scale international gas project to be realized may be warranted.

▪ **Balanced supply and demand of natural gas**

- The price of natural gas is also a function of demand and supply, where a balance between the two contributes to price stability.
- That said, more gas-to-gas competition may potentially also lead to price signals which are capable of resolving any supply-demand imbalances.
- There is an abundant global resource base of natural gas for the foreseeable future. Timely and adequate investment is critical for ensuring stable and uninterrupted supply and therefore prices that are acceptable for consumers. A continued dialogue between gas producers and consumers is important to foster mutual understanding of demand and supply trends, and to avoid any sustained mismatch between the two.
- When it comes to new producers (e.g. in East Africa), the experience of mature consumer countries could be usefully shared with those countries trying to establish an appropriate investment, regulatory and environmental framework for the development and exploration of their gas resources.

In light of EU and Japan's similar concerns and interests as energy consumers, the experts on both sides will continue examining trends in the gas markets, bearing in mind their respective energy challenges and objectives, including on the EU side, the decarbonisation objective. In addition, in order to specifically benefit from a broad base of expertise and best practices on LNG markets , the EU and Japan consider launching a Multilateral Joint Study Group on LNG, which could also include experts from other countries and organizations and could be coordinated under the aegis of the IEA.