


THIRD IEF-IGU MINISTERIAL GAS FORUM



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DIALOGUE INSIGHTS

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MAIN DISCUSSION TOPICS AND FINDINGS

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KEY INSIGHTS

- Developments in regional gas markets have global consequences; for example, coal to gas switching in the US engendered gas to coal switching in Europe. Markets remain interconnected and interdependent, despite the recent “re-regionalisation” of gas markets.
- More dialogue is required to analyse possible changes to the structure of gas contracts. Long-term contracts help ensure security of supply and demand, but there may be room for these contracts to incorporate more short- to medium-term market signals.
- When faced with multi-billion dollar investment decisions, gas companies weigh their decisions heavily on the degree to which the “rules of the game” in the target jurisdiction are expected to remain stable. Policymakers must balance the short-term nature of their mandates with the long-term goals for the nations they represent.
- Most stakeholders and market actors do not grasp the degree to which renewables need gas as a backup.
- Improving the availability, quality and timeliness of gas market data will contribute toward reducing uncertainties, facilitating project planning, and encouraging investment over speculation.
- Industry and government should work together to address “herd mentalities” – whereby many firms rush to invest in and develop the same market – as this creates challenges (such as human resources constraints) for all players.
- Future gas demand levels for transportation remain a “known unknown”, and discussants agreed that this warrants close monitoring.

1. EVENT BACKGROUND

The Third IEF-IGU Ministerial Gas Forum was held in Paris, France, 16 November 2012, with the participation of Ministers, government representatives, industry leaders from gas producing, consuming and transit countries, international organisations and experts from developed and developing countries. The central theme of the Forum was “Call for Sustainable Energy Policies and Improved Cooperation – Enhancing the Role of Natural Gas”.

2. RECENT DEVELOPMENTS

Participants discussed the prominent trends in the industry and noted that the global gas scenario is currently being reshaped on various fronts. While gas markets remain regional, the rapid expansion of shale gas resources in the US has altered market dynamics and offers significant long-term potential for gas exports from the US. On the demand side, developing countries have begun to use more natural gas while some traditionally major markets have seen their demand level off or decline.

In light of the faltering global economic recovery, energy consumption in OECD nations fell in 2011 – though global energy demand overall grew because of the increased consumption in non-OECD countries. The Asian gas market represents the main engine of demand growth, supported by strong Japanese LNG imports and the rapidly expanding Chinese market.

Discussants commented on how the low price of natural gas in the US has made it preferable to coal for use in domestic power generation, and cheap US gas has prompted a steep rise in exports of US coal to Europe for use in power generation. In other words, coal to gas switching in the US has been sparking gas to coal switching in Europe. This example illustrates that even though gas markets remain regional, developments in the regional gas markets have far reaching impacts.

There was a fair amount of discussion about the interplay among gas, coal, renewables and nuclear. The point was made that policymakers in Europe must endeavour to balance the realities of ambitious renewable energy policy objectives with the realities of economics (i.e. coal is cheap). A participant noted that when the sun doesn't shine and the wind doesn't blow, someone must keep the lights on. In other words, renewables need gas – but this message has not been clearly communicated to actors and stakeholders.

The Fukushima accident prompted many countries to revisit their national energy policies. The potential adverse impact on the development prospects of nuclear power worldwide may have significant implications for gas demand.

Overall, discussants agreed that gas is on the rise. One participant noted that when looking at the last five years, estimates for production and demand for gas have consistently been lower than market realities. This point was reinforced by another participants who described gas an “underestimated fuel.” There appeared to be consensus that while gas is typically discussed in relation to other fuels, it is increasingly warranting more attention in global dialogues and debates.

3. LONG-TERM PROSPECTS

Forum discussants noted that proven global gas reserves have risen from 131 trillion cubic meters (tcm) in 1991 to 169 tcm in 2001 and 208 tcm in 2011, which is sufficient to meet demand for 60 years at current production rates. They observed that adding recoverable unconventional gas resources to the proven reserves could raise the global resource estimate to 250 years of current production.

Participants noted that according to recent projections, natural gas demand should increase by an average of 1.7 % per year to reach 4,750 bcm in 2035. More than 80% of the projected increase in natural gas demand is expected to come primarily from non-OECD countries (mainly Asia, with China showing the largest growth).

Discussants spoke about transport demand for gas. The speed and reach of transport demand adoption rates is tough to gauge, though around six million tons/year of LNG are currently being used in China for transport. Speakers acknowledged that they may well be underestimating transport demand, which may surprise on the upside.

4. INVESTMENT

An important point discussed in Paris was that natural gas development projects involve large capital expenditures and long-term operational commitments. Huge investments are required throughout the entire value chain to produce and deliver natural gas to end-consumers. Estimates of the cumulative investment needed to meet projected gas demand from 2011-2035 amount to around US\$ 9.5 trillion, or an annual average of US\$ 380 billion. In light of the numerous uncertainties that impact investment choices, the gas industry faces some challenging decisions ahead.

Participants observed that when firms must make investment decisions in the US\$30-50 billion/project range, they quite understandably need some reassurances that costs and prices are not likely to change unexpectedly. A discussant requested that policymakers be consistent with regard to their requests from the gas industry. For example, governments want gas to be cleaner and safer. This drives up the costs for producers, and subsequently drives up the price to the end user. With higher prices, policymakers may clamour for lower costs. Again, participants made an appeal to governments for well-reasoned public policy stances with regard to energy overall and gas more specifically.

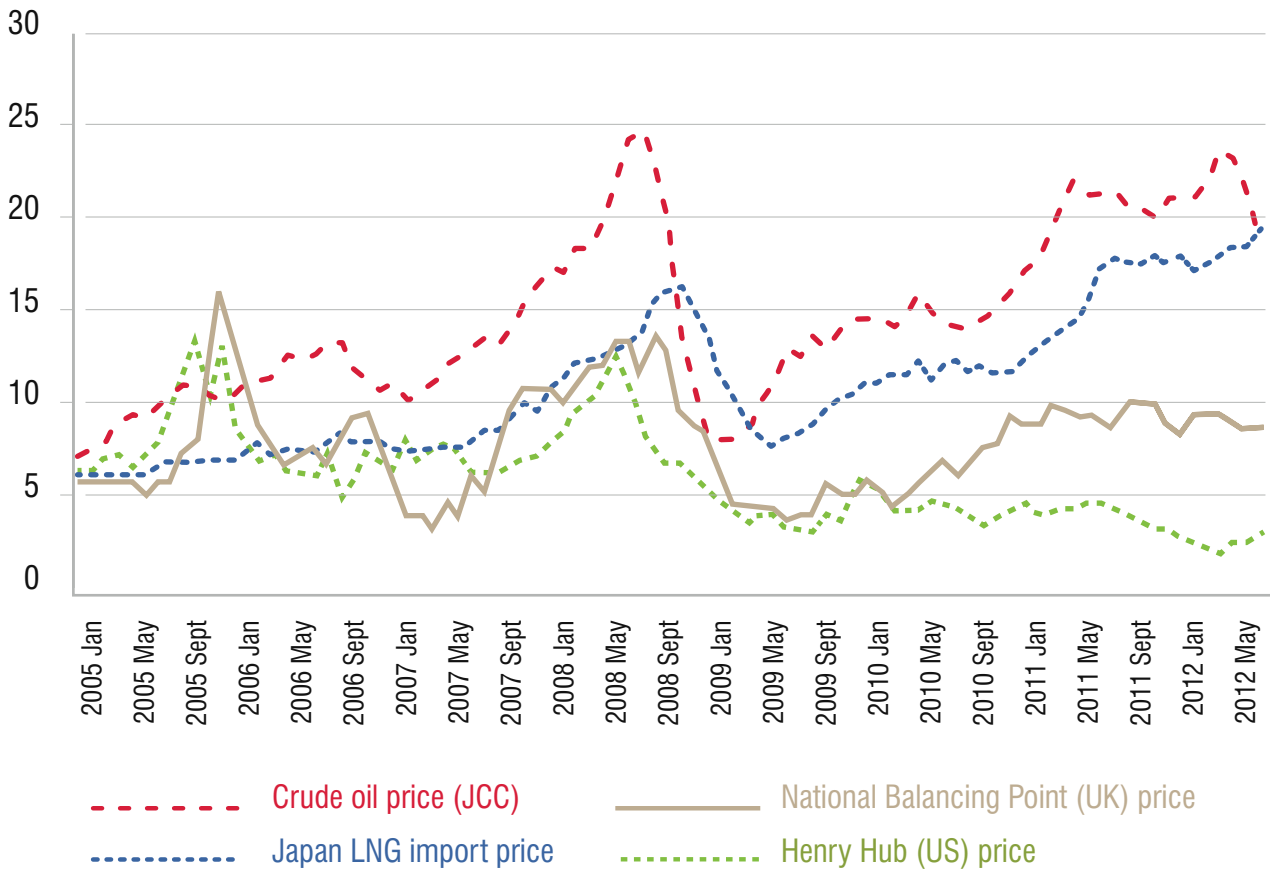
A shared view among various participants was that long-term commitments and stability are needed to continue to invest and facilitate gas developments. Governments were encouraged to make every effort to ensure that the “rules of the game” remain as constant as possible. Some experts mentioned that ensuring long-term stability can sometimes present a challenge for public officials, as they may be in office for 2-4 years but are expected to make decisions that may only bear fruit in 10-20 years. Deepening the dialogue around these short- and longer-term policy decisions is at the core of the IEF’s mission.

5. GAS MARKET TRANSPARENCY

Forum participants discussed gas market transparency and affirmed that, in light of recent growth in global gas trade and increasing volumes of LNG traded on the spot market, the availability of data is becoming increasingly important to ensure the smooth functioning of gas markets. Improving the availability, quality and timeliness of gas data will contribute toward reducing uncertainties, improving predictability and facilitating project planning. Discussants noted that market players in all regions have an interest in seeing an improvement in the quality of information and data, to enable them to make more informed business and investment decisions. Participants were briefed on the progress made by the IEF and the Joint Organisations Data Initiative (JODI) regarding gas data collection. The JODI-Gas database is scheduled for public launch in 2013.

6. REGIONAL GAS MARKETS DYNAMICS AND PRICING

Price evolution in the three regional markets (\$ / mmbtu)



Source: EIA

Forum participants held in depth discussions about the current gas pricing mechanisms and noted that the difference in prices among the US Henry Hub, European prices and Asian LNG contracts has never been so wide (see graph). Despite recent increasing volumes of traded LNG, the elusive prospect of one global gas price has not materialised and appears unlikely to take shape anytime soon. The rapid growth of shale gas in North America has slowed or reversed the move toward globalisation and price convergence – engendering a “re-regionalisation” of the international LNG market. European gas prices continue to be influenced by oil price movements, gas prices in the US spot market are totally disconnected from oil prices, and LNG imports in Asia are oil-indexed. There are huge differences in the regional markets: production is booming in the US; in Europe gas is squeezed between coal and renewables, with the price is somewhere between levels in the US and in Asia; in Asia the price is at record highs.

After discussing the pricing mechanisms, many Forum participants insisted that in order to safeguard the security of supply (which benefits both producers and consumers), the industry needs some form of long-term commitment to justify the massive investments required to expand capacity.

Some discussants observed that producers should accept that long-term contracts be adapted to market conditions, while consumers need to develop a better understanding of the fact that security of supply comes with a price. They observed that, while the degree to which gas prices are indexed to oil is expected to diminish, long-term oil indexed contracts are not expected to disappear anytime soon. The Japanese Crude Cocktail (JCC) pricing mechanism is making less and less sense, as Japan doesn't use oil for power generation – thus, oil and gas are not substitutes. Some participants stated that there will always be some correlation among fuel prices as they are to some extent, substituting each other and that the important issue is the level of price – not the pricing mechanism.

On the topic of investment and pricing, another observer posed this question: if gas were only traded on the spot and futures markets, would that provide enough visibility and predictability to safeguard long-term planning and the security of supply?

7. INTERGOVERNMENTAL COOPERATION AND INDUSTRY PARTNERSHIPS

Forum attendees stated that governments and industry should promote cooperation and collectively recognise the interdependent nature of the industry and its importance to the global economy. Bilateral and multilateral agreements and solutions will be needed to support the new infrastructure required to jointly explore and exploit new gas reserves. This will require long-term cooperation between gas producers, consumers and transit countries.

One participant noted that the industry and government should work together to try to address “herd mentalities”. For example, if all private firms decide to invest in LNG in Australia, then they will all face widespread human resources challenges. If all firms next move to Africa, they'll face similar challenges. It remains to be seen what solution is best for addressing this coordination issue, though the International Energy Forum is currently analysing this and it will likely be a topic of discussion at the Third IEF NOC-IOC Forum (Delhi, 2013).

Discussants also noted that gas-based partnerships between national and international oil companies are expected to grow, as their respective interests are more likely to converge in the natural gas business. The relationship covers the whole value chain: from resource development to gas transportation and transformation, to downstream and marketing.

Forum participants observed that industry partners share a common interest in persuading their respective governments that short-term solutions do not provide the best environment to address long-term challenges, and that commercial ties and agreements can be made more robust even in the face of a persistently volatile business environment.

The insights presented in this Brief are for general reference on the diversity of perspectives expressed, and should not be interpreted as reflecting the participants' consensus nor the specific views of the organisations that hosted the event.