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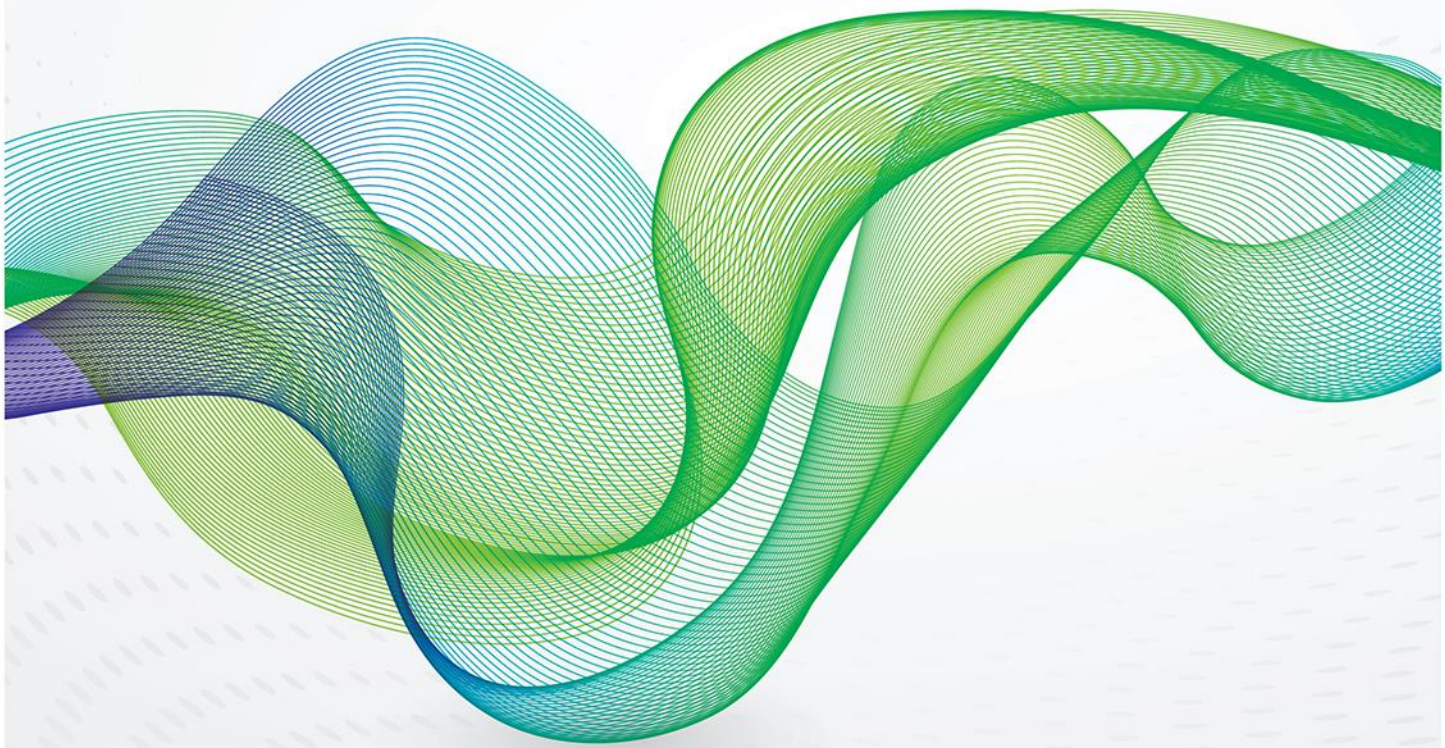
The new Japanese LNG strategy: a major step towards hub-based gas pricing in Asia



OXFORD ENERGY COMMENT

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Introduction[1]

The English language press devoted very little attention to what may be the most important LNG development of 2016. In contrast to the arrival of the first cargo of US LNG which sent journalists into to a frenzy of `Russian pipeline gas versus US LNG price war' rhetoric, the publication by the Japanese Ministry of Economy, Trade and Industry (METI)'s *Strategy for LNG Market Development*[2] at the G7 Energy Ministerial at the beginning of May passed almost unnoticed. The importance placed on LNG at such a high level meeting reflects the emerging realities of Japan's future energy and power mix. While the Energy Strategy unveiled in mid-2015 foresaw 20-22 percent of nuclear in the power mix by 2030, this appears very ambitious to most observers, with an increased use of renewables, coal and LNG a more likely outcome. But in the absence of CCS, greater use of coal rather than LNG would present challenges to emission targets and, despite a drop in LNG imports in 2015, for these reasons it appears likely that LNG will continue to represent a key component of Japan's future energy mix. Given the impact of high oil and LNG prices on the country's trade balance over 2010-14 and on the financial health of gas and power companies, LNG will be more acceptable if it is affordable which, in Asian buyers' eyes, means at prices delinked from oil.

The Strategy's main proposition that Japan, as the world's leading importer can, `play an initiator role in creating a global LNG market', is an ambitious aspiration, but two developments seem certain: first the strategy heralds the biggest shake-up of the Japanese gas and LNG market since its creation in the 1970s. Second it is a declaration that traditional crude oil-linked (JCC) pricing has reached the end of the road, and will be followed by a new era of market-based pricing. This brief comment sets out the major elements of the strategy and the consequences for LNG trade with Japan, and potentially more broadly throughout the Asia-Pacific region.

Major elements of the strategy

The main goals of the strategy are the development of a flexible and liquid LNG market and the creation of an LNG trading hub. Flexibility will be achieved by the expansion of spot trade and pricing which `properly reflects the actual supply and demand of LNG'. This will eventually achieve the goal of creating `an internationally recognized hub by the early 2020s'. The three fundamental elements needed to achieve these goals are the enhancement of trade, the creation of a proper price discovery mechanism, and open access to facilities. Legislation passed in 2015 will create third party access to regasification terminals in 2017 and separation of network assets from supply businesses of the three major gas companies by 2022 (liberalisation of the electricity industry started in April 2016).

While these aspirations may not seem particularly remarkable to those already operating in liberalised gas markets, they are revolutionary in the conservative world of Pacific LNG. Of course publishing a strategy could be said to be the `easy part'. But to be fair the document addresses many of the difficult implementation issues, and although it stops short of any suggestion of direct intervention in commercial negotiations, it is evidence of a determination to ensure that the regulatory elements to support liberalisation are in place.

Destination clauses

Japanese utilities have long complained about (what Europeans call) territorial restrictions in long term contracts which require cargos to be delivered to the market of the purchaser. Even outside of Japan this has become highly problematic as demand in some markets has fallen short of anticipated requirements and buyers are obliged to take contracted volumes (in order to honour take or pay clauses) for which they may have no requirement. Since 2011 it has inhibited trading between parties

[1] The author would like to thank Anne-Sophie Corbeau, James Henderson, David Ledesma and Howard Rogers for comments on a previous draft. Jonathan Stern is the author of the chapter on LNG pricing in a new book: *LNG Markets in Transition: the great reconfiguration*, eds. Anne-Sophie Corbeau and David Ledesma, to be published by OIES and KAPSARC in September 2016.

[2] METI, *Strategy for LNG Market Development: creating flexible LNG market and developing an LNG trading hub in Japan*. May 2, 2016. http://www.meti.go.jp/english/press/2016/pdf/0502_01b.pdf

with surpluses (mostly in Europe) and those with shortages (mostly in Asia) when the price signal provided a strong incentive for cargos to move to the Pacific. This gave rise to the bizarre practice of `reloading' – unloading a cargo into a storage tank (to comply with the clause in the long term contract) and immediately reloading it on to the same ship for delivery elsewhere. For the next few years, Japanese buyers are likely to have contracted quantities in excess of actual LNG demand, and therefore elimination of destination clauses is increasingly relevant.

Financing new LNG projects with spot indexation

Mindful of the widespread view that long term contracts have traditionally been required as essential for new projects to be financed, METI has been bold enough to suggest that: `it would be advisable for financial institutions to positively review their financing policy in response to current and future…changes'. The government's JBIC and NEXI financing policy will reflect the priority of moving towards shorter term contracts and developing a liquid market. The strategy acknowledges that: `at present as LNG spot trading has yet to gain sufficient momentum, there are still no price indices that are widely accepted by market players'. This is a recognition that the spot JOE prices, reported by METI since April 2014, have not been embraced by the market as a reliable indicator on which to base contract prices. METI would still like to see the development of price indices based on specifically Japanese transactions and, recognising the traditional confidentiality of the LNG business, suggests that: `it may be important for both parties to permit anonymous information disclosure to an agreed PRA from the perspective of developing better indices'. Further support for this process is provided by the provision that: `In order to increase the appropriate use of price indices, LNG trading contracts using such indices will be positively taken into account for evaluation of national interest by..JBIC, NEXI and JOGMEC.'

What might this mean for LNG contracts and prices in the Pacific Basin?

Japanese LNG pricing

Heavily influenced by this policy, the country's single biggest LNG buyer JERA (a joint venture of Tokyo Electric and Chubu Electric) has already said publicly that it: favours a move to market prices, will diversify its purchase portfolio away from long term contracts, will not sign any new contracts with destination clauses, and plans to renegotiate some of the terms of existing contracts. To the extent these initiatives are successful, it would be expected that other Japanese buyers will follow suit. But this raises questions as to how the transition to a different pricing and contractual structure will be managed. Any parties signing contracts for new LNG projects – which given construction lead times cannot start to deliver gas until the early 2020s – have been left in no doubt that price terms will need to be consistent with the evolving Japanese hub.

For the development Pacific LNG prices and hubs more generally

With the Singapore SGX already promoting its SLInG price which has longer term potential to evolve into a regional south east Asian hub price, and the Shanghai (Petroleum Exchange's) hub trading small volumes of LNG, it could be argued that METI has needed to scramble to catch up with events elsewhere in Asia. However, the Japanese strategy is altogether more coherent, better argued and geographically more convincing than those of its competitors. Singapore is further advanced in terms of liberalisation and transparency, but is relatively small with limited growth potential and geographically distant from major LNG markets. Shanghai has huge potential volume and diversity of domestic and imported gas, but Chinese government policy in respect of market development is less clear, and it risks being considered open to manipulation by the three state-owned companies which dominate the gas market. However, there is no reason why these three hubs could not coexist in the Pacific region (and develop strong price connections).

A truly liberalised Japanese gas market with prices determined at a physical hub (which could become virtual as and when greater national pipeline connectivity is established) is an entirely serious aspiration. But timing is everything. The Strategy's projection that the hub will be created only in the early 2020s is refreshingly realistic, in contrast to previous announcements of the launch of a futures market. But there is much to be done before the necessary conditions (third party access to LNG and pipeline infrastructure, transparency, establishment of a wholesale gas price) are fulfilled which are essential for a trading hub with a trusted price discovery mechanism to emerge, particularly since

separation of networks from supply will only be completed in 2022. But as we saw in Continental Europe in the late 2000s and early 2010s, one of the most important changes needs to be in the mentality of established market players. Once the latter accept that hub pricing will become the norm within a few years, they will start to position themselves to take advantage of – or at least not to lose out from – this new commercial environment. Despite the financial battering to which electric utilities have been subjected following the closure (and very slow reopening) of their nuclear stations, the Strategy has put all market players on notice that government will have little sympathy with those who fail to adapt to the new competitive gas (and power) market which is expected to develop.

Transition to hub pricing: cooperation or conflict?

It will clearly take time for competition to take hold in the Japanese gas market, but in relation to timescales for new LNG projects, the early 2020s is somewhere between tomorrow and the day after tomorrow. The immediate question is whether the market will manage a smooth transition to hub pricing. Here the Strategy is somewhat less convincing:

> `In addition to collaboration with major LNG consumers, cooperation with LNG producers, such as Qatar, Australia, Russia, and the United States is needed. Japan will contribute to discussions mainly at G7 meetings and LNG Producer-Consumer Conference meetings and present concepts for an ideal LNG market…in order to further expand international cooperation, Japan will proactively communicate its approach in this field on such occasions as multinational meetings of the G20, APEC, and EAS, as well as at bilateral meetings with major LNG consumers in Asia and the EU that have announced a policy prioritizing LNG use.'

Cooperation with other consumers in Asia should be straightforward, if by this is meant solidarity in switching to hub pricing and a trading mentality. But LNG exporters, especially those with major projects which have required tens of billions of dollars of investment - capital costs which are substantially higher than originally planned - and which are just starting production (or due to start in the period up to 2020), already battered by price levels not seen since the early 2000s, may have little appetite for `cooperation'. They are trying to recoup as much money as they can from their traditional (JCC-based) long term contracts in a market where demand growth is currently much lower than was anticipated. Offtakers locked into 20 year contracts for US LNG at Henry Hub plus prices may be similarly concerned as the `Asian premium' prices on which they were relying to cover their full costs have already disappeared and, with the emergence of hub pricing in Asia, are not likely to reappear. This suggests that a period of commercial conflict over pricing – not unlike that just experienced between Continental European buyers and their suppliers since 2009 – is a more likely prospect.