Despite supply and infrastructure constraints, Chinese gas demand has been growing faster than income levels and additional latent demand is expected to be unleashed once connectivity and supply security are enhanced. The State Council’s recently announced the goal of establishing gas supply capacity of 400-420 Bcm by 2020 is further testimony of the central government’s resolve to achieve high gas penetration levels in the longer term as part of a determined effort to combat pollution amid the softening and rebalancing of economic growth. To achieve that goal, annual gas demand will have to continue to grow by more than 10% over the next six years, implying a more than doubling of gas demand from the 2014 level. However, the share of gas in the total primary energy mix would most likely remain lower than 15%.

With the introduction of a more market-oriented pricing mechanism, Chinese gas demand will become more closely correlated with pricing reform. The speed at which the price of existing and incremental gas converge and tiered gas pricing is introduced will have a strong impact on Chinese sectoral and regional gas demand, which is becoming increasingly sensitive to the economics of LNG and pipeline imports. The degree to which gas demand will respond to price changes will depend largely on various regional market fundamentals, the level of accessible pipeline connectivity and the perception of gas import availability. Regions that are more developed economically and have relatively fewer alternatives tend to be more able to pay higher prices and pass through costs to end users. However, there is an increasing reluctance to pay premium LNG prices and a growing trend towards accelerating the sourcing of alternative supplies.

Ultimately, a more comprehensive gas pricing reform would need to reflect the relative price (and environmental costs) of coal and the degree of gas substitutability in the major consuming and producing regions in order to mobilize market forces to promote coal replacement – especially in the power sector. Assuming the gradual electricity market liberalisation would be more reflective of environmental costs and benefits of various input fuels towards 2020, a more effective gas price reform based more on the market price of alternatives would emerge along with end-user price sensitivity. At the same time, the recent refocusing on nuclear and renewables as sources for power generation would create competition for gas and imports.

By and certainly beyond 2020, China’s gas pricing could well assume a wider regional significance as China will have the largest importing capacity in Asia and have the most diversified (and relatively...
balanced) portfolio of supplies, means of transport and routes¹ as a result of its relentless quest for optionality. This increase in its market power may allow China to create various domestic regional markets with benchmark price that interact with import price levels. But its ability to do so will also depend to a large extent on the progress in accessible connectivity, domestic unconventional gas, and robustness of demand in response to economic rebalancing and pricing reform.

About the Author

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¹ Over the years, China has established four different sources of supply: onshore domestic gas (increasing its efforts in unconventional gas), offshore domestic gas, international pipeline gas from Central Asia, Myanmar and more recently Russia (towards 2020), and imported LNG from a variety of sources.