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China Gas:
Pipeline company reform has potential to stimulate gas demand but recent price cut unlikely to have any impact

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Introduction

China's Five Year Energy Plan announced in 2017 sets out the reform objectives for the sector, which are largely focused on environmental improvements which themselves are expected to be heavily driven by increased use of gas. The objectives include promoting gas and renewables at the expense of coal, increasing the proportion of gas-fired power generation to 5% of total capacity as well as broader gas sector reform, including pricing reform.

While these are all positive statements of intent, the key to their effectiveness was always going to be in their implementation.

Two key reform issues

We see the two key reform issues underpinning increased demand for gas, and hence environmental improvements in China, as being infrastructure reform, particularly third party access to infrastructure (TPA), and gas price liberalization. In recent weeks there have been signs of some progress on both issues. Following statements made at the "Two Sessions" meetings in Beijing in March, there are signs of some potential progress in the months to come on third party access and there has been a recent – albeit modest - price adjustment.

The government's broader aim of course is to stimulate gas demand and it wants lower consumer prices as a way of achieving that. In the past it has simply enforced price reductions (which created losses for the NOCs that import gas from world markets) but now – with its proposal to create a national pipeline company - it seems to be turning its attention seriously to reducing the actual costs of the industry and promoting more aggressive competition between suppliers as a way of getting prices down and stimulating gas demand.

Other things – such as international gas prices - being equal, the government will certainly want to see end-user prices moving lower. It should stimulate demand for gas, improve the environment and will almost certainly play well with the wider population – an ongoing concern of the government.

The argument for this is that there seems to be plenty of gas available on the spot market at prices substantially lower than the NOCs charge (because the latter have bought substantial volumes at relatively high term prices to deliver to China to meet its growing demand).

Third party access to infrastructure

What has prevented that gas getting to customers in China is the lack of third party access to terminals and pipelines, which is where the proposed national pipeline company becomes important. If that really does get established, and is effective in its operation, it ought to open up the market for other gas sellers – of which there are already a few, albeit relatively small - to gain access to a wider range of customers in China and therefore put pressure on prices.

The major oil companies see it differently of course. From their point of view, price liberalization is a good thing – as long as they are permitted to raise prices to reflect the high cost of their supply of term gas to customers in China. The NOCs would also need to frustrate the desires of the independent gas suppliers to get their gas to market if they were to be successful in raising prices – which might suggest they will drag their heels on the implementation of this new national pipeline company.

Despite the recent statements by the government, we should not expect overnight progress on the creation of a functioning national pipeline company, even if the legal establishment of the company does take place this year. Many issues remain to be resolved, including exactly which hydrocarbons will be transported by the company, which assets are included in the company, how those assets are valued, the ownership stakes each of the majors will have in the new midstream company and who will ultimately manage the new company.

Only once issues such as these are resolved does TPA have a chance of becoming reality. Its early stages are likely to involve better interconnections between the NOCs' own infrastructure (and we already see signs of progress in this area) which will improve utilization and efficiency, while effective third party access by alternative suppliers is only likely to develop after these physical changes take place. Once effective TPA does begin to happen we will be able to make an informed judgment on the impact that it has on prices.

The signs are not necessarily encouraging. While CNOOC has offered to give private companies access to its LNG regas facilities if they trade on the Shanghai exchange, that offer comes with a requirement that the companies buy two of their four allowed cargoes from CNOOC at prices based on the latter's long-term contract prices. While this may have some attraction for new entrants, it also highlights the challenges that third party access is going to have to overcome if it is to be effective.

The good news is that we will not have to wait too long to get some indication as to whether the idea of a new and independent pipeline company is likely to become reality in China, or whether the oil companies will be able to slow-walk the plan for the new company because we believe that by mid-year there ought to be some announcements, or even actual progress, on the creation of the pipeline company itself. Hence by the autumn we ought to have a clearer understanding of the potential impact on end-user prices and on demand.

Gas price liberalization

The one caveat we would make regarding the impact of TPA on domestic gas prices **is** that the effect ultimately depends on the government adjusting prices and actually implementing changes in line with its pricing formula.

In 2015, Beijing promised complete price liberalization by the end of 2017. We are of course still waiting for that to happen – although, as we note, the potential creation of a national pipeline company will likely spur greater competition and should lead to lower gas prices despite concerns that the national oil companies (NOCs) could use the opportunity to increase prices rather than lower them. Competition – if it is actually effective after TPA is introduced - is likely to prevent that.

The National Development and Reform Commission (NDRC) lowered city gate prices on 1 April. However, this was really just a minor technical reduction. The NDRC marginally lowered city gate prices and cut some provincial pipeline tariffs because the rate of VAT had been cut from 10% to 9%. So even if the NOCs were not going to try and claw the cut back by raising prices as a way of recouping the losses they make on their sales of imported gas – which they *are* going to do – it is not a meaningful change.

The last major price reform actually took place in June 2018, when residential prices were raised to the same level as industrial prices with the aim that they would meet the cost of supply and help address the shortages which emerged at times of peak demand (China had then just been through a winter of severe shortages caused by the over-enthusiastic switch from coal to gas in northern China).

Province-level initiatives

Since then very little has really happened at the national policy level. However, there have been occasions when regional authorities have tried to take charge of developments to improve gas supply and stimulate demand in their provinces.

Fujian for example wants to take control of the province's pipeline and LNG import infrastructure which - unusually for a Chinese province - it does not fully own, to help it develop the gas sector. It claims that local gas demand is only half as much as it should be as a result of LNG prices being so high since CNOOC has an effective monopoly over direct supplies to the province.

Guangdong province, China's southern economic powerhouse which consumes 8% of China's gas, has also been trying to stimulate its gas demand. It wants to see a 44% increase in gas use by 2020. The power sector represents more than half of Guangdong's gas demand compared to just 20% across China – so that has become an unusually important segment in Guangdong. Residential and industrial demand is much smaller than elsewhere in China (only 48% of demand in Guangdong against 70% in China as a whole) and the provincial government particularly wants to stimulate gas demand in these sectors as a way to improve the local air quality. While this is not as severe a problem in Guangdong as it is in Beijing, Guangdong cannot ignore the central government's environmental instructions.

However, gas is expensive in Guangdong, coming from Central Asia through the West-East Pipeline and from offshore production and international markets through LNG import terminals. As a result, Guangdong's citygate price is also the highest in China at more than RMB 2/cm and that translates into high end-user prices – around RMB 3.50/cm ($15/mmBtu) against less than RMB 2.75/cm ($12/mmBtu) in other provinces with similarly high gas demand.

A year ago the provincial government said it wanted to agree a price cut with PetroChina for gas delivered to Guangdong through the West-East pipeline. It only wanted a 4% cut to RMB 2/cm ($8.50/mmBtu) but there has never been an update on whether that reduction happened and we have to assume that PetroChina was not particularly receptive to the idea of a price cut.

Instead, Guangdong has since focused on cutting costs along the gas supply chain:

- It has capped the tariffs charged by the local gas distributors in cities to a maximum of RMB 1/cm above the purchase cost of gas
- Separately the government had already capped end-user transport tariffs at RMB 0.20/cm
- Local authorities in Guangdong now subsidize gas use in poorer households which should reduce end-user tariffs down to RMB 3.30/cm
- Coal to gas switching is underway to stimulate demand with factories being told to replace their coal boilers with "recommended" gas-fired boilers
- The government has also ordered cities to build more pipelines so that all the province's industrial centres are on the grid by 2020 while at a provincial level 21 additional cities in the less developed northwest and eastern Guangdong are being connected to the grid.

To encourage competition and increase gas supplies, CNOOC is being pressed to open up its LNG import terminals in Guangdong to other companies, including PetroChina, while a new private LNG terminal is being built to serve western Guangdong and two further terminals are under consideration.

Cost reduction along the gas chain is also becoming more of a focus. CNOOC recently highlighted that it had sent 24 containers of LNG across the sea and up a river earlier this year with the stated reason being that it showed that costs could be reduced by being innovative (although other concerns such as potential inland supply shortages or the high cost of trucking LNG may also have played a part). Domestic LNG costs around $12/mmBtu to produce, so if it is to be competitive it needs to reduce transport costs – as well as source lower-cost imported gas.

The government has contributed to this process as well. The major oil companies now have to disclose the revenues and costs from their pipeline segments, which has provided additional information to those arguing for greater transparency as a way to lower costs – in fact the disclosure of this information is widely credited with sparking the price cut last year which reflected the lowered cost of gas transmission.

Conclusions

The proposed creation of a national pipeline company has the potential to reduce the price of gas to consumers and consequently stimulate gas demand – provided it is managed correctly and the NOCs do not find ways to block its creation. Greater transparency on costs in the gas distribution system is also likely to lead to lower consumer prices in the medium-term. However this month's price cut will have no impact on demand and we will need to wait for the autumn – by which time we expect to see further announcements on the pipeline company formation – before we can make a judgment on its likely impact on end-user pricing in China.