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Unfolding the upstream reform

Welcome to our second issue of China oil and gas reform series. In the first issue, we went through the reform tasks and their implications throughout the value chain. The second issue will focus on upstream reform, which aims to put diversified industry players on equal footing with national oil companies for upstream exploration and development.

The hope is that reforms will introduce private and foreign companies to engage in China's upstream business with fresh investment under a more relaxed business environment and more partners can be attracted to production sharing contract.

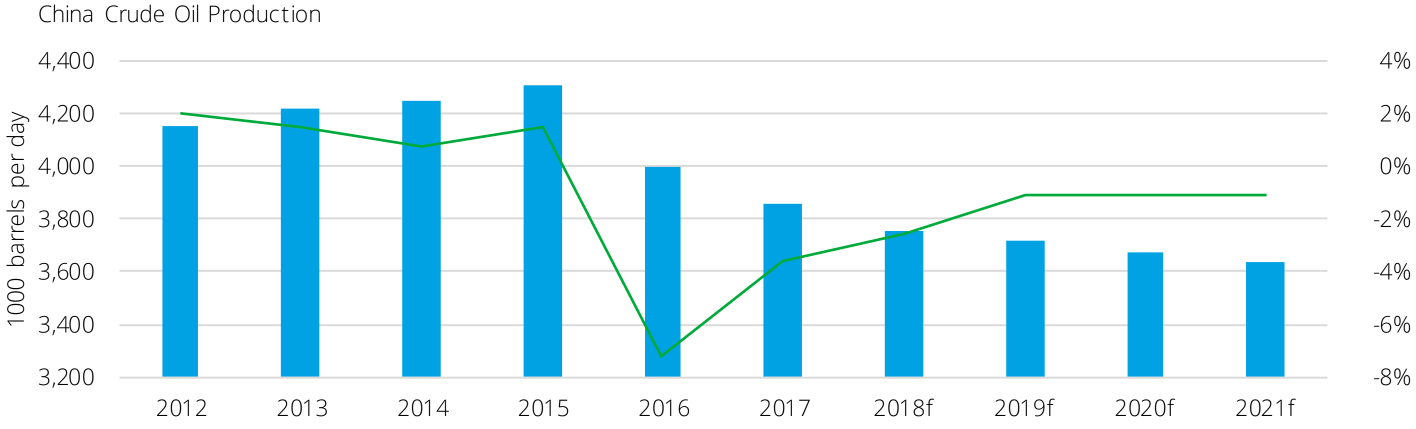
Background and reform momentum

State oil companies face challenges in boosting production while struggling with higher development cost and reduced development activities. Their recent discoveries are low permeability and take expensive technologies to develop. Therefore, national oil companies had to shelve the exploration and development of reserves with complex geology and shut down wells with high lifting cost in 2017. The downsized production activities caused a seven-year low of oil production with190 million tonnes (3.85 million barrels) per day, down 6% from 2016[1].

However, given the expectations of higher oil prices and a more tense geopolitics environment, the government is keen to stabilize output.

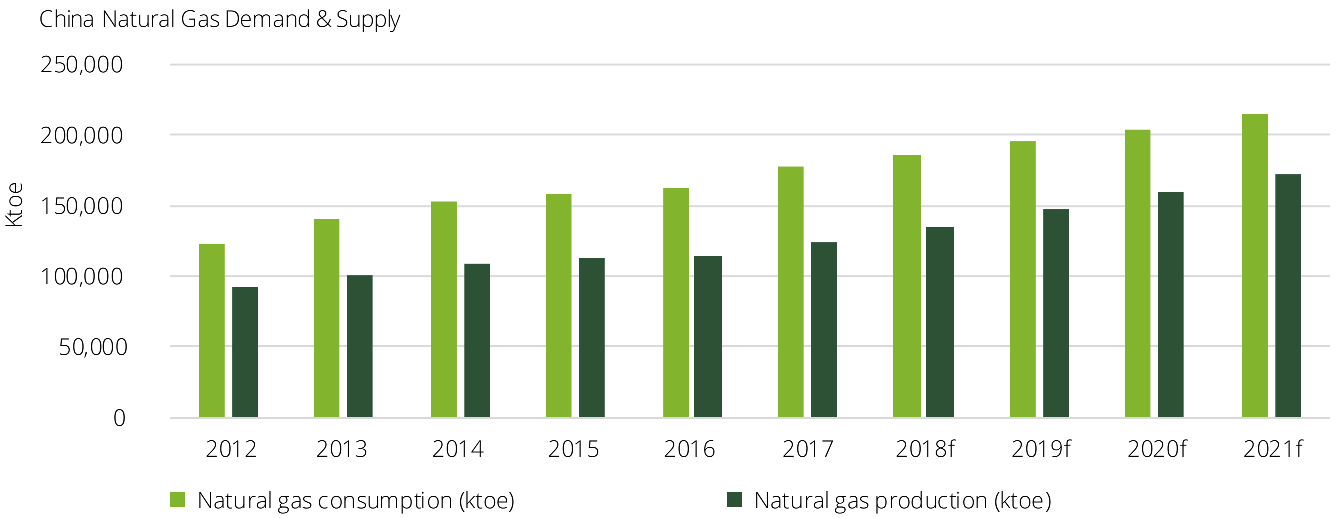
1. "Country's crude output falls to seven-year low", Upstream, 2018-01-26

Figure1: China crude oil production declining



Source: EIU

Figure 2: China natural gas demand & supply



Source: EIU

Traditionally, the government distributed upstream blocks based on applications from the four state-owned oil companies. The existing oil exploration and mining rights granting system is far from sufficient and it has become a priority for oil and gas upstream reform.

China announced the oil and gas reform master plan ("the Opinions") in May 2017. It indicated that it would open up the upstream sector to help sustain energy supply, encourage qualified market players to participate in exploration and development of conventional oil and gas, and ultimately create a market that is led by state-owned oil companies but with the participation of diversified investors. The new granting mechanism will involve licensing upstream block through a tendering system and their relinquishment upon the expiry of the exploration period.

In addition to the Opinions, several pieces of legislation have been issued in regard to the granting of mineral rights (Figure 3). In general, the government will promote competitive granting and reduce the mineral resources allocated through agreements or other administrative methods to promote the competition in natural resources exploration and development.

Figure 3: Newly issued legislations regarding mineral rights granting

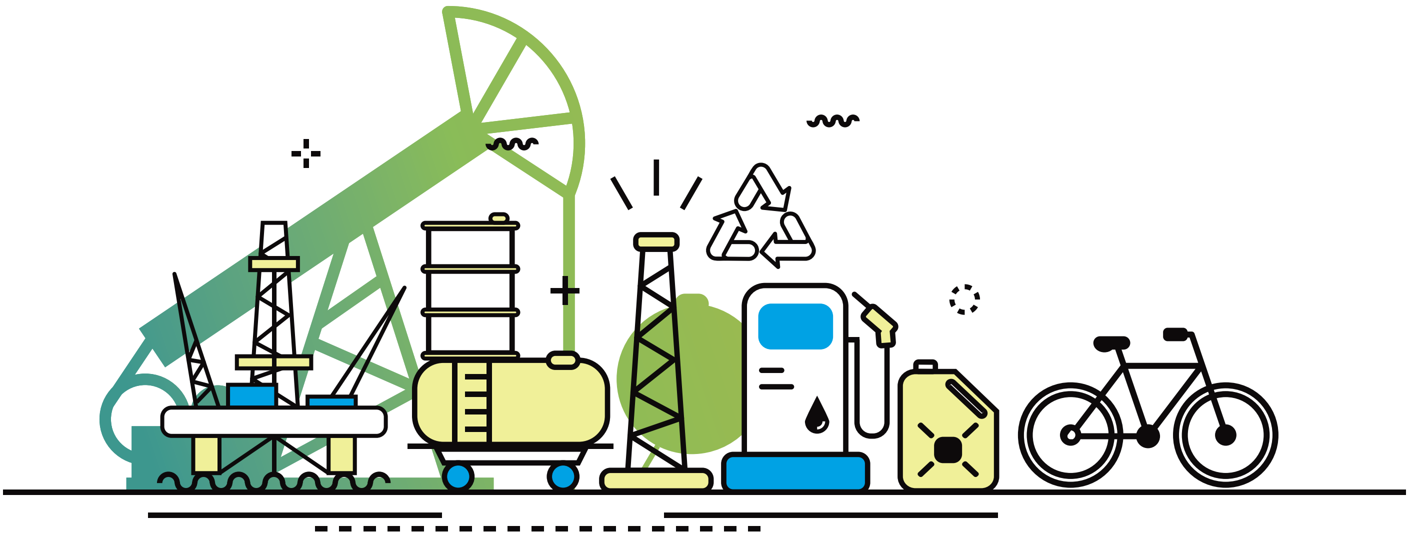
Date	Title	Content (mineral rights)
April 2017	Programme on the Reform of the Mineral Resources Equity Benefit System	• Mineral rights holders must pay the competent authorities the mineral rights granting bonus for obtaining such rights, occupancy fee, and the resource tax for sale of mineral products
May 2017	Opinions on Deepen Oil and Gas System Reform	• Licensing upstream block through a tendering system • Establishing the oil and gas mineral rights granting system • Oil and gas mineral rights relinquishment upon the expiry of exploration period
June 2017	Mineral Rights Granting System Reform Programme	• Requiring competent authorities to implement tender, auction and listing methods to grant mineral rights • Imposing strict restrictions on the granting of mineral rights via agreements • MLR delegates partial mineral rights approval powers to provincial level competent departments • Six regions including Shanxi, Fujian, Jiangxi, Hubei, Guizhou & Xinjiang will be the pilot for two years
July 2017	Interim Administrative Measures for the Collection of Income Derived from the Mining Rights Granting	• Amount of the bonus will depend on the results of the tender, auction or listing for the mining rights obtained through competitive granting • The bonus can be paid in annual instalments to reduce the burden on mineral rights holders

Source: State Council, Ministry of Land and Resources, Deloitte analysis

To date, Chinese national oil companies have been reluctant to relinquish blocks that lack commercial discovers, even after the exploration period is over. We expect this will change and we are seeing a break of state monopoly with the auction of oil and gas blocks in Xinjiang.

China plans to auction about 30 oil and gas blocks in the north-west region of Xinjiang in 2018 to non-state investors to boost private participation in the sector.

Ministry of Land and Resources (MLR), via its local outfit Xinjiang Land and Resources Administration, listed five blocks in Tarim basin in Xinjiang and sold three of them to three non-state oil companies in January. Shenergy Co.,Ltd, Xinjiang Energy (Group) Co., Ltd and Zhongman Petroleum & Natural Gas Group Corporation (ZPEC) managed to secured the rights to explore the Keping South block, covering 2,646 square kilometres, the Wensu West block, with 1,504 square kilometres, and the Wensu block covering 1,096 square kilometres, committing to invest more than 2.7 billion yuan during the five-year exploration period. The total transaction price was more than 2.7 billion yuan (421 million U.S. dollars). [2]



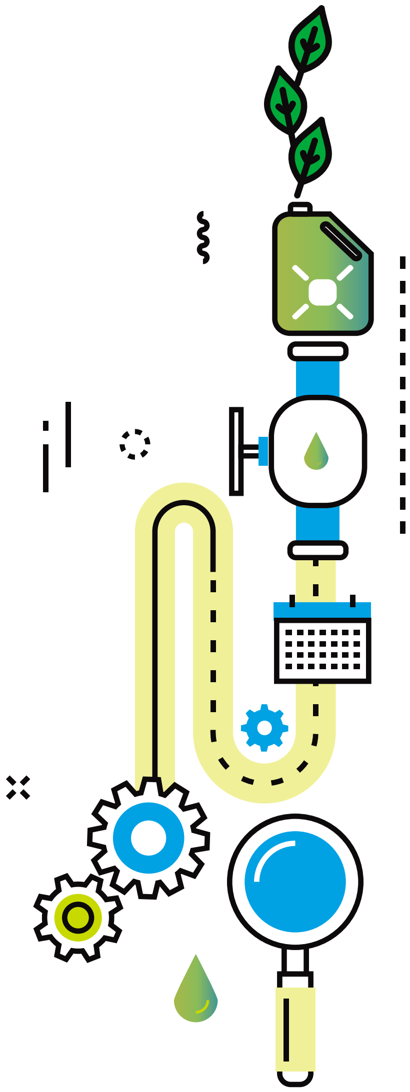
2. "Oil, gas exploration rights sold in Xinjiang", Xinhua, 2018-01-24, http://www.xinhuanet.com/english/2018-01/24/c_136919028.htm

Opportunities for investment

This wave of reform will introduce new opportunities for the industry to integrate and reallocate existing resources. This should result in the anticipated domestic restructuring as well as inbound M&A opportunities for the industry. With the comprehensive and in-depth promotion of China's oil and gas system reform and economic restructuring, more preeminent enterprises are expected to emerge in China's oil and gas sector.

Three types of oil and gas companies are be expected to gain access to exploration of onshore conventional oil and gas, thus gaining new opportunities for development:

- Provincial SOEs located in oil and gas resources-rich provinces;
- Private oil and gas companies who owns overseas assets with overseas exploration experience;
- And oil service companies with domestic oil field service experience.



Limited by traditional mineral rights registration system and restricted oil and gas exploration and development qualifications that were almost monopolized by the oil heavyweights in the past, private capital and provincial SOEs have been struggling to make an impact in the upstream sector of China. This is part of the reason many private capitals have turned their attention to overseas resources located in Central Asia, South America, Africa and etc..

In addition to the provincial SOEs, oilfield service companies may also benefit from this reform. The oilfield services market has long been the focus of private capital, however, due to the distressed global oil price of the recent years, the profit margin of oilfield service companies has been squeezed year by year. These companies also have internal motivations to step into the upstream business of oil and gas exploration and development projects to extend their business prospect in the upstream sector in order to improve financial performance.

With the gradual reforming of policies, these aforementioned companies are expected to be more active and involved in the domestic upstream market. These three types of players have their own specialities in the fields of technology, personnel, overseas oilfield operation experience, relationship with local government and engineering services. However, today none of them are strong enough to compete with the trio of giants that occupy this capital intensive industry. Their ability to identify a niche in an increasingly competitive and market-oriented environment after the reform will be the key issue they face going forward. To achieve the goals, mergers and acquisitions, consolidation and restructuring might be a viable option for them to be competitive with the "Big Three" (CNPC, Sinopec and CNOOC).

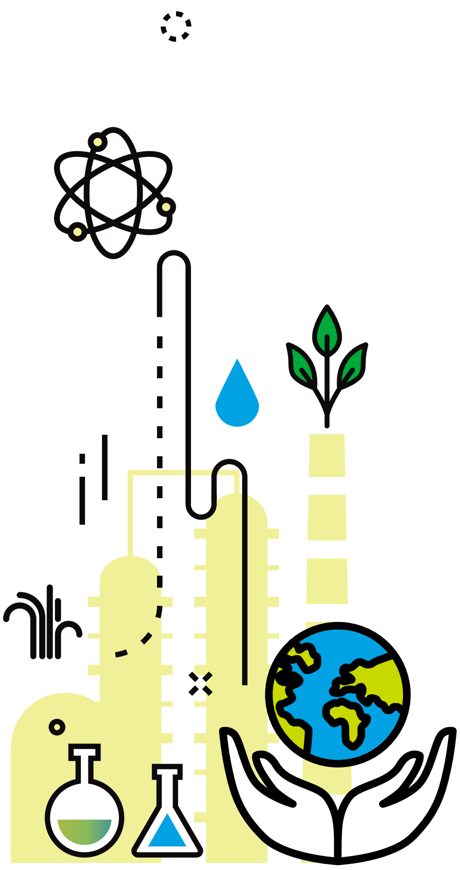
On the other hand, in the context of reform, large SOEs also face challenges. Under the intrinsic need of continuously improving efficiency, downsizing and efficiency enhancement have become a crucial demand for the Big Three. Integration and reorganization of existing resources as well as introducing private capital will form part of the approach for traditional state-owned enterprises to boost competitiveness and efficiency.

Also, foreign oil and gas companies may be expected to participate in the exploration and development of conventional resources by means of setting up joint ventures with domestic players beyond the current collaborative model However, considering China's complex geological conditions and limited oil and gas resources, in addition to the China regulatory environment, foreign participation in upstream sector will still be very difficult and will impose significant hurdles.

Challenges and best practice

As the reform unfolds, it brings new challenges in many aspects, especially in financing. Ability to raise capital becomes the key for new investors since the oil and gas industry is one of the most capital intensive one. The gradual implementation of new PPP [what are we referring to?] regulation is also challenging for new players.

The successful bid for exploration and mining rights for the exploration of oil & gas in Wensu block in the Tarim Basin of Xinjiang might give us a good inspiration. As mentioned in the biding requirements, the qualified bidder should be: domestic companies registered in the territory of the People's Republic of China (excluding Hong Kong, Macau and Taiwan), ultimate controllers of domestic ownership, and net assets of RMB1,000 million (1 billion yuan) or above, which raises the threshold for companies that are willing to participate in the oil and gas upstream sector. Since the detailed plan has not yet been announced, there could be some potential uncertainty in opening up the upstream sector to more diversified capital sources in



the future. From current practice, if private capitals intended to seize the opportunity and make an achievement during the reform of oil and gas upstream sector which is a highly capital-intensive business, they may need to consider to cooperate with others to raise sufficient capital in order to cover the costs as well as dealing with potential risks and probable uncertainties introduced by oil and gas exploration activities, and domestic consolidation and establishing joint-venture may be a viable option. Meanwhile, we also noticed the attractiveness of the oil and gas upstream sector reform to other types of companies which are not traditionally involved in upstream business. On one hand, companies engaged in oilfield services and equipment manufacturing might find new opportunities to join in the upstream business. Involving in the upstream sector will help these companies to extend its upstream industrial chain and realize the development strategy of integration of exploration, development and engineering services, which will help the company to increase its profitability. On the other hand, companies in the fields related to other petroleum sectors, such as natural gas and even petroleum refining, might also grasp investment opportunities from this reform. This gradual unfolded reform might attract capital from other related business becoming potential upstream investors, Shenergy Group investing in Tarim basin could be a referable example. As global oil prices continue to rise since late 2017 and early 2018, the investment opportunity for oil and gas investment may have appeared.

On the optimistic side, as emphasised in the 13th FYP, China seeks to create an environment conducive to greater market competition and increased private investment in Oil and Gas industry. However, the published reform guidelines are only conceptual. The NDRC is expected to announce the detailed plan in the first half of 2018 but still has not to date.

Despite the optimistic expectation of the recovery of the upstream sector, there will need to be a by well-designed Oil and Gas sector reform package with an effective regulatory environment. Moreover, there must be the right balance of power and opportunity between the Big Three and the new investors. Similarly, the success of China Oil & Gas Reform highly depends on whether the government and NOCs can release quality blocks to the public. If only those blocks with low profit margins due to high oil production difficulty are available to private capital, the attractiveness of the reform will be greatly reduced.

Overall, the sector reform is welcome news and should be watched closely by all participants. As the details of the reform are published investors should be ready to move quickly and understand both the opportunities as well as the risks.

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