

# China's Oil & Gas Sector Deep Reform and Implications for Investment

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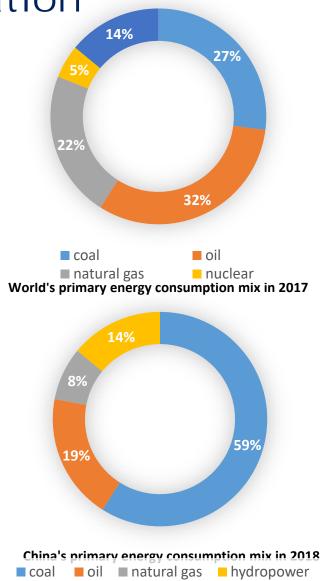
- 1. The Context
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■ China's Energy Supply and Demand Situation

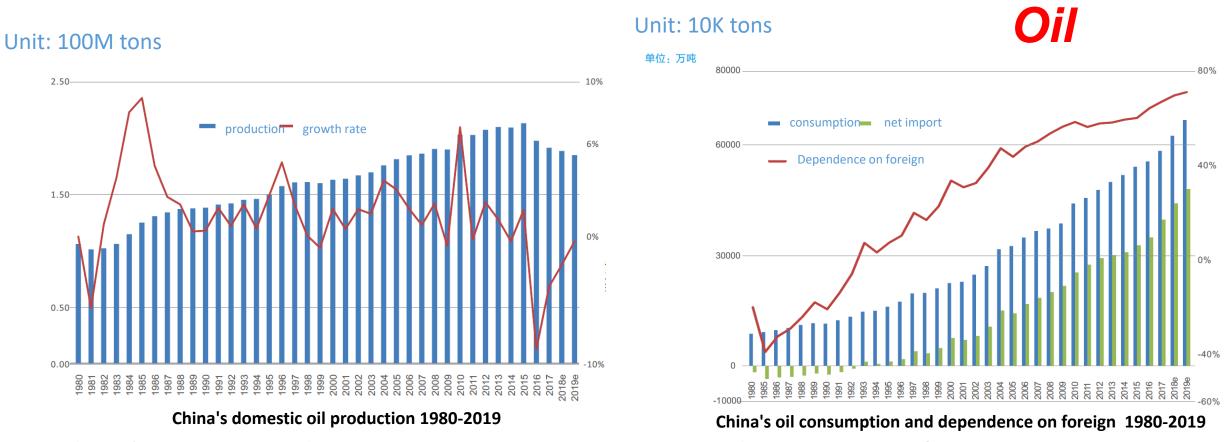
- In 2018, China's primary energy production totaled 3.77 billion
   TCE, accounting for 18.7% of the world's total output, ranking first in the world.
- In 2018, China's total consumption of primary energy is about 4.7 billion TCE, accounting for 24% of the world's total consumption, ranking first in the world.
- In 2018, China imported 1.07 billion TCE, exported 100 million TCE, the net import of 970 million TCE ranks first in the world.
- China became a net importer of oil in 1993, energy in 1997, natural gas in 2007 and coal in 2009.

China is abundant in coal and short of oil & gas





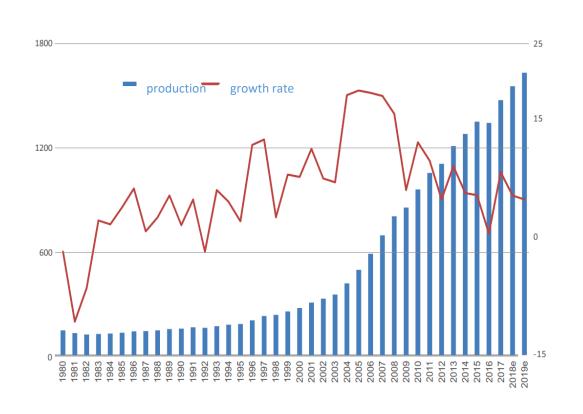
#### China is Facing a Great Challenge of Oil &Gas Supply



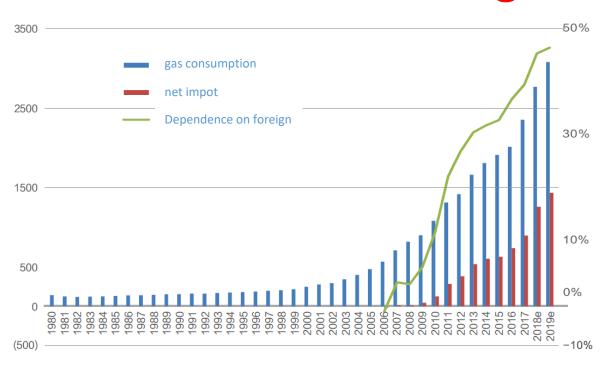
China's domestic oil & gas production can not meet the demands of consumption growth, the dependence on foreign of oil reached 70% in 2018.



#### □ China is Facing a Great Challenge of Oil &Gas Supply



# Natural gas



The dependence on foreign of gas reached 45% in 2018.



# ■ Institutional Obstacles and Problems of China's Oil & Gas Industry, Requiring Urgent Deep Reform

- > Upstream business access threshold is high, the transfer of mineral rights and withdrawal mechanism is not sound
- > The opening of competitive links in circulation is not enough
- > Structural contradictions in downstream processing links are prominent. On the one hand, the overall refining capacity is seriously excess, on the other hand, a large number of high-end products imports from abroad
- > The pricing mechanism on oil & gas market is imperfect
- > Large state-owned oil & gas enterprises lack endogenous power
- > Government regulation and supervision is inadequate



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- Guidance: Widen access to every link of the industrial chain
- Framework: Restrict the middle while open the upstream and downstream
- Key: Improve market mechanisms and strengthen government supervision

#### **Areas of reform**

- Exploration and Production
- > Import and Export
- ➤ Pipeline Reform
- Downstream Competition
- Pricing Mechanism
- > SOE Reform

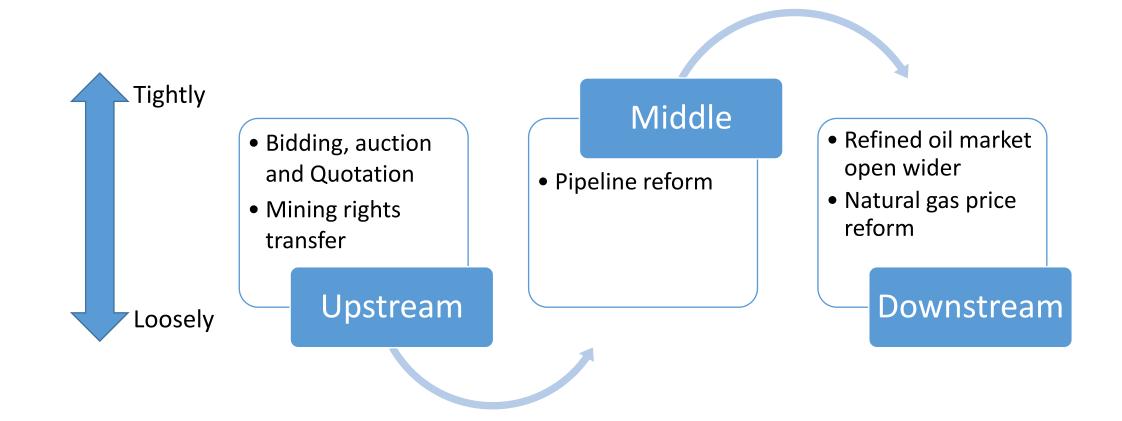


#### Goals of reform

- Establish a Flexible and Efficient Market-oriented Mechanism
- Improve the Capacity in Resource
   Displacement, Resource
   Utilization, Risk
   Prevention, Intensive
   Transportation, Production
   and Supply etc.



#### Deep Reform Framework of Oil & Gas industry Chain





## Open up the Upstream in an Orderly Manner, and Establish Mechanisms for the Transfer and Withdrawal of Mineral Rights

- Allow market entities qualified to meet requirements participate in conventional oil & gas exploration and production system dominated by large state-owned oil & gas companies with participation of various economic components.
- Encourage eligible enterprises to diversify their shareholder base and introduce mixed-ownership reform.
- Implement a stricter block withdraw mechanism. If the minimum statutory
  investment for exploration is not completed, the exploration right holder shall bear
  the responsibility according to law and regulations until the exploration right is
  cancelled.



- Deep Reform in the Distribution Sector and Downstream Competitive Links, Improve Access and Optimize Structure; Enhance the Production and Supply Capacity of High-quality Oil & Gas Products.
  - Deregulate the importing of crude oil, allow all kinds of refineries qualified to meet
    the requirements to use imported crude oil, grant qualified refineries non-state
    trading qualifications, and appropriately increase the amount of non-state importing
    allowances.
  - Formulate stricter technical standards for quality, safety, environmental protection and energy consumption. Raise the level of deep processing of crude oil in China, protect and foster advanced production capacity, and speed up the elimination of outdated production capacity.



### Separate Pipeline Sector from Oil Companies and Establish a Fair and Open Mechanism for Third-party Market Players

- Promoting the trunk pipelines network of large state-owned oil & gas enterprises to open fairly to third-party market players,
- Separating pipeline business from oil companies to establish independent oil & gas pipeline companies with state capital holding and diversified investors.
- Oil & gas production companies are allowed to maintain certain non-strategic pipelines and branch pipelines, but need independent accounting.



### Establish and Improve Market-Oriented Mechanism, Releasing Market Vitality in Competitive Sectors Effectively

- For refined oil products, the government only reserves the right to control the abnormal price fluctuations; for natural gas, focus on promoting the marketization of non-residential gas prices, and further improve the pricing mechanism of residential gas.
- Accelerating the construction of oil & gas trading platforms and form a fair and standardized spot and futures market trading platform.
- Strengthening supervision over the cost and price of pipeline transport, and formulate the price of pipeline transport in a scientific manner.



### □ A Series of Special Reforms have been Introduced, and Substantial Progress has been Made in Oil & Gas Sector

Time	Policy	Relevant content
2016	Decree No. 65 of the Ministry of Land and Resources	Delegating the approval of coal-bed methane mining rights to Shanxi Province
2018	New "Negative List" for Foreign Investment	Removing limits on foreign ownership of gas stations
2018	Notice on the reduction of resource tax on shale gas	Cutting resources tax on shale gas production by 30% from April 1, 2018
2019	Decision on the cancellation and delegation of a number of administrative licensing matters	Cancelling approval requirement for overall development program(ODP), replacing with registration.
2019	Foreign Investment Law	Further promoting the opening up and cooperation of oil and gas industry
2019	The supervision of oil and gas pipeline network facilities	Encouraging and supporting various types of capital to participate in the investment and construction of oil and gas pipeline network facilities
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### ■ More Foreign and Private Capital will be Attracted to Upstream Exploration and Development

 Open bidding, auction, and quotation Nov 2017, Open bidding for 10 CBM blocks
 8 Shanxi local companies won the 10 blocks

Jan 2018, Quotation of 5 blocks in Xinjiang Tarim Three companies including a private oilfield service company won 3 blocks

- Internal mining rights transfer
  Start from 2017, mainly applied in CNPC and Sinopec at present, further opening-up to private/foreign investors is expected
- Policies hold the key to realizing China's unconventional potential
   Further reform related to land acquisition, subsidies is expected to create real momentum
- Further opening E&P sector for private/foreign capital Cancelling approval requirement for overall development program (ODP), replacing with registration.

The opening of mining rights will release China's incremental oil & gas resources, with production expected to increase by 20% to 50%.



# ☐ The Opening up of Downstream Access will Further Stimulate Market Vitality

- Refining and chemical will become an important field of restructuring and mixed ownership
  - November 2016, CNOOC-Shell JV receives government approvals to take over new petrochemical complex in china
- The refined product terminal market will be fully open to foreign investment BP plans to add 1,000 new sites across China over the next five years; Shell targets 3,500 sites in China by 2025.
- LNG will play an important role in China's energy transition and attract more private/foreign investment
  - China has been the world's second-biggest buyer of LNG since 2017. Recently, CNOOC-China's biggest operator of LNG import terminals explores opening up LNG terminals to third parties.



# ☐ Find a Balance Between Giving and Achieving for Oil & Gas Investment

#### What could they achieve

Integrating the value chain in China with upstream and downstream business

Gaining regional expertise by gradual expanding the footprints nearby.

#### What should they give

Bringing technical capabilities to help the Chinese NOCs

Supporting of Chinese NOC's overseas upstream business through strategic partnership

Providing capital investment and sharing the risks of E&P projects



#### □The potential of Upstream Opening and Reform

So far, the most international investment are still involved in offshore and conventional projects





#### □ The Reform Policy Still Needs to be Refined

- Improve fiscal and tax support for operators
- Further promote the market-based reform of gas prices
- Support the development and expansion of the natural gas reserve system
- Control refinery and chemical capacity, transferring to the high-end, and building industrial parks
- Promote international oil & gas cooperation



### **Summary**

#### Oil & Gas Sector Policy Reform

- Chinese government has been exploring reforms and incentivizing policies to increase domestic oil & gas production
- Under the objective of increasing domestic production, Chinese government has accelerated the policy reform to attract more players in E&P
- Policies hold the key to realizing China's unconventional potential; further reform is expected to create real momentum

#### **Private and Foreign Players**

- The drive from the government has landed with tangible progresses in attracting private and foreign capitals, although not significant
- Private capital becomes more cautious to enter domestic E&P after the two unsuccessful shale gas bid rounds
- Foreign players currently focuses more in offshore after several unsuccessful trials, and keeps looking for opportunities



# Thank you for your attention