1. CNOOC Gas & Power Overview

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CNOOC Overview

- Founded in year 1982
- China’s largest offshore oil and gas producer
- Ranked 79 in 2014 Fortune Global 500 (first listed in 2007)
- Ranked Class A in 9 consecutive years in SASAC state-owned enterprises performance appraisal
CNOOC Gas Industrial Value Chain

- Capital-intensive & technology-intensive complete industrial chain

- LNG Transport
- LNG receiving terminal
- Natural Gas Pipeline
- Offshore gas
- CBM
- LNG storage center
- LNG receiving terminal
- vessel filling
- Distributed energy
- CNG
- Truck
- Industrial users
- power generation
- Town gas
- local distributor
- vehicle filling
- Overseas gas production & liquefaction
- International Market

Overseas gas production & liquefaction

Industrial users
Steady Development of CNOOC Natural Gas Business

- From year 2006 to 2013, respectively imported LNG 0.745, 2.98, 3.21, 5.80, 9.34, 10.85, 10.79, 13.01 million tons

In year 2013, offshore gas production was 10.7 bcm.
Resource Pool & Market Group

- Offshore gas
- Domestic Onshore Gas
- Imported LNG

- Power Generation
- Town Gas
- Filling
- Industrial/Chemical
Domestic Resource

- Offshore gas
- CBM
- LNG produced by small liquefaction plant
- SNG
CNOOC gas & power group has established intensive cooperation relationship with more than 64 major global LNG market participants and contracted long term LNG resource by now is up to 25.7 million tons/year.
### Infrastructure - LNG Receiving Terminals

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<th>Dapeng LNG</th>
<th>Fujian LNG</th>
<th>Shanghai LNG</th>
<th>Zhejiang LNG</th>
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Infrastructure - Pipeline and Others

Power Plant
- In-operation: 6
- Total Installed Capacity: 8480MW

Pipeline
- Commissioned & Under Construction: 3698 km

Filling Station
- Commissioned: 171
- Under Construction: 70
In 2013, the primary energy consumption of China was 3.75 billion tons of standard coal, increased by 3.7% over last year.

- Gas consumption was about 169.2 bcm, increased by 13% over last year, accounting for 5.9% of the total primary energy consumption.
Chinese Natural Gas Consumption

- Chinese natural gas consumption average annual growth was 17.3% between 2002 to 2013.
- In year 2013, Chinese nature gas consumption is 169.2 billion cm with 30% dependence on imported nature gas.
Characteristics of Chinese natural gas market

- Seasonal fluctuation of demand
- Requiring ensured supply security
- Fierce competition
Gas Sources

Proportion of each gas source in year 2013:

- Domestic Gas 70%
- Imported Pipeline gas 16%
- Imported LNG 14%

Estimated proportion of each gas source in year 2020:

- Domestic Gas 63%
- Imported Pipeline gas 19%
- Imported LNG 18%

Gas from Central Asia: 85 bcm/y
Gas from Russia: 68 bcm/y
Gas from Myanmar: 12 bcm/y

Gas Sources:

- Sichuan Basin
- Ordos Basin
- Tarim Basin
- Domestic Onshore Gas
- CNPC Pipeline
- Sinopec Pipeline
- CNOOC Pipeline
- Gas from Central Asia
- Gas from Russia
- Gas from Myanmar

Locations:

- Dushanbe
- Yerevan
- Smolensk
- Moscow
- Brussels
- Hamburg
- Antwerp
- Rotterdam
- Vlissingen
- TripAdvisor
- Tianjin
- Shenyang
- Dalian
- Xianyang
- Xi'an
- Jinan
- Zhengzhou
- Wuhan
- Chengdu
- Chongqing
- Yichang
- Qingdao
- Qingdao
- Shaoxing
- Hangzhou
- Jiaxing
- Shanghai
- Nanjing
- Wuhan
- Shenzhen
- Guangzhou
- Zhuhai
- Hong Kong
- Macau
- Hangzhou
• China imported 18.08 million tons of LNG in 2013, while 72% of which was imported by CNOOC
Domestic Price is regulated by the government

- The Town-gate price ceilings of domestic and imported pipeline gas are regulated by the government
- Although LNG price is not regulated, the price still be affected by the town gate price.

LNG import VAT is proportionally refunded
Pipeline, receiving terminal, storage and other infrastructure are gradually opening up to the third party.

- However, there are unsolved technical problems (e.g., gas quality standard, metering and pressure system).
China’s Recent Economic Situation

**GDP Growth Rate**
- 2000: 8.4%
- 2010: 10.4%
- 2012: 7.8%
- 2014 Jan-June: 7.4%

**Export Growth Rate**
- 2007: 14.6%
- 2012: 12.7%
- 2015: 7.7%

**Electricity Consumption Growth Rate**
- 2006: 14.1%
- 2009: 5.1%
- 2014 Jan-June: 5.3%

- Economic growth slowed down, representing a GDP growth of 7.4% in the first half year
- Export situation is still not optimistic, representing a decrease of 1.2% in the first half year
- Electricity demand is not strong, representing a slight growth of 5.3% in the first half year
- Severe environmental pollution problems come along with the economic development
Natural Gas Price Reform

Main Point

- Since September 1, 2014, for existing gas for non-residential use, the city-gate price ceiling increases Rmb 0.4 /m³
- In 2015, the goal is to achieve that the price of existing gas equals that of incremental gas

Impact on the Market

- Lead more rational consumption of the gas and promote the industry upgrading.
- The demand growth slows down.

However, the prices of natural gas and electricity generated by gas do not fully reflect their peak-shaving and environmental value.
Gas Market Situation

• January-June 2014, gas consumption is 88.7 bcm, increased by 8.9%, less than 13% in last year.

• Competition in the domestic gas market is driven by:
  ➢ Steady progress in domestic onshore natural gas exploration and development
  ➢ Rapid progress in offshore gas exploration
  ➢ More pipeline gas import
    ✓ Mid-Asia
    ✓ Myanmar
  ➢ Coastal LNG terminals move into operation
  ➢ Unconventional gas made breakthroughs

• Due to user’s lower affordability of gas price, some “coal to gas” users changed back to coal
• Expected by 2015, China’s nature gas demand will reach 230 bcm, accounting for 7.5% of the total primary energy. By 2020, consumption will increase to 360-430 bcm, accounting for 10-12% of the total primary energy.
Outlook of Chinese Gas Demand

Gas by Source in year 2020

- Domestic onshore gas: 57%
- Imported pipeline gas: 19%
- Domestic offshore gas: 6%
- Imported LNG: 18%

Gas by Usage in year 2020

- Residential & Commercial: 38%
- Industrial: 26%
- Power Plant: 27%
- Chemical: 9%
Summary

• In short term, the growth of gas demand in China is slowing down.

• In long term, there is broad space for the further development of Chinese gas market.

• As the demand cannot be satisfied by domestic resources, gas import is imperative for Chinese gas market.

• The competition among diversified gas sources is becoming fierce, mainly in price and security of supply.

• Though LNG is an important part of imported gas, it should keep competitive in price and supply flexibility.
Summary

All along, CNOOC maintains a leading position in Chinese LNG market. We are willing to establish long-term and stable cooperative relationships with worldwide LNG participants. We would like to develop diversified cooperation to achieve win-win situation in terms of upstream exploration and development, resource purchase and sales, liquefaction facilities etc.
Thank You

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