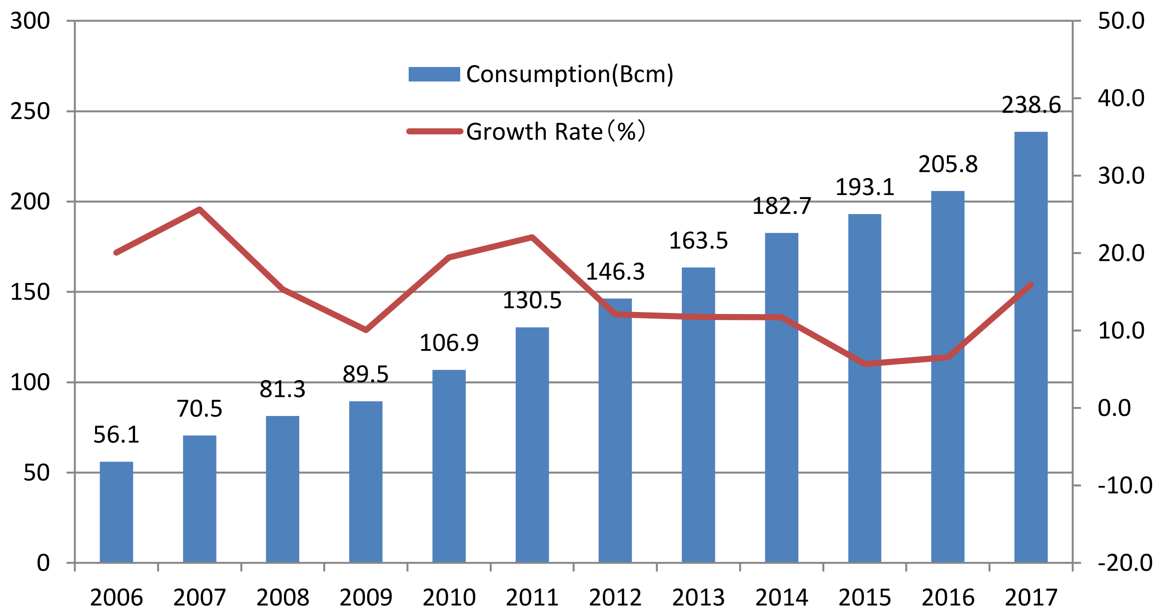
Policy updates and Market Outlook of Natural Gas in China

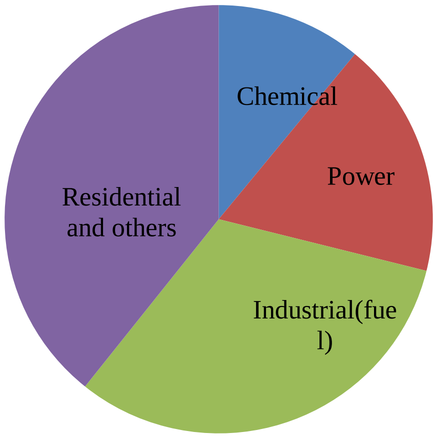
National Energy Administration

In Oct, 2018, Japan

Gas Supply and Demand

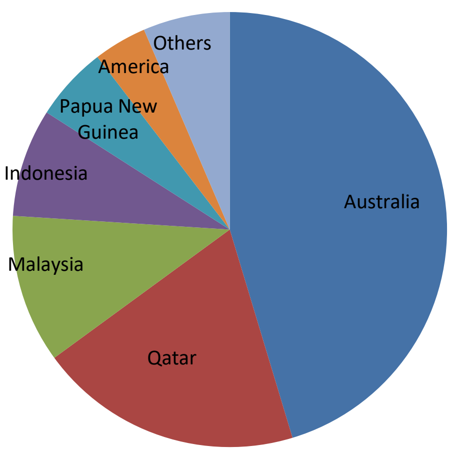
- From 2017, coal-to-gas measures throughout the whole country, especially in areas around Beijing, contributed to the gas demand increasing sharply.
- In 2017, gas consumption was 238.6Bcm, a year-on-year increase of 14.8%. Natural gas accounted for 7.3% in national primary energy consumption mix.
- In 2017, gas imported was 94.6Bcm,of which 42Bcm flowed by pipeline, and 52.6Bcm unloaded by LNG terminals.
- Gas demand will increase to 270Bcm and 320Bcm in 2018 and 2020, respectively.





LNG Terminals and Imported

- By the end of 2017, 18 LNG terminals were in service with imported capacity of 59mmtons per year.
- The top three imported countries were Australia, Qatar and Malaysia.
- LNG supply is dominated by state-owned companies , such as Cnooc, PetroChina and Sinopec. Recently, LDCs and private traders have both more involved in LNG business, with 1.5mmtons LNG imported by non-stated companies in 2017 .

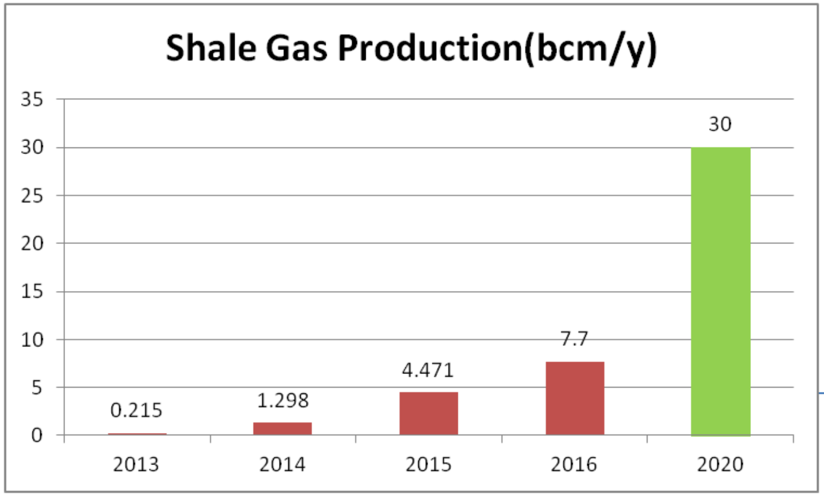


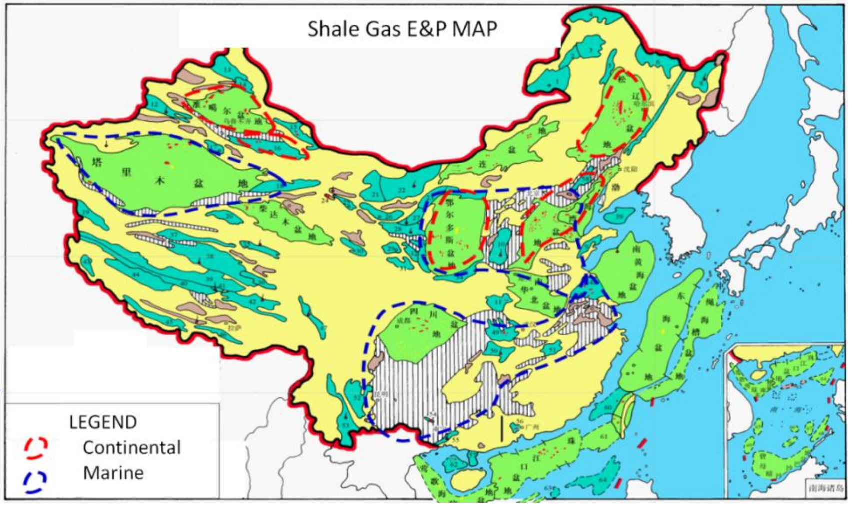
LNG imported by countries

Shale Gas Development

➢Since 2012, shale gas industry has get rapid progress in China. In 2017, shale gas production was 9.2Bcm. According to 13th five-year plan, 30Bcm shale gas production is estimated in 2020. In future, 100Bcm production capacity is expected to reach.

➢By now, all shale gas production is from Sichuan Basin, which is the biggest gas basin in China. More and more companies have been working on shale gas E&P, however, Sinopec and PetroChina contributed the whole commercial shale gas production in 2017.





Gas Supply Security

In 2018, *The Guideline for Sustainable Development of Natural Gas* was issued by State Council.

- Gas supply should mainly rely on domestic production. In 2020, total domestic production including conventional gas , tight gas, shale gas, CBM, should increase to more than 200Bcm.

- Diversification of gas import. For LNG, import will be from more and more different countries. LNG contracts will contain different duration, pricing-mechanism, etc.

- Gas storage capacity building by underground gas storage and LNG tanks. According to updated gas storage regulation, supply companies should get storage capacity accounting for 10% of its gas supply. LDCs should get storage capacity accounting for 5% of its total demand. Local government also have an obligation, which should have storage capacity for 3 days' consumption in their administrative region.

- Shave peak demand by market-oriented pricing mechanism. In extreme cold weather, residential gas supply security is the top priority for government intervention.

Market-oriented Reform

In 2017, *The Framework of Oil and Gas Industry Reform* was issued, aiming to encouraging competition.

- **Price deregulation.** By now, at the city gate, the cross-subsidies from industry use to residential use was dismissed. LNG, shale gas, CBM pricing were fully marketable.
- **Pipeline Unbundling and TPA.** Pipeline interconnection among different owners, different systems.
- **Upstream reform.** Private and international companies and local government will more engage in oil and gas E&P area.

Thank you very much…

Get more detailed information from *China Natural Gas Development Report (2018)*

weblink: https://1drv.ms/f/s!AsAKZLCKLez6Z1gjUa2uKfRZpIk

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