

Russian Gas Trade: Barriers and Opportunities, a Chinese Perspective

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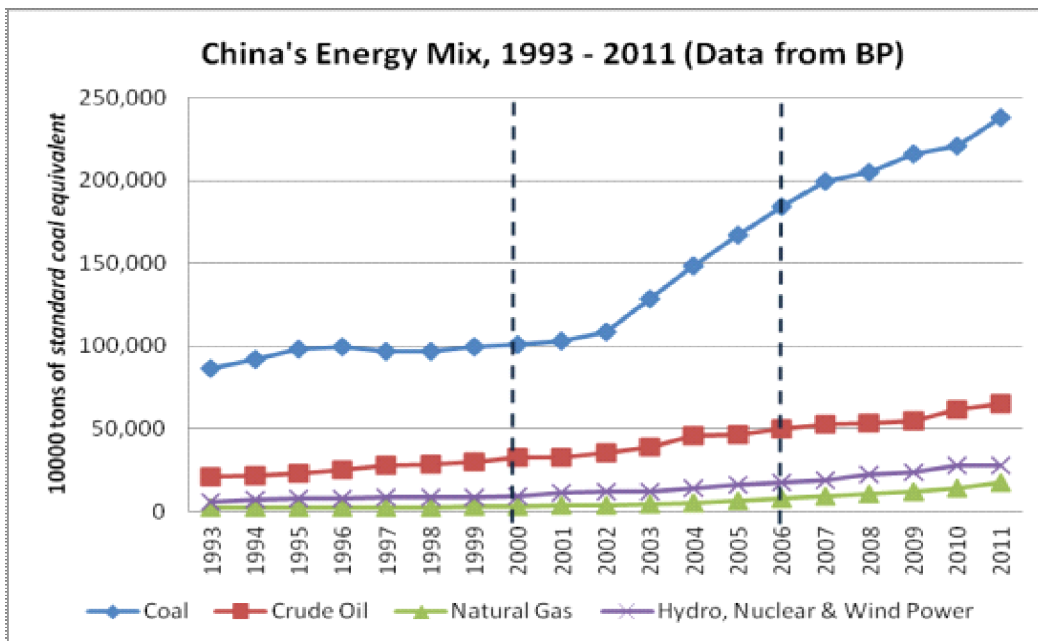
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Background

1. Energy resource diversification strategies of China and Russia
2. **Sharply increased China's natural gas consumption**
3. “Going Out” policy for Chinese oil and gas companies
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Background

Natural Gas in China Energy Mix



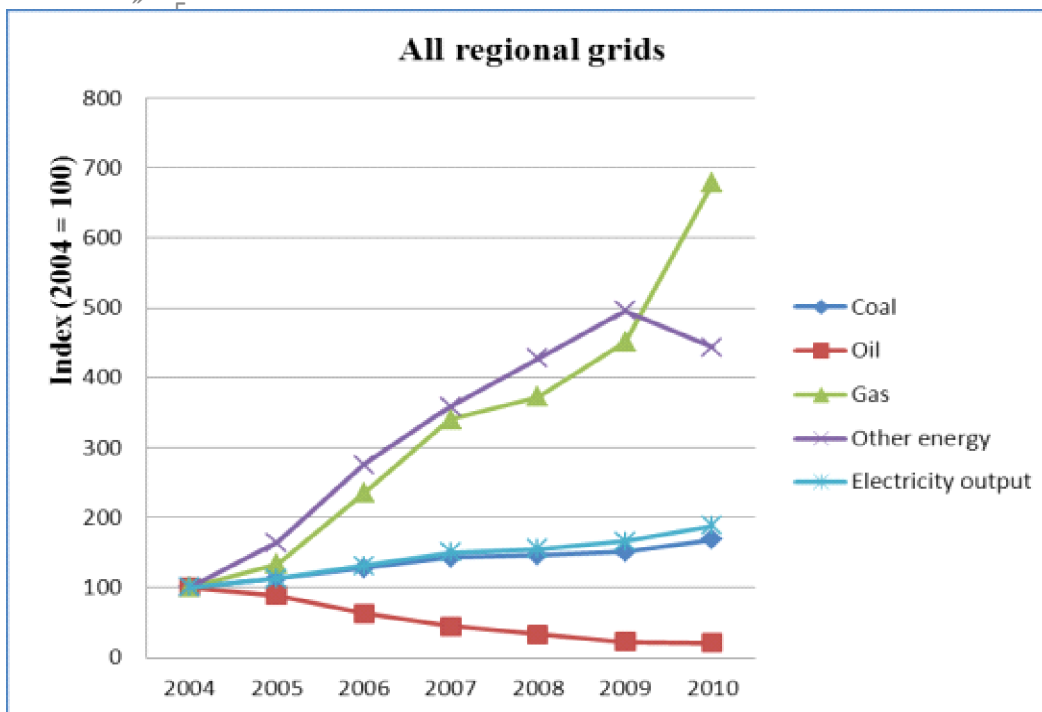
Annual growth rate of energy consumption by type, 2001. 2011

Year	Annual growth rate(%)			
	Coal	Crude Oil	Natural Gas	Hydro, Nuclear & Wind Power
2001	2.0	1.5	12.7	21.1
2002	5.5	8.4	6.0	3.2
2003	18.3	9.6	20.1	2.6
2004	15.6	16.7	16.1	19.7
2005	12.6	2.8	15.0	12.2
2001-2005	62.6	42.5	7.0	42.3
2001-2011	131.7	97.4	382.0	146.8

Background

Natural Gas in China Energy Mix

All Regional Grids, 2004. 2010



1. Coal consumption growth is nearly in line with the thermal electricity output because coal is the dominant fuel for thermal electricity generation.
2. **Gas consumption rapidly increases, whereas oil consumption continually decreases.**
3. Growth of other energy consumption is fast, although there is a drop between 2009 and 2010.

Background

Natural Gas in China Energy Mix

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“ China’s natural gas supply mainly comes from domestic production, imported by pipeline and LNG.

“ It is aiming for 6.5 billion cubic metres (bcm) of shale gas production by 2015, which is equivalent to 2.3% of projected Chinese gas production in 2015.

“ Long-distance gas transport pipelines will also be commissioned, including the third and fourth routes of the West. East gas pipelines with total length reaching 150,000 km by 2015.

“ Large strategic gas reserves are also scheduled to ensure the security of supply (3.5 trillion m³).

“ China gas independency in 2013 was 31.6%, surpassed Iran to be the 3rd largest gas consumer in the world.

History

1. A very tough negotiation for both countries

“ (1) Sino-Russian gas negotiation started in the early 1990s. The Pipeline negotiation has last for almost 20 years.

“ (2) The priority pipeline route selected from Altai route and the Power of Siberia, and the route map have changed several times.

“ (3) There is still no final decision on the gas price.

History

2. From irregular to institutional

“ Regular negotiation inter governmental bodies from 1999:

“ The Energy Committee of the Regular Prime Minister’ s Meeting

(1) on the governmental level:

Vice-Prime Ministers

Ministers of related Ministrie

(2) on the business level:

NOC and other big companies

History

3. Positive Progress in Cooperation

- “ (1) The fundamental principle of the gas price formula has been set up.
- “ (2) Chinese companies won the stakes of Russian gas upstream projects.
- “ (3) The Central Asian gas by Russia comprises about half the import of China.

Barriers

1. Unclear gas development progress in Russia

- “ (1) Government published several documents concerning gas development in East Siberia and Far East without obligated schedule.
- “ (2) Gazprom has no clear vision on gas development in the eastern part of Russia and export for Asian market.
- “ (3) Gazprom keeps monopoly for gas pipeline transport and export which discourages other producers, including foreign companies.

Barriers

2. Different strategies on bilateral gas trade

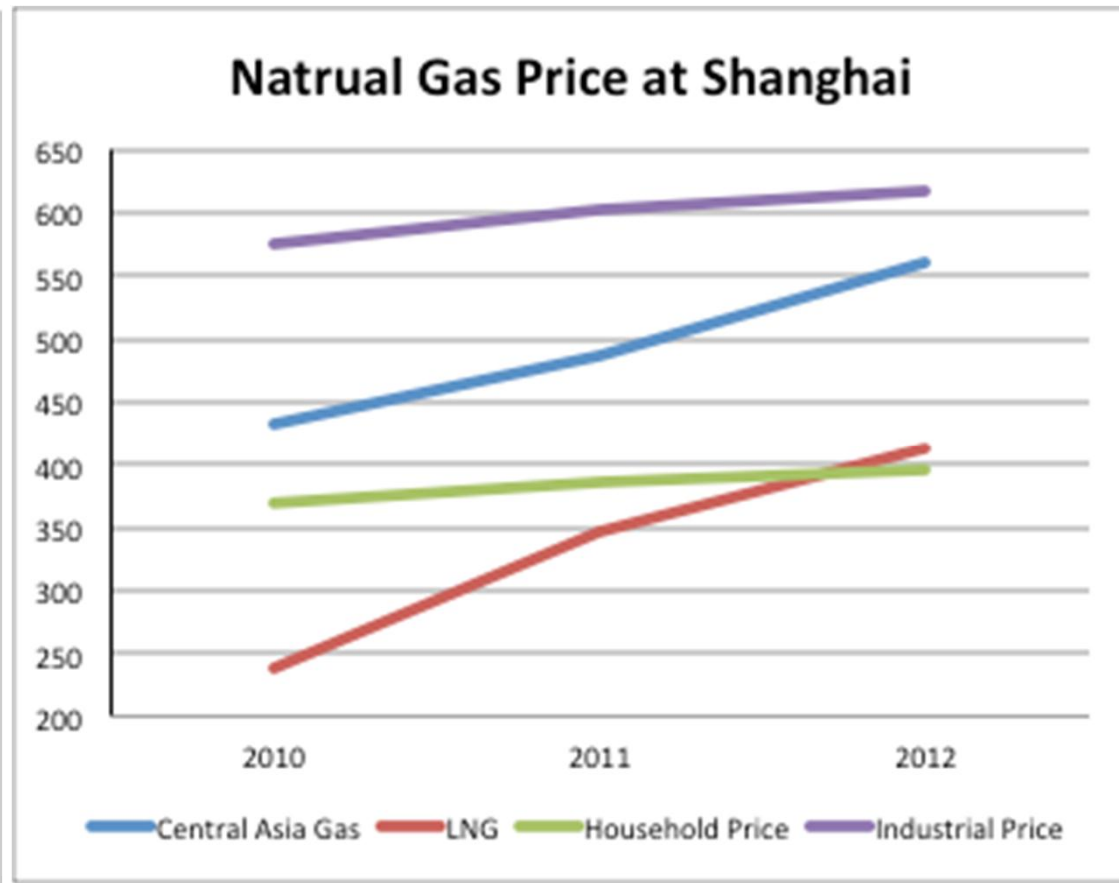
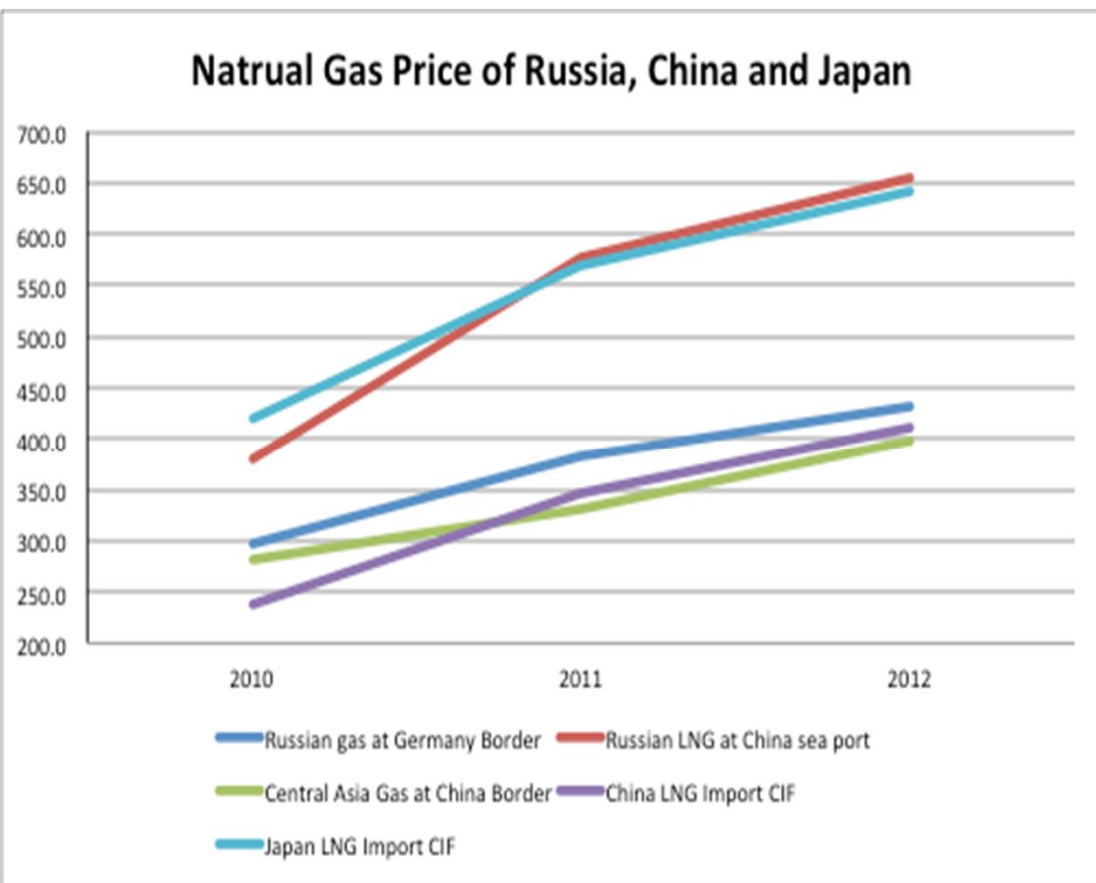
- “ (1) Russia prefers Altai route and LNG export because the former will change itself into a swing supplier between Europe and China and the latter will make its export more flexible.
- “ (2) China favors East route because it lies adjacent to the major market in the north and eastern part of China.

Barriers

3. Different gas pricing in European and Asian markets:

- “ (1) Russian gas price in the European market is linked to oil price, while LNG price from Sakhalin is linked to JCC which is also an oil-based price, but much higher than the European market.
- “ (2) China's domestic gas price is regulated by government and changed irregularly.
- “ (3) Household use accounts for more than 50% China's total gas consumption, but its price is kept on very low level, which makes gas suppliers suffer much every year.
- “ (4) The business model of Gazprom and its European partners cannot be copied in the Chinese market

Gas Price Comparison (USD/thousand cm³)



Sources: China Customs Statistics, CPCIA, IMF, Trade Statistics of Japan.

Opportunities

- “ 15 1. The changing global gas market
- “ (1) Natural gas became one of the most important global investment targets.
 - “ (2) Loan for Oil or Gas has been created in the background of world financial crisis in 2008.
 - “ (3) the potential export of natural gas from USA will greatly change the supplying structure of Asian market.
 - “ (4) Gas pricing in Asian market is projected to be more rational and the price gap between Asian and other markets is expected to decrease.

Opportunities

2. The changing Russian and Chinese gas policy

- “ (1) Russia destroyed Gazprom’s monopoly for LNG export.
- “ (2) The Russian government started to admit China’s NOC as an equal player in large gas projects, such as Yamal LNG.
- “ (3) The Chinese government announced the reform of the structure of oil and gas industry which leads to the opening of oil and gas transportation.
- “ (4) The gas price in the Chinese market is being internationalized step by step.

Conclusions

1. Energy resource diversification strategies of China and Russia will prompt bilateral gas cooperation in a long time.
2. Industry policy reform in both countries improves the investment environment of bilateral gas cooperation.
3. The potential gas export as a result of Shale Revolution in USA will accelerate the price negotiation between China and Russia.
4. China, Japan and South Korea are partners more than competitors in terms of Russian gas trade.

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