

# The Effects on the Asian and World Gas Markets of the Chinese Gas Market Expansion

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# Overview

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- Gas Supply Plan: 2020

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- Central Asian and Russian Pipeline Projects
- 11 LNG Projects

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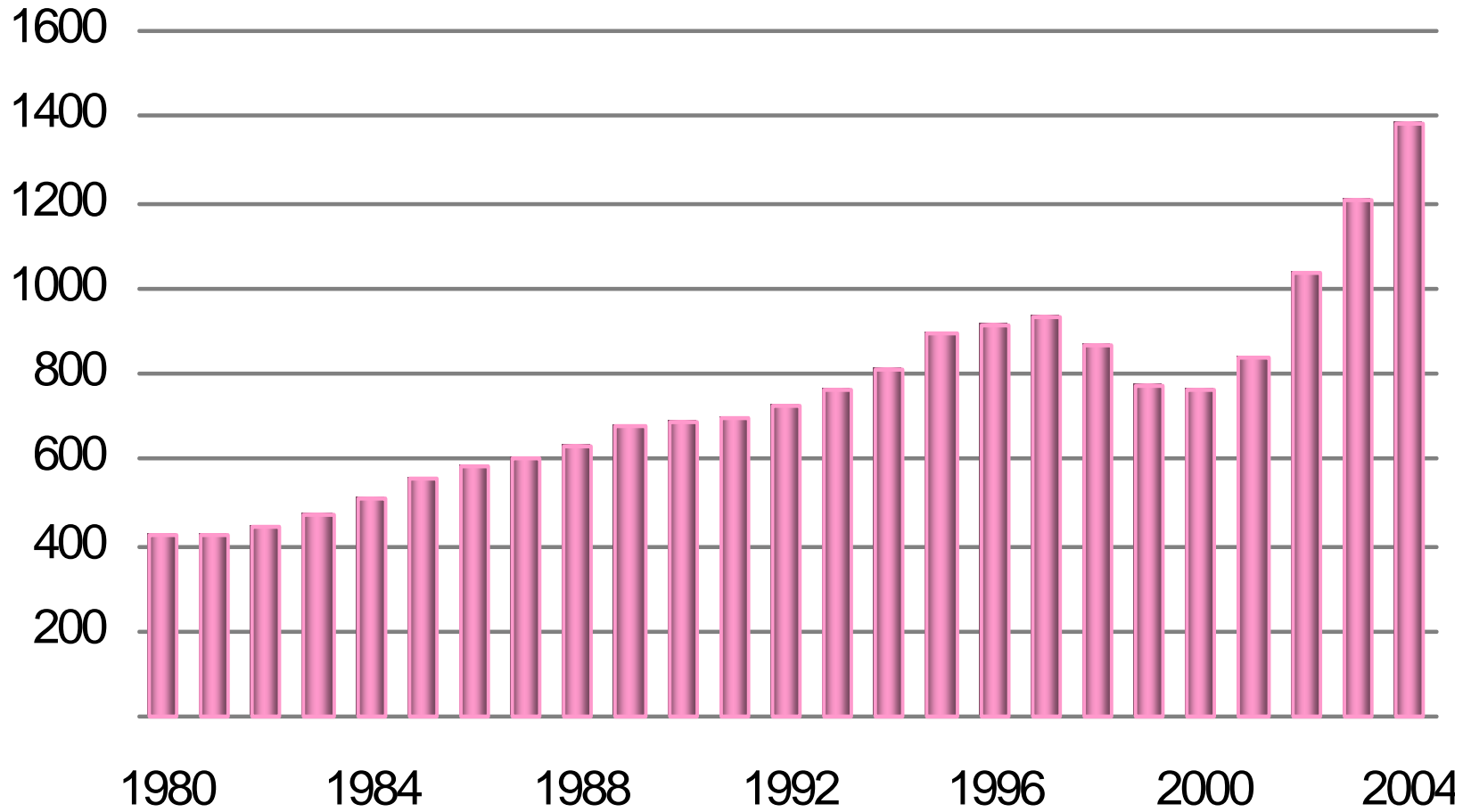
# China's Policy & Economic Growth

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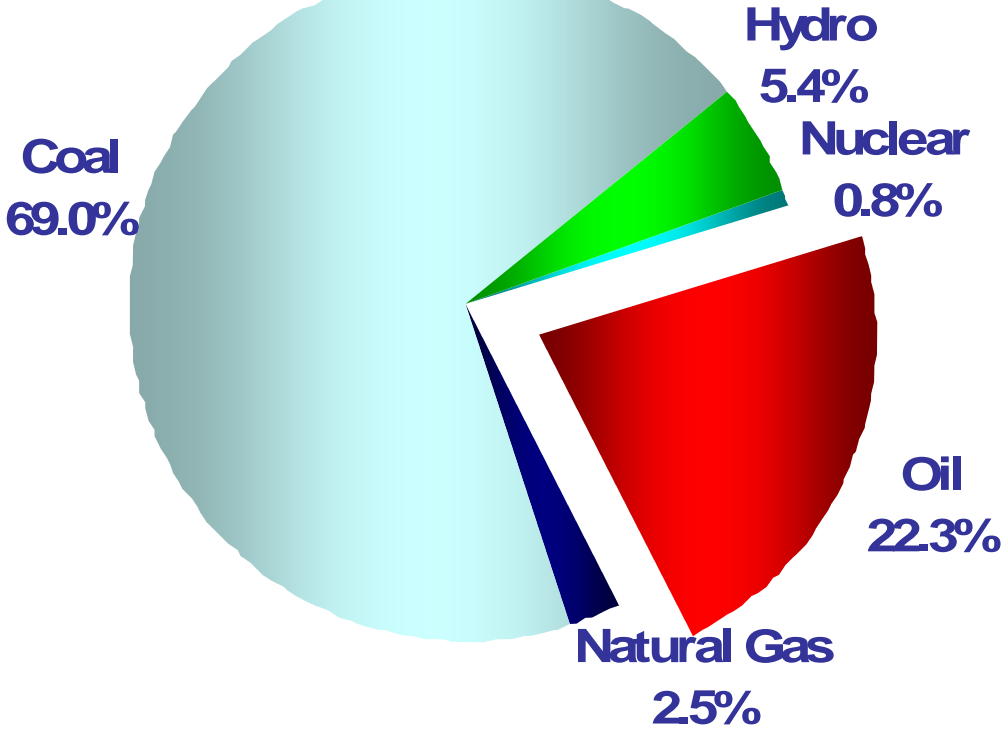
- **Adoption of Policies “Reforming & Open-Door”**
  - Opened Shezhen and Zhuhai of Guangdong province in 1979 followed by Shantou of Guangdong and Xiamen of Fujian provinces in 1980.
  - Extended into all the eastern coast regions in the 1980s~1990s.
- **Join WTO in 2001**
  - China became an important member of international trade society.
- **Annual Economic Growth Rate of almost 10% during 1979-2005**
- **High Economic Growth required high energy consumption.**
  - China, self-sufficient in energy, has become a net importer of oil since 1994.

# Energy Consumption in China

MMToe



# Energy Market Composition



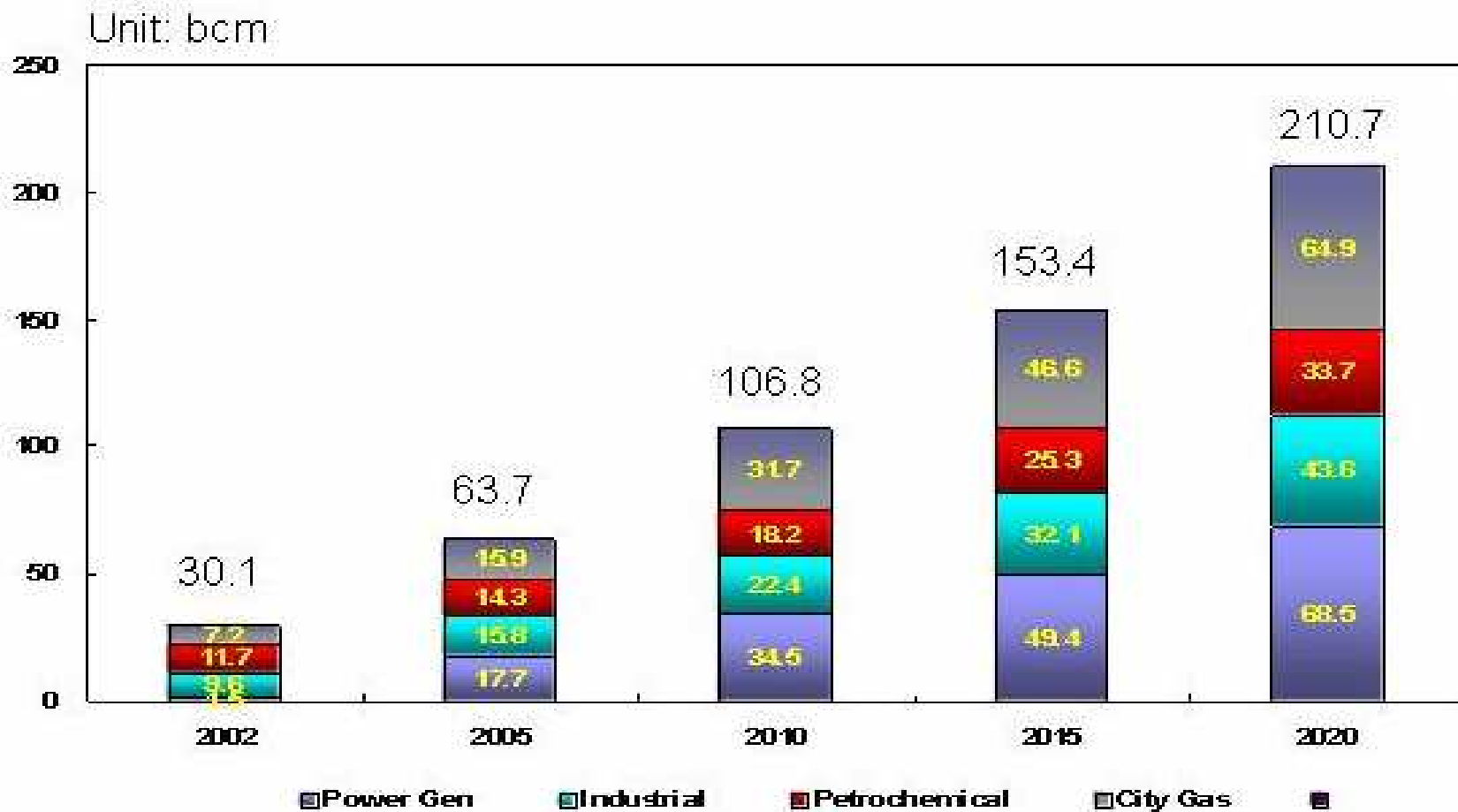


## Target of Gas Policy: 2001~2005

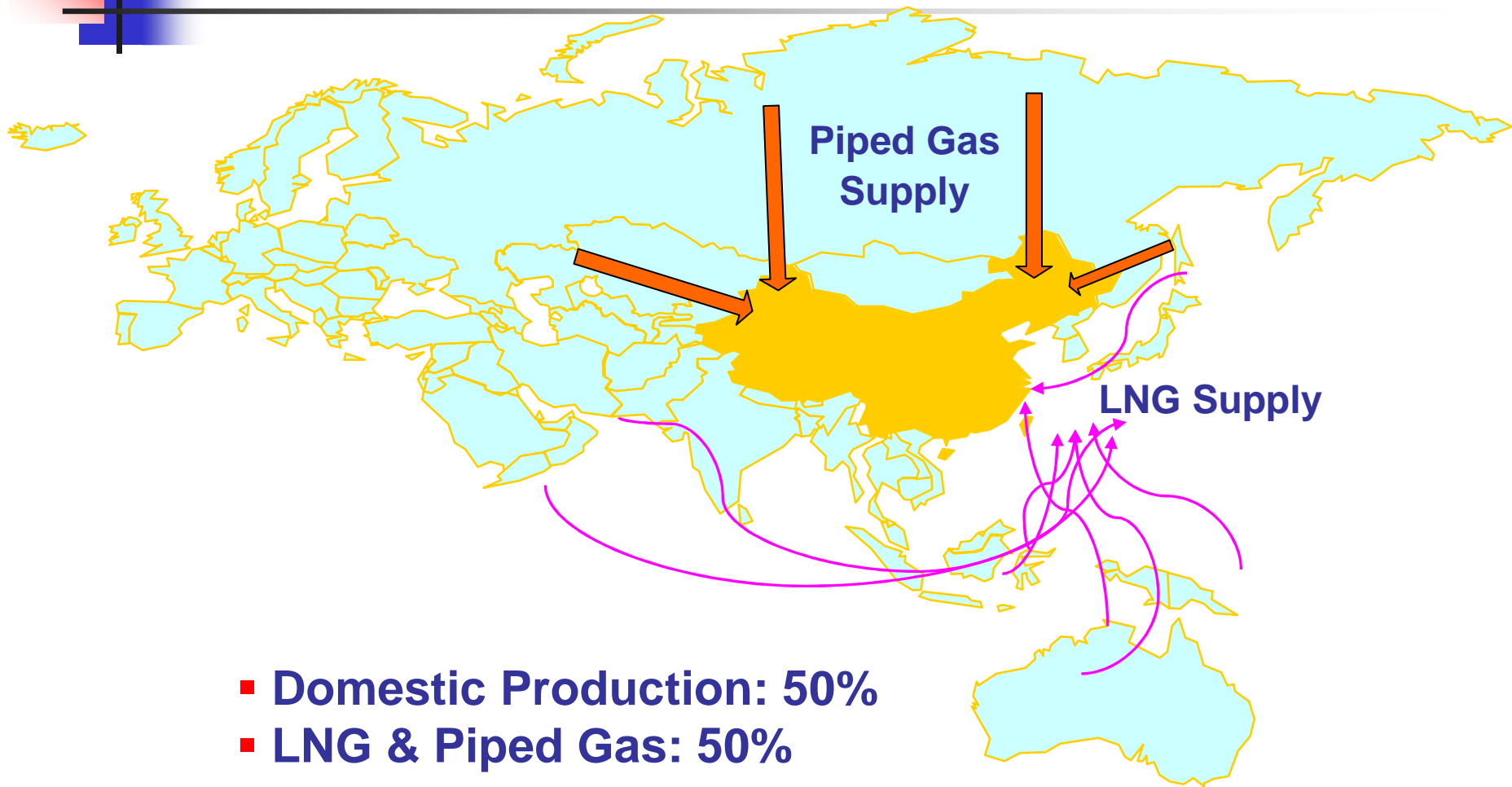
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- Increase market share of gas from 2.0% to 4.0~4.5%.
  - Discover additional gas reserves of 1.45 tcm from existing fields.
  - Produce 50~55 bcm of natural gas in around 2005.
  - Construct 10,000km of gas pipelines and establish a nation-wise network until 2015.
- 👉 To achieve the goals, China opened her gas market to foreigners, devoted herself to int'l gas cooperation, and implemented various int'l gas projects.

# Gas Demand Outlook in China



# Gas Supply Plan : 2020





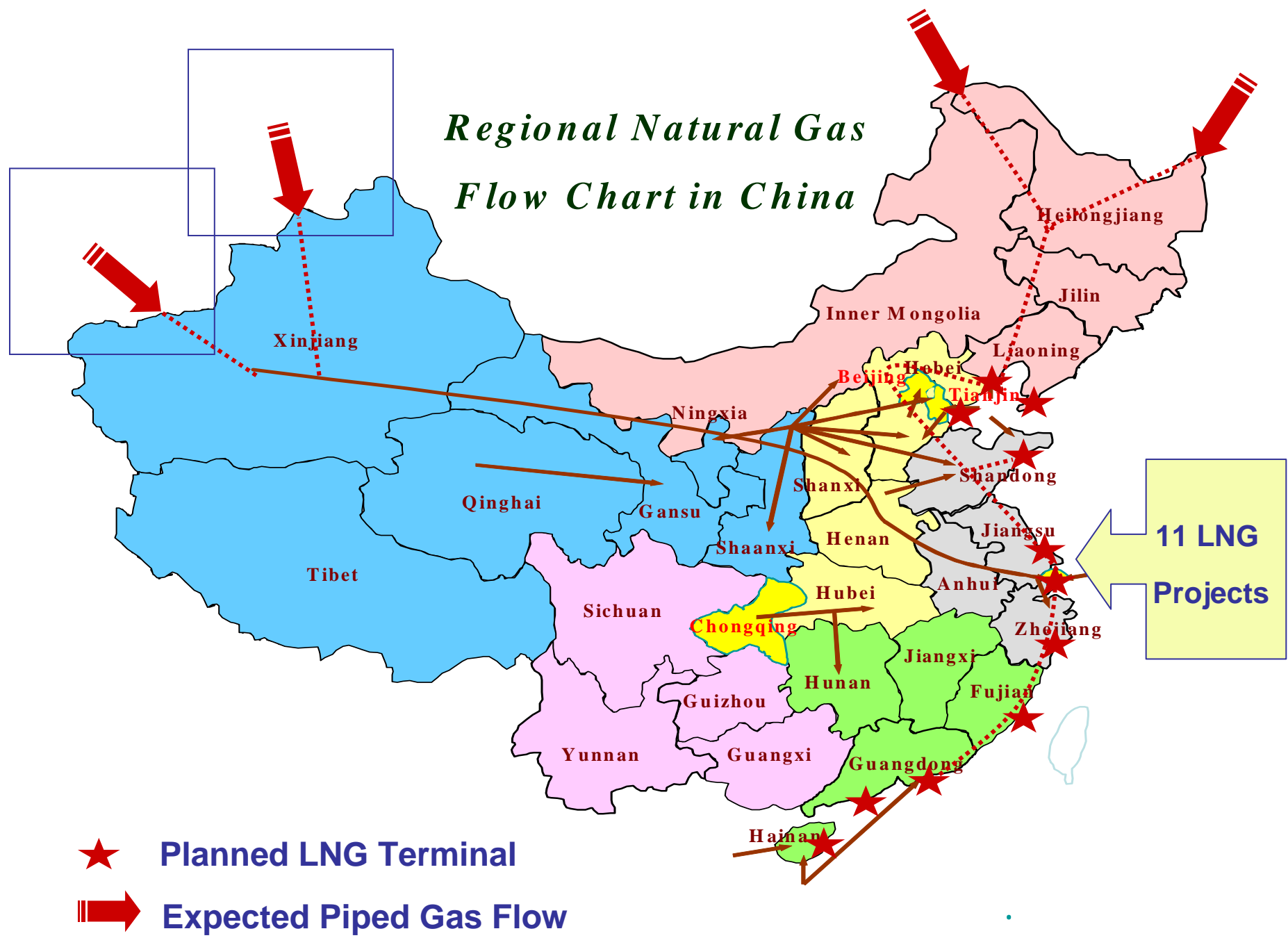


	Gas Pipelines in Place
	Planned Gas Pipelines
	Oil Pipelines in Place
	Planned Oil Pipelines

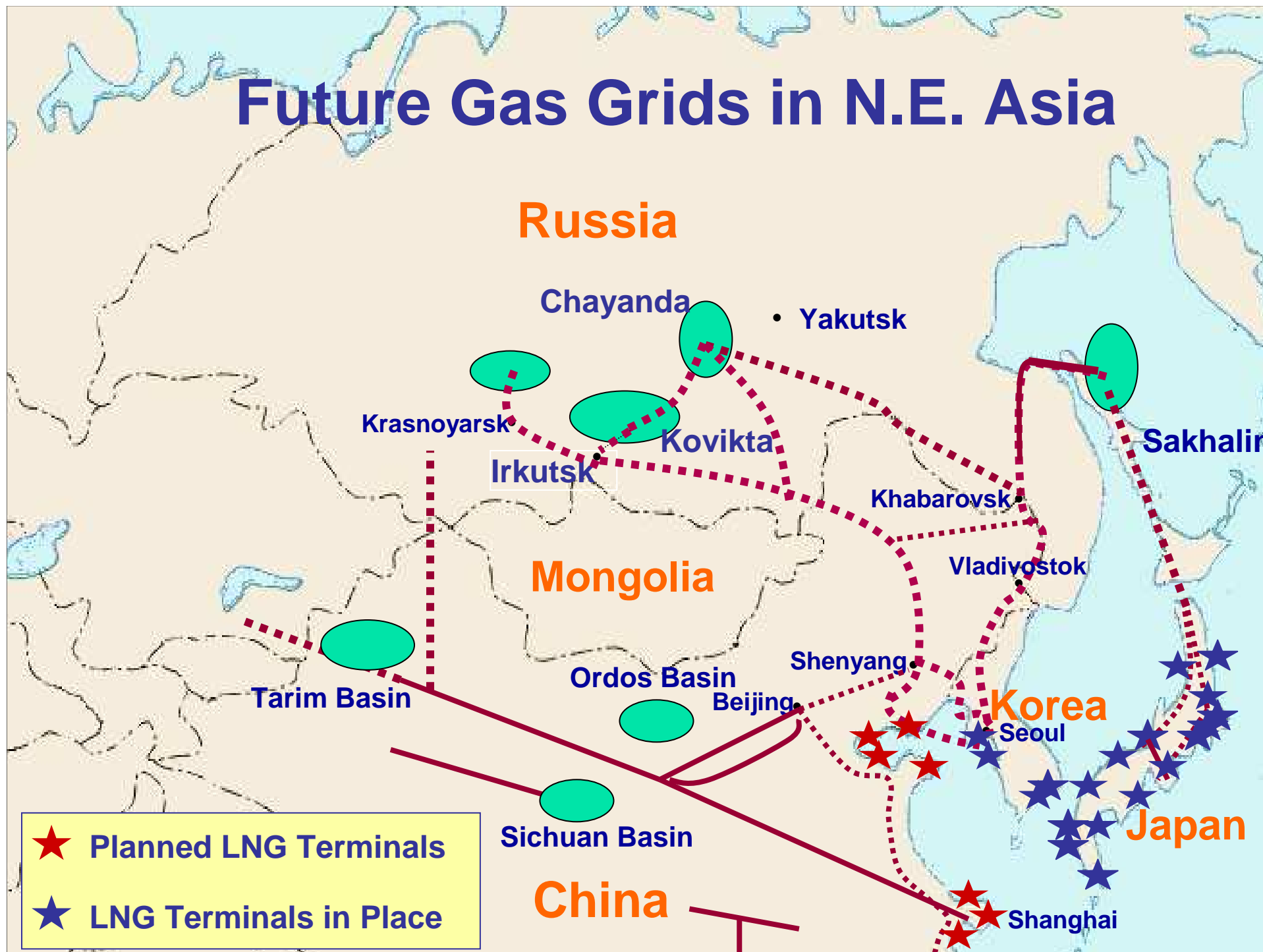
**Expected Volume of Gas Inflows**

- 30 bcm from Central Asia
- 30 bcm from W. Siberia

# Regional Natural Gas Flow Chart in China



# Future Gas Grids in N.E. Asia



# Effects of PNG Projects in China



# Effects of LNG Projects in China





# Summary & Conclusions

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- Natural gas demand had slowly increased since China had adopted policies of “**Reforming & Open-Door**” in 1979. More recently, however, it has been accelerated at a speedy manner due mainly to strong environmental regulations and expansion of heavy energy-intensive industries.
- To meet such increases in gas demand, China not only develops domestic gas resources in Tarim and Ordos basins, where most gas reserves are buried, but also implements Central Asian, West and East Siberian, and Sakhalin pipeline projects, as well as a number of LNG projects.
- The pipeline projects would connect Chinese gas market with Central Asian and East Russian gas resources, thereby **making Europe compete with Northeast Asia for the gas in question.**
- China’s 11 LNG projects together with those of India and US will also have tremendous effects on the Asian and world LNG markets. They will integrate 3 regional gas markets into a global LNG market, which will be **more flexible and competitive than as it is.**



## Two Questions to Ask

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- **When will all the gas projects in China be realized, so that competition between NE Asia and Europe for the gas in Central Asia and Siberia take place?**
- **In Which order the gas projects in question be materialized?**

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**Thank you**