

PRC-Turkmenistan Natural Gas Pipeline (Central Asia-China Gas Pipeline)

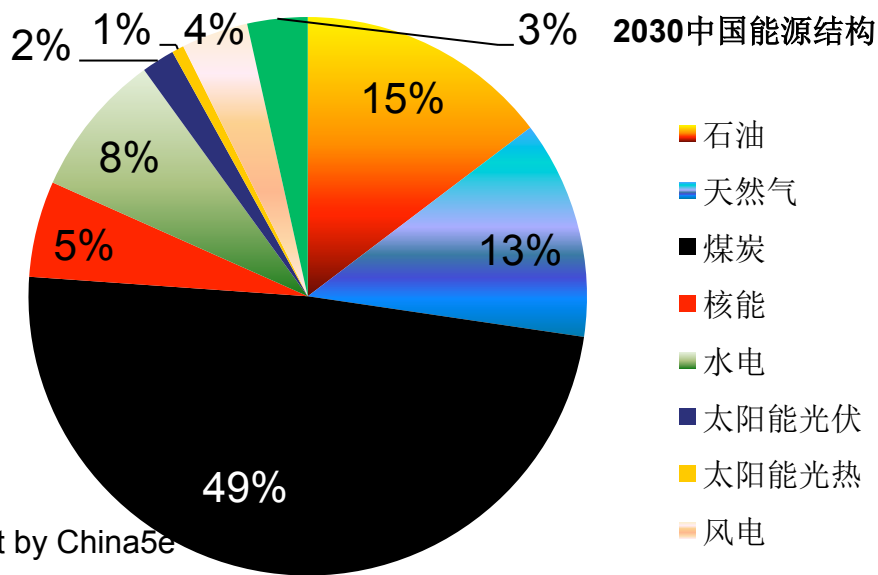
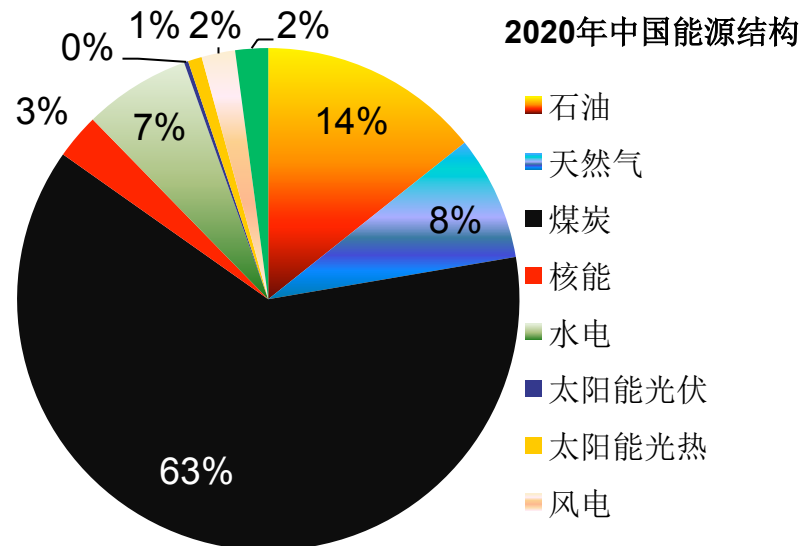
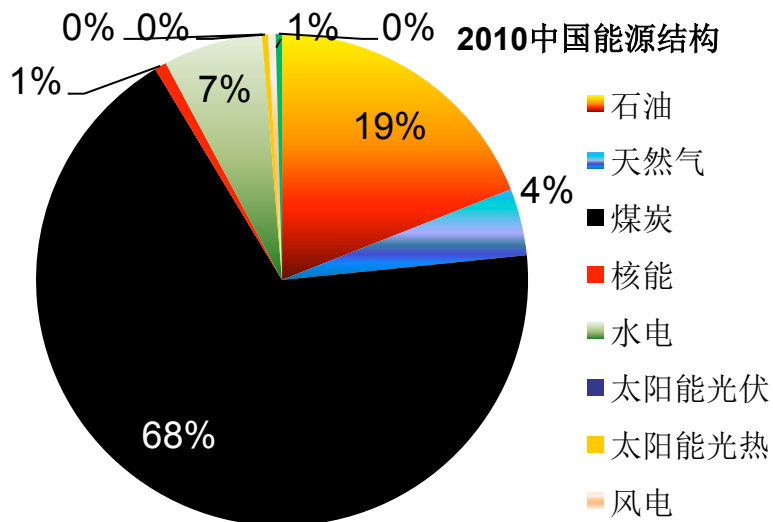
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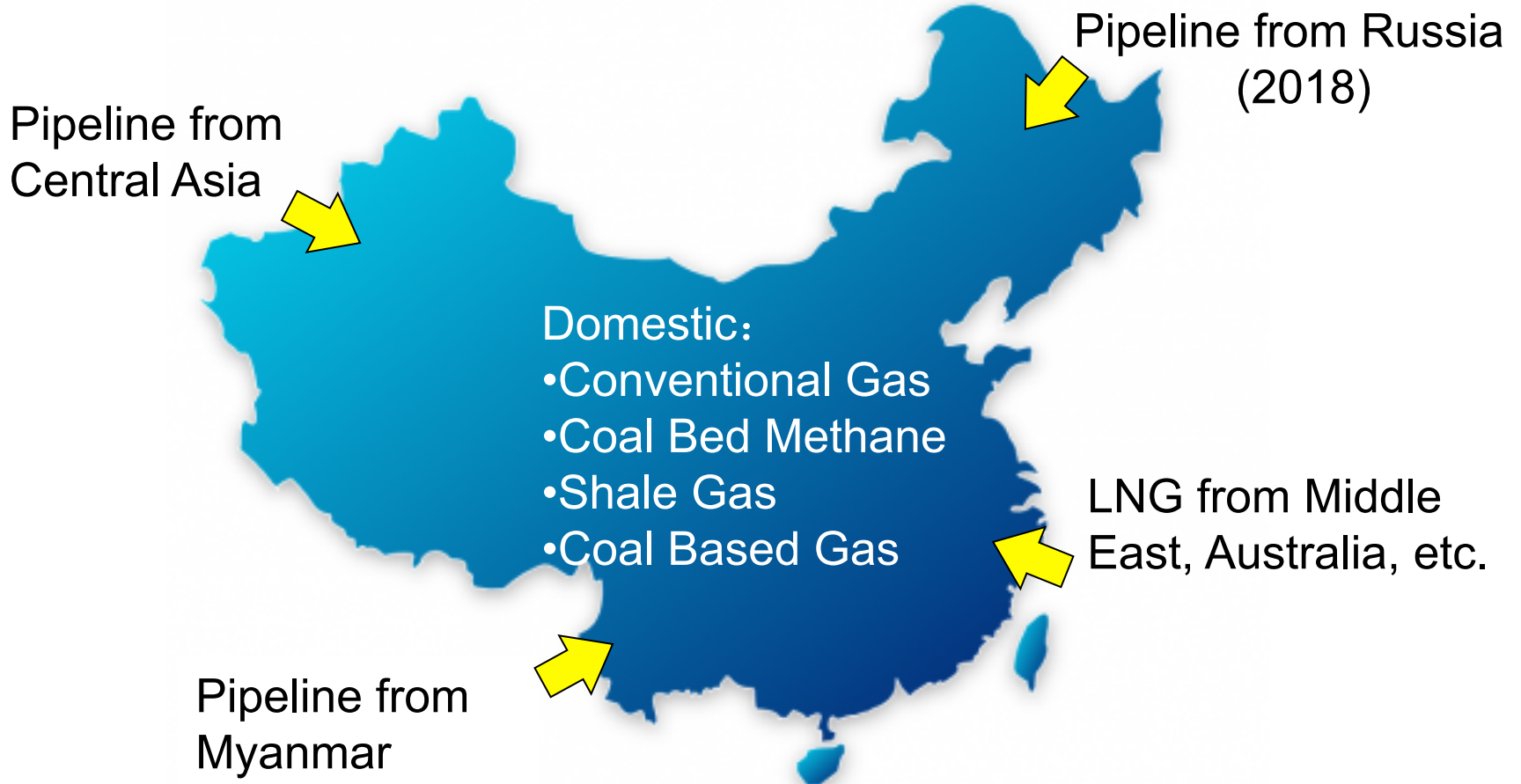
Background: Golden Age of Natural Gas in China

Natural gas share in China's energy mix is rising. **4%→8%→13%**



- 石油
- 天然气
- 煤炭
- 核能
- 水电
- 太阳能光伏
- 太阳能光热
- 风电
- Oil
- Gas
- Coal
- Nuclear
- Hydro Power
- Solar PV
- Solar Thermal
- Wind Power
- Other Renewable Energy

Gas from all directions and various resources in China



PRC-Turkmenistan Natural Gas Pipeline

Length: 1830 km

Connected to *West to East Line*

About 10,000 km in all

Line A: opened in Dec. 2009
capacity **15** bcm/year

Line B: opened in Oct. 2010
capacity **15** bcm/year

Line C: opened in May 2014
capacity **25** bcm/year (end 2015)
10+10+5

(two compressor stations still under construction)

Line D: run through Tajikistan and Kyrgyzstan to Wuqia county China
capacity **30** bcm/year

Planned to begin construction in Dec. 2014
and become operational in 2017



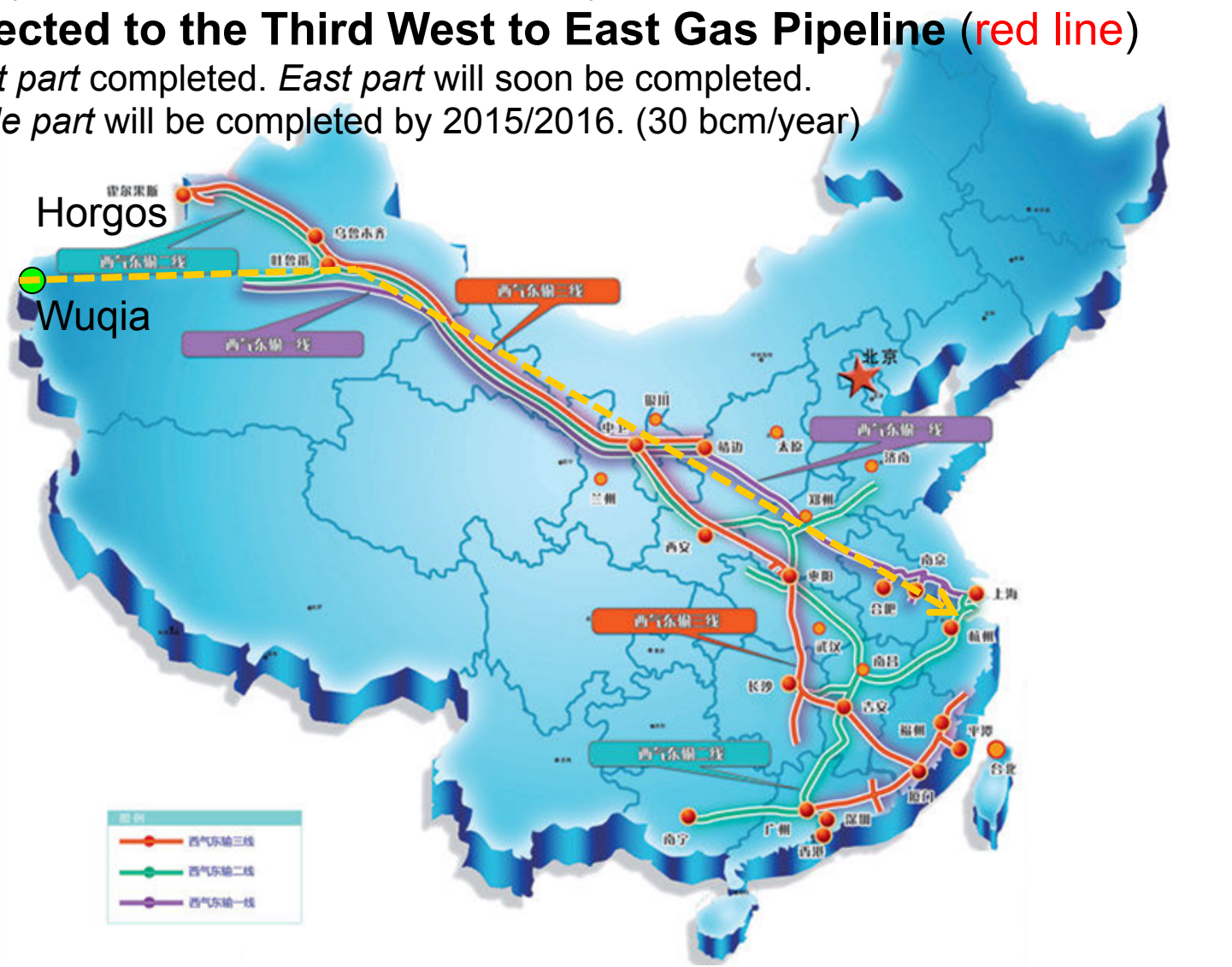
Line A/B is connected to the Second West to East Gas Pipeline (green line)

Second Pipeline: fully operational in Dec. 2012 (30 bcm/year)

Line C is connected to the Third West to East Gas Pipeline (red line)

Third Pipeline: *West part* completed. *East part* will soon be completed.

Middle part will be completed by 2015/2016. (30 bcm/year)



Line D will be connected to the Fifth West to East Gas Pipeline (yellow line)

Fifth Pipeline (planning): from Wuqia county to Zhejiang/Jiangsu province (45 bcm/year)

Pipeline Gas Resources and Capacity Comparison

Pipeline	2010	2011	2012	2013	2014	2015	2016	2019	2020
Line A	4.8	16.8	15	15	15	15	15	15	15
Line B			8.5	12	15	15	15	15	15
Line C					3.5	7	25	25	25
Line D								30	30
Myanmar				1.2	3.9	4	12	12	12
Russia East								38	38
Russia West									30
Mongolia Coal Based Gas									13
Possible Increase from Uzbekistan									15
Total (bcm)	4.8	16.8	23.5	28.2	37.4	41	67	135	193

Data source: Public data / calculated by China5e Research Center

The PRC-Turkmenistan gas pipeline is vital to China even in 2020.

Gas Price Comparison around the world

General Price	US\$/1000m ³	US\$/MMbtu	RMB/m ³
Turkmenistan Departure Border Price	200	5.69	1.25
Turkmenistan Arriving (China Horgos) Border Price	352	10.01	2.20
China Russia Agreement Price	350	9.95	2.19
Russia to Europe Price	550	15.64	3.44
Russia to Ukraine	485	13.79	3.03
Russia to Ukraine Former Favorable Price	285	8.10	1.78
Russia to Germany Favorable Price	400	11.37	2.50
USA Summer Price	141	4.00	0.88
USA Winter Price	211	6.00	1.32
Asia JCC Price	563	16.00	3.52

Data source: Public data / calculated by China5e Research Center

The PRC-Turkmenistan pipeline gas price is competitive and enhances China's price negotiation power.

PRC-Turkmenistan Natural Gas Pipeline

- meets the surging gas demand of China and the supply is comparatively steady.
- diversifies the importing gas route to China and is the most important existing route.
- brings investments and jobs to Central Asia.
- enhances the political and economical connection between China and Central Asia.
- offers a win-win cooperation model to the world.

Thanks

