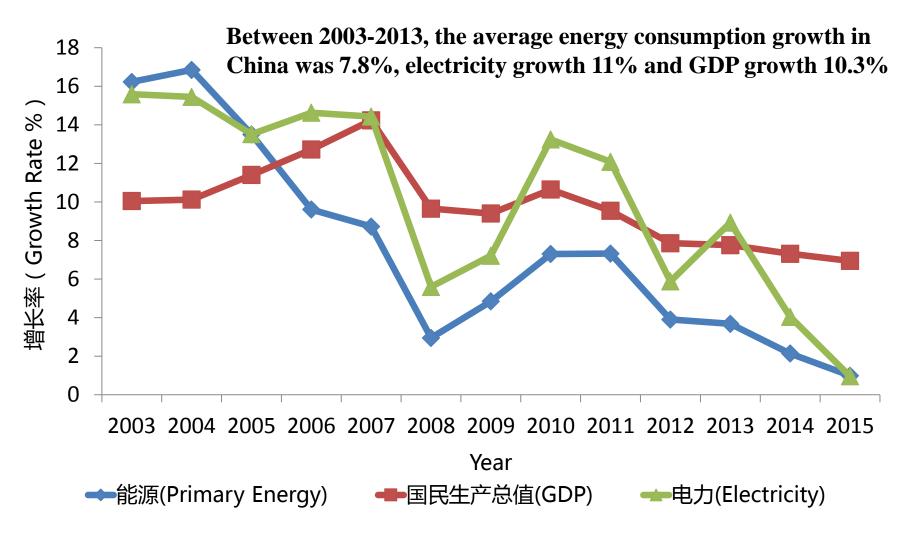
### China's energy outlook

**Boqiang Lin** 





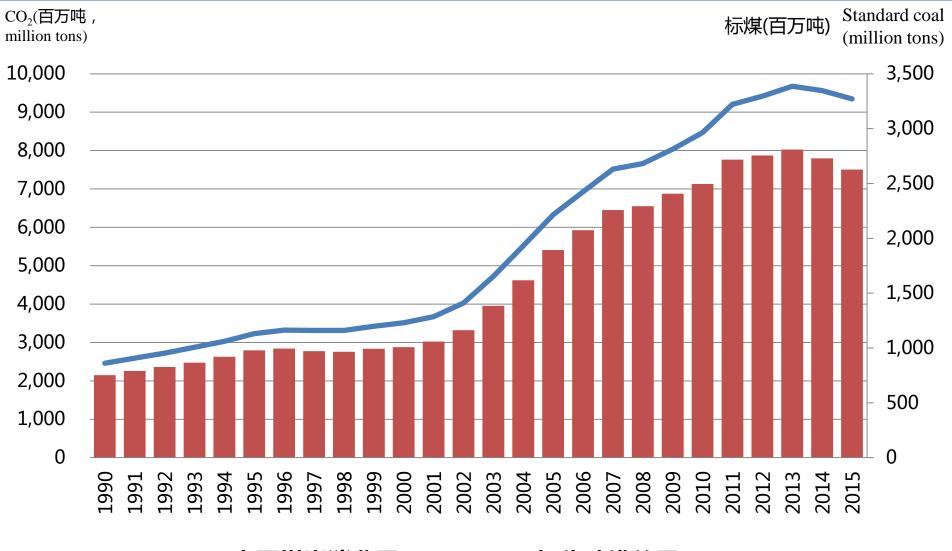
## Growth Rates of China's GDP Electricity and Energy Consumption between 2003-2015



Source: China's economic Database



## China's CO<sub>2</sub> emissions and coal consumption from 1990 to 2015



■中国煤炭消费量

**Coal consumption** 

一二氧化碳排放量

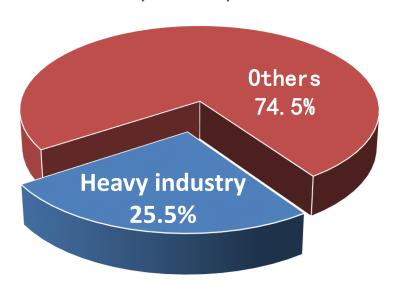
CO<sub>2</sub> emissions

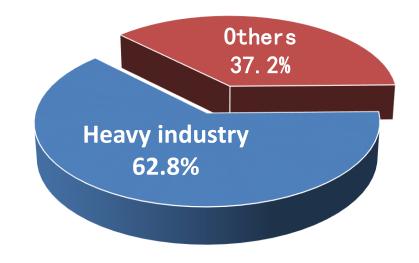




#### **GDP and Energy Consumption of Heavy Industry in 2014**

■ 重工业 Heavy industry ■ 其他 Others





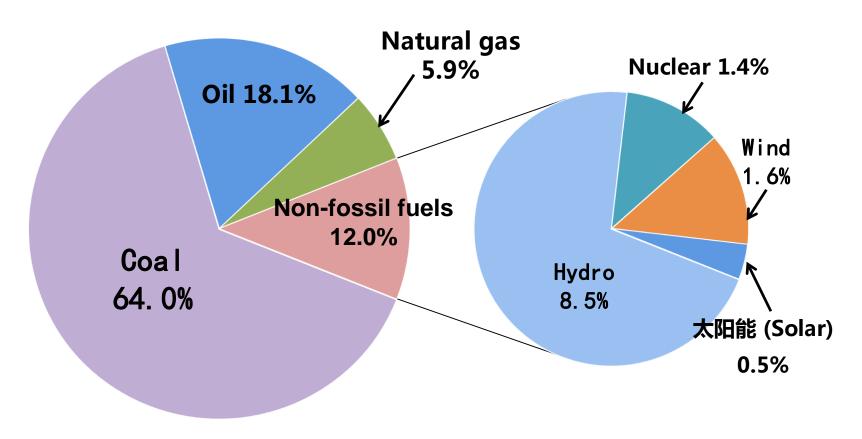
(GDP Structure)

(Energy Consumption Structure)

In 2014, the heavy industry, including steel and cement, consumed 62.8% of energy, but only contributed 25.5% of GDP



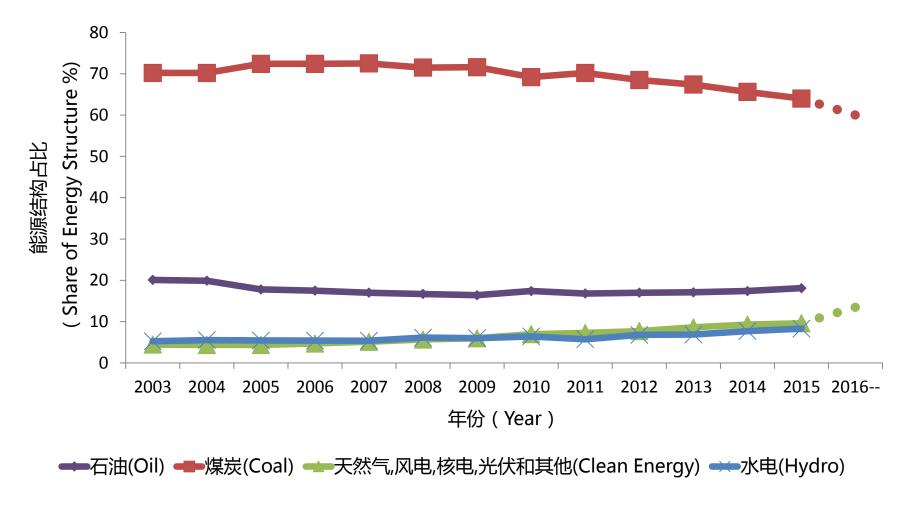
#### **China's Primary Energy Structure in 2015**



With energy and low carbon development targets of the government, most likely energy structural changes in 13<sup>th</sup> five years plan: reduce coal; increase gas, nuclear, wind and solar



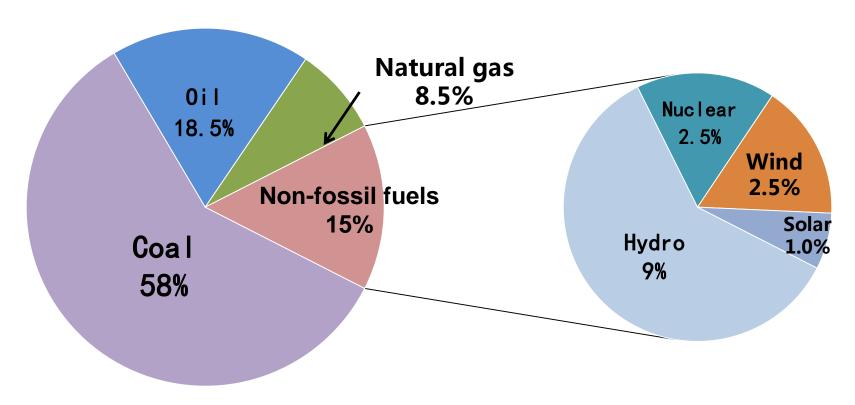
#### Changes of China's Primary Energy Structure since 2003



The share of oil is restricted by resource endowment and energy security and has been stable. The share of hydro and gas have been increased, but the hydro future development will be limited by hydro potential



#### Forecasting China's primary energy structure in 2020



The possible energy structure changes in the  $13^{th}$  five years plan , if the government insists on achieving the target of 15% non-fossil fuels by 2020.



# Comparison of rail transits in Tokyo, Beijing and Shanghai

City	Size (10 <sup>3×</sup> Km <sup>2</sup> )	Population (million)	Vehicles Numbers (Thousand)	Rail Transit Mileages (km)	Transit Trip Ratio
Tokyo	13.4	37.6	8000	2500	86% (rail transit)
Beijing	16.4	21.7	5480	574	
Shanghai	6.3	24.2	3220	617	

<sup>\*</sup> Rail transit mileage of China in 2015 in 3618 km



Thank you!

bqlin@xmu.edu.cn



