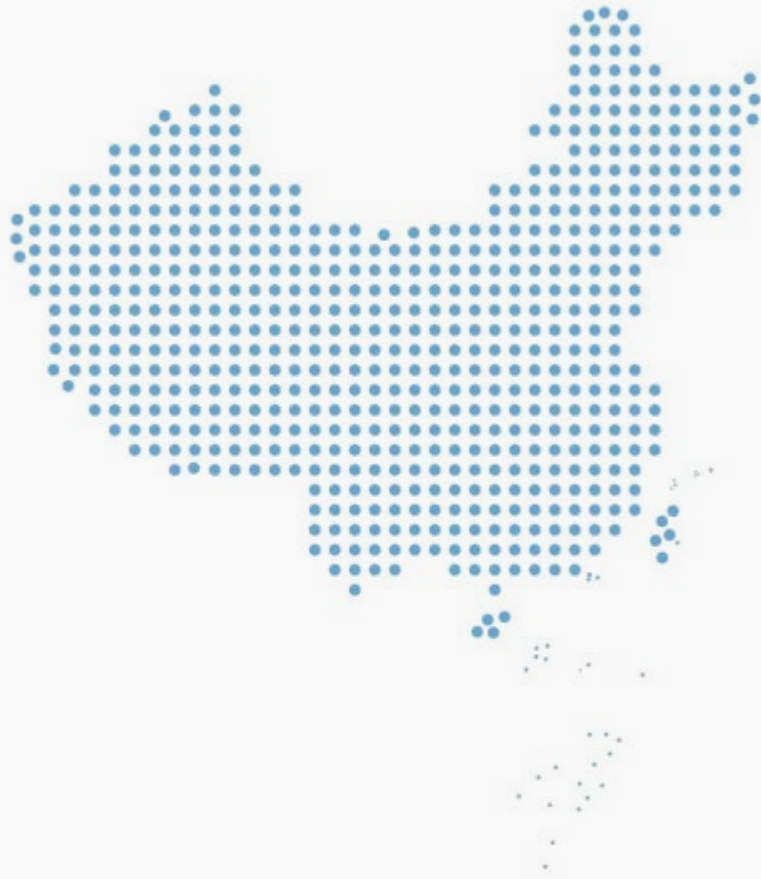


A faint, light blue world map is centered in the background. Overlaid on the map are several thin, dark blue geometric lines that form a series of intersecting triangles and quadrilaterals, primarily on the left and right sides of the slide.

China's Domestic Market and Decarbonization in Globalization Era

Shaohua Lei
Peking University, China

Challenge of China



As the largest developing country, China has to face the challenge of both promoting economic growth and combating with climate change. China's GDP has maintained rapid growth rate for decades. We have, however, witnessed that overwhelming social outrage by haze and depletion of water troubles Chinese government's decision-making in recent years.

Difficulties of Decarbonization



Economic Growth in the Prior Position

The legitimacy of Chinese Communist Party heavily relies on economic performance, that is, China's economic growth is prior to other agendas. China has to continually improve people's living standards and alleviate poverty by promoting economic development. Local governments must rely on the government revenue to cover the costs of various day-to-day administrative responsibilities and public services.

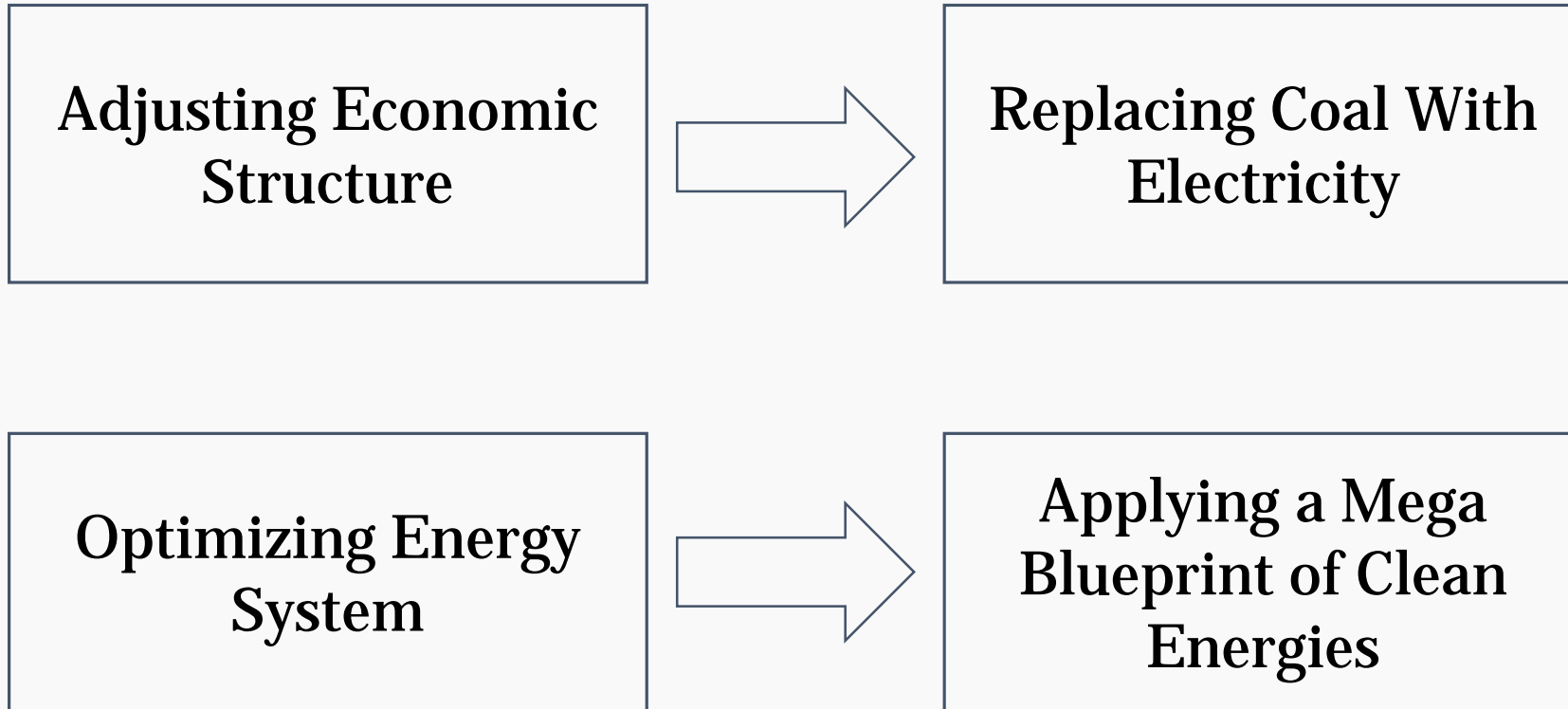
Difficulties of Decarbonization



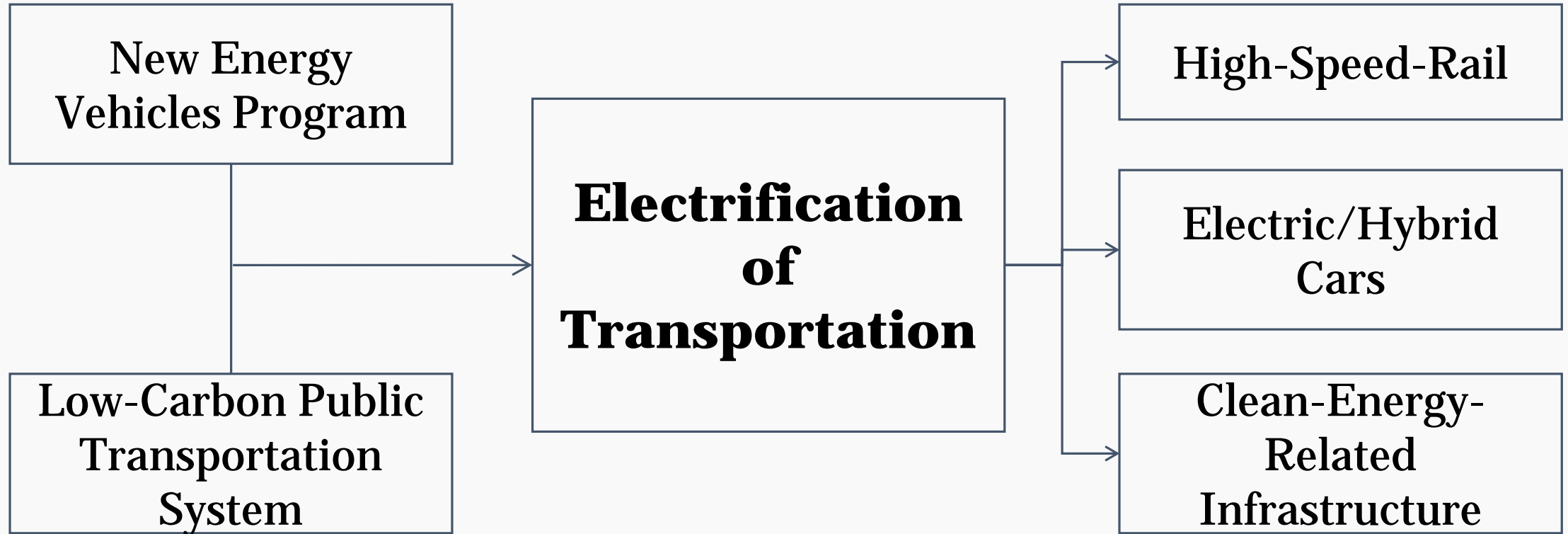
Increasing Energy Consumptions

Since 2009, China has surpassed the U.S. and has become the largest automobile market in the world. Automobile's gas-guzzler-like demands push China to explore various resources to secure its energy system. Consequently, with ongoing urbanization and industrialization process, it seems that fossil fuel demands, as well as other energy consumptions, have embarrassed China's commitment of decarbonization.

Measures of Decreasing CO₂ Emission



New National Strategies






Beijing:
The total numbers of
E-Car
will be **20,0000** in the end
of 2017



High Speed Rail



China's Domestic Market and the World

- 
- ◆ The adjustment of economic structure and energy system optimization deeply reshape China's domestic market.
 - ◆ Chinese market is becoming a leading power to stimulate the transition from an input intensive development model to a more sustainable and high-efficiency economic pattern.
 - ◆ Eventually, Chinese market will deeply influence the world to be a more sustainable future across three dimensions: policy, technology, and commercial models.

Decarbonization Compatible with Growth



Carbon emissions control will not contradict the development of China's economy and cross-border trade. The power of market and the transition of consumption model will get developed to make more open economies to be compatible with decarbonization.

DAIMLER

Daimler Greater
China Ltd. (DGRC)

50%



BYD Auto Industry
Co., Ltd.

50%

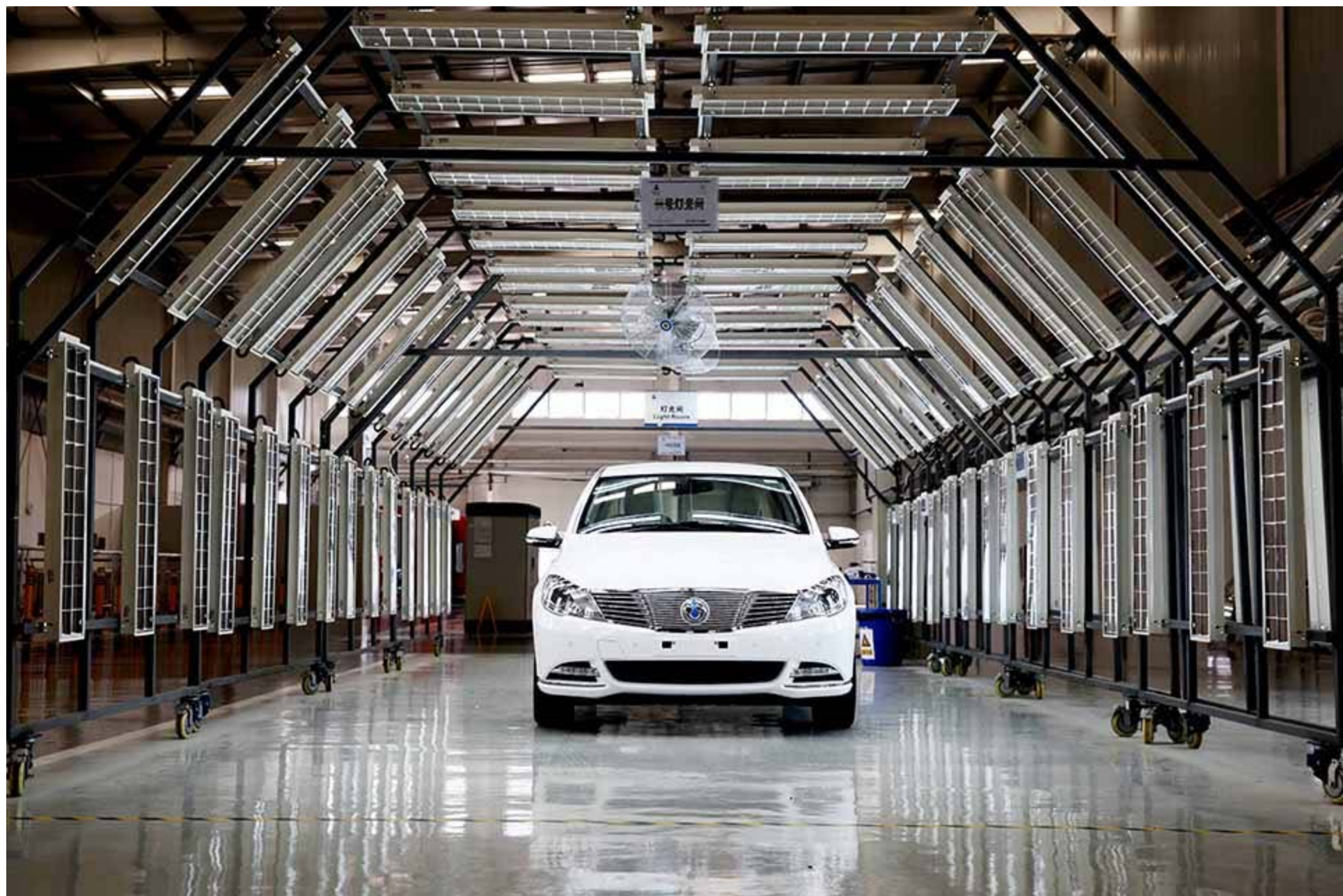
BYD Daimler New
Technology Co., Ltd.
(BDNT)



DENZA

腾势







TESLA

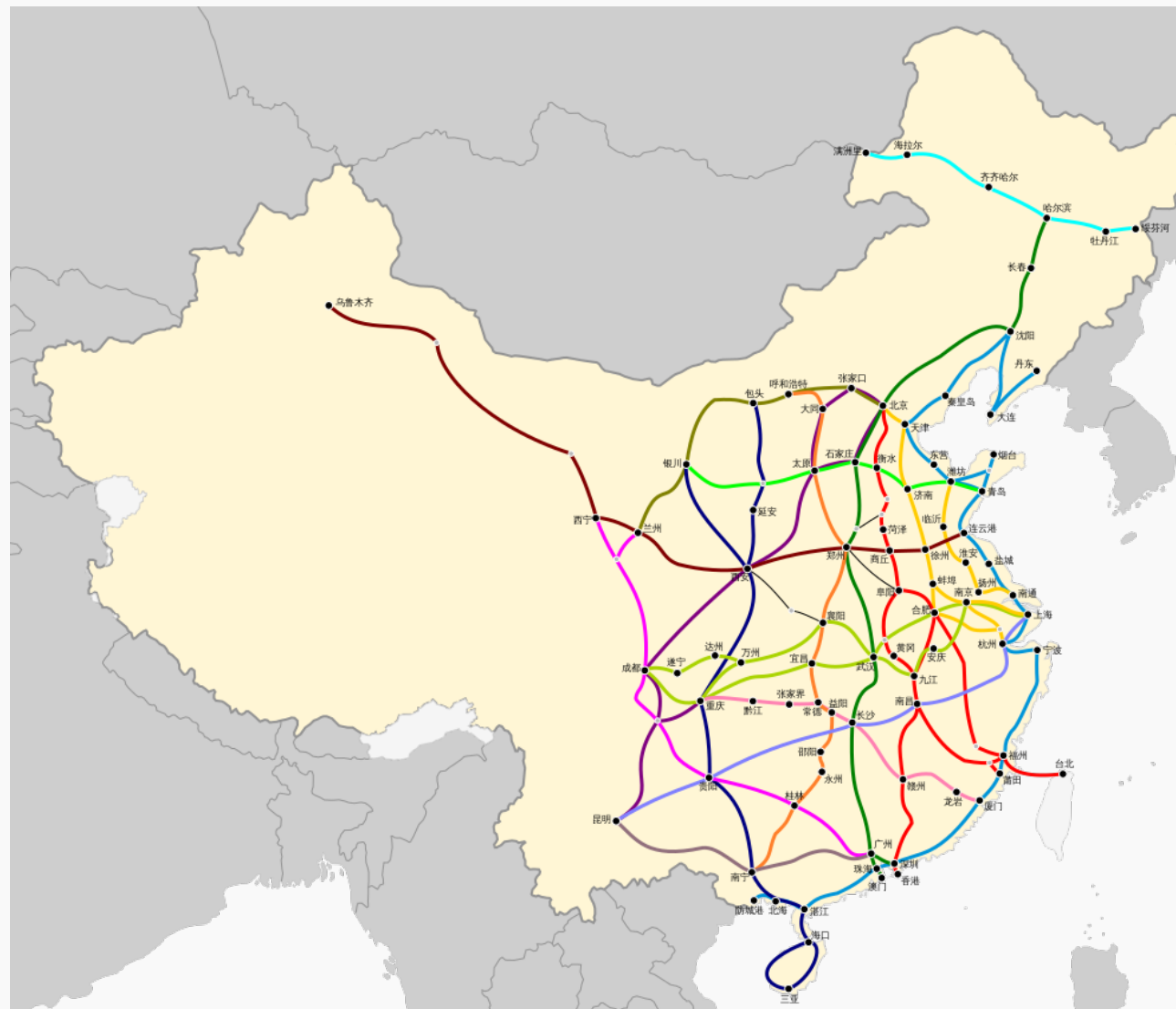




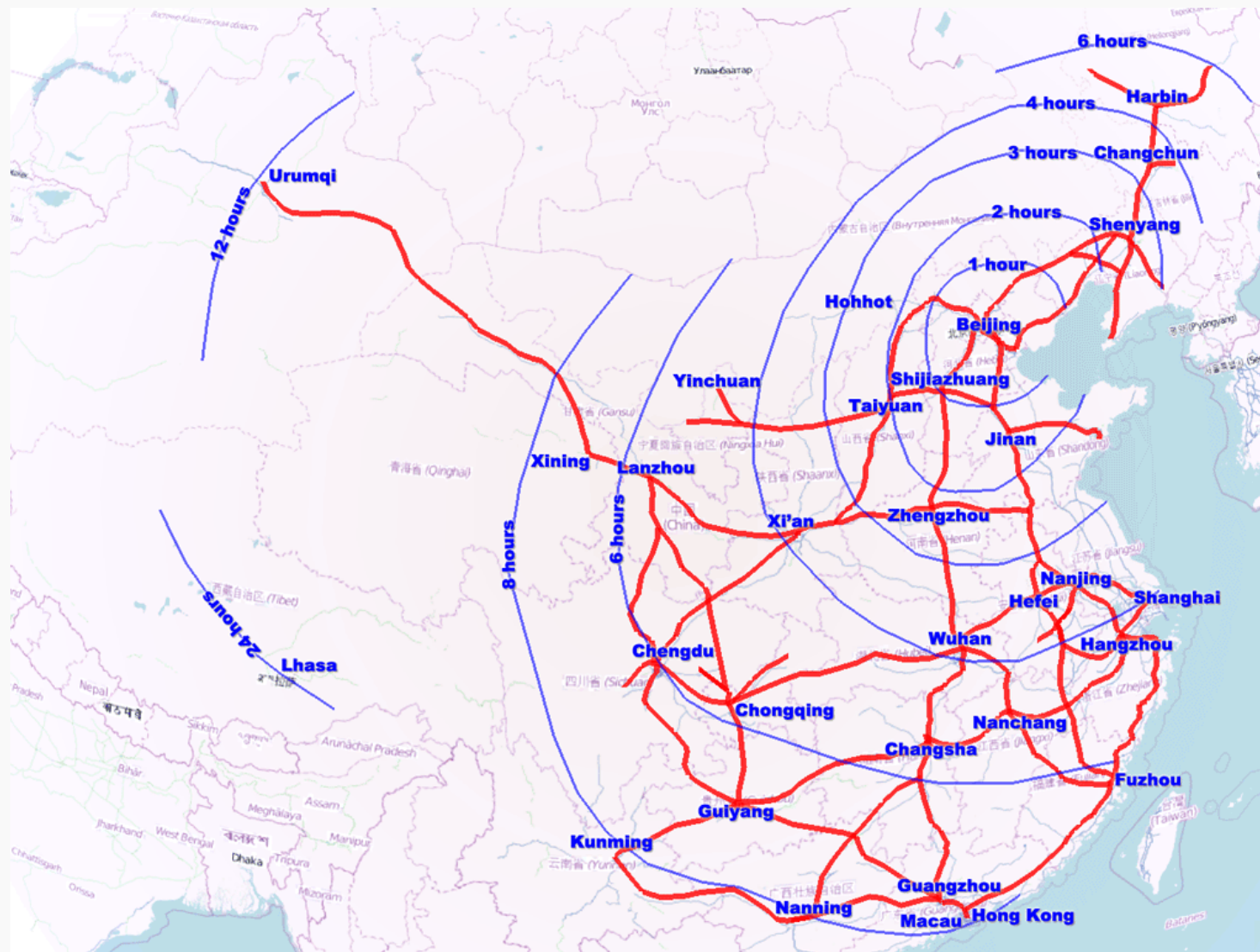
Thank you!

Shaohua Lei
Peking University, China

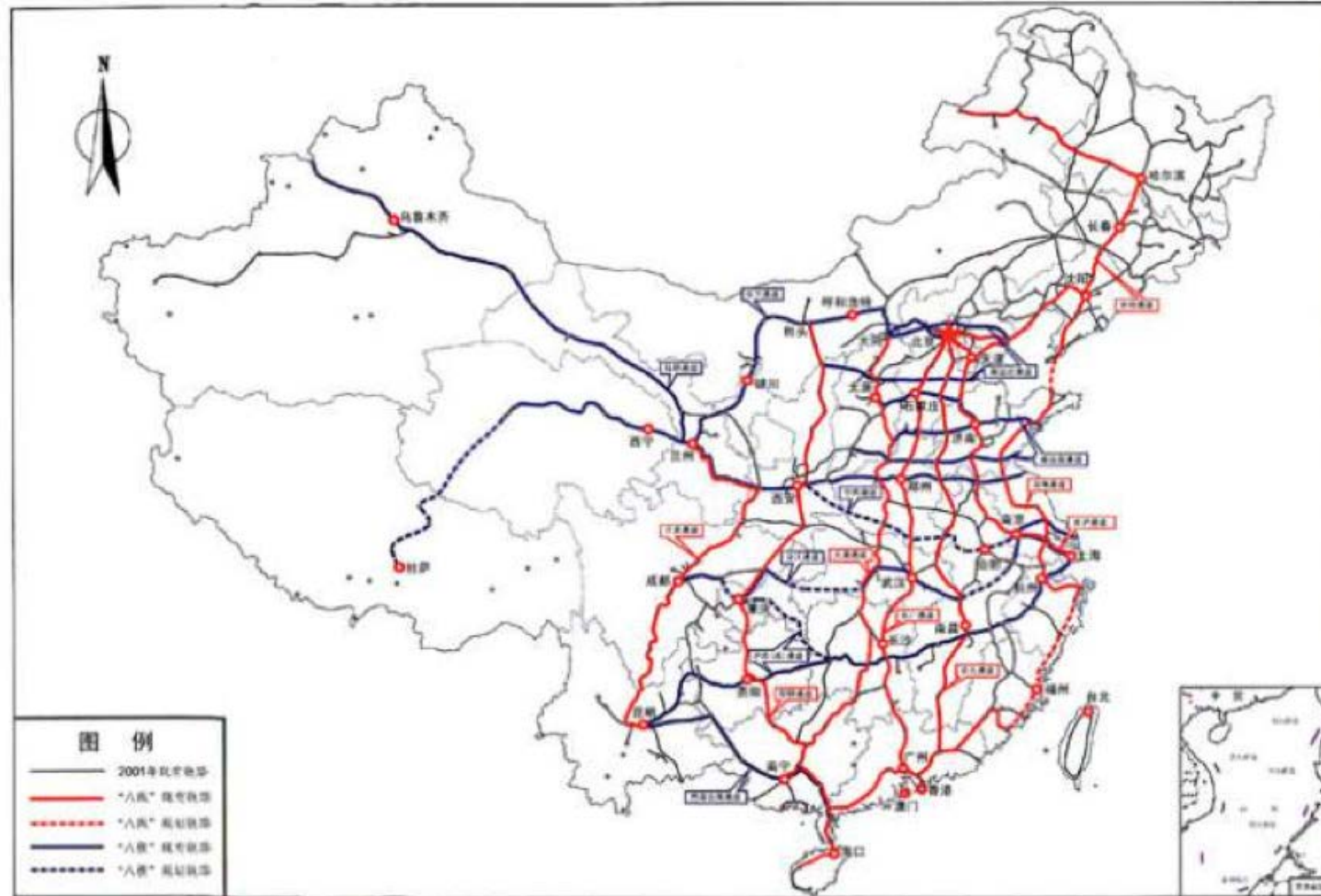
leish@pku.edu.cn



High Speed Rail Grid
20,000 km in 2016



High Speed Rail Grid 2020



High Speed Rail Grid
8+8 (Eight Vertical and Eight Horizontal network)=38,000 km
2025

Data



- E-cars in Beijing: 20,000 in 2017
40,000 in 2020
- Nuclear Power Plant: 60 Millions kwhr
(about 100 power plants)