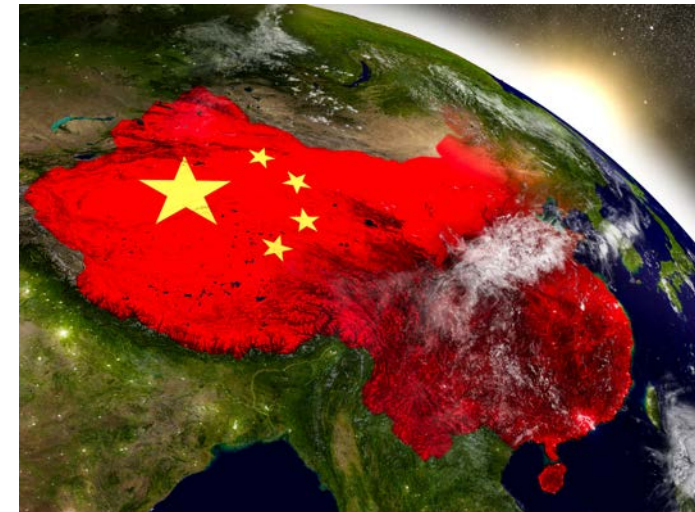




CHINA'S CLIMATE AND ENERGY POLICIES

DAVID SANDALOW

Climate Science and Investment Conference
May 10, 2019



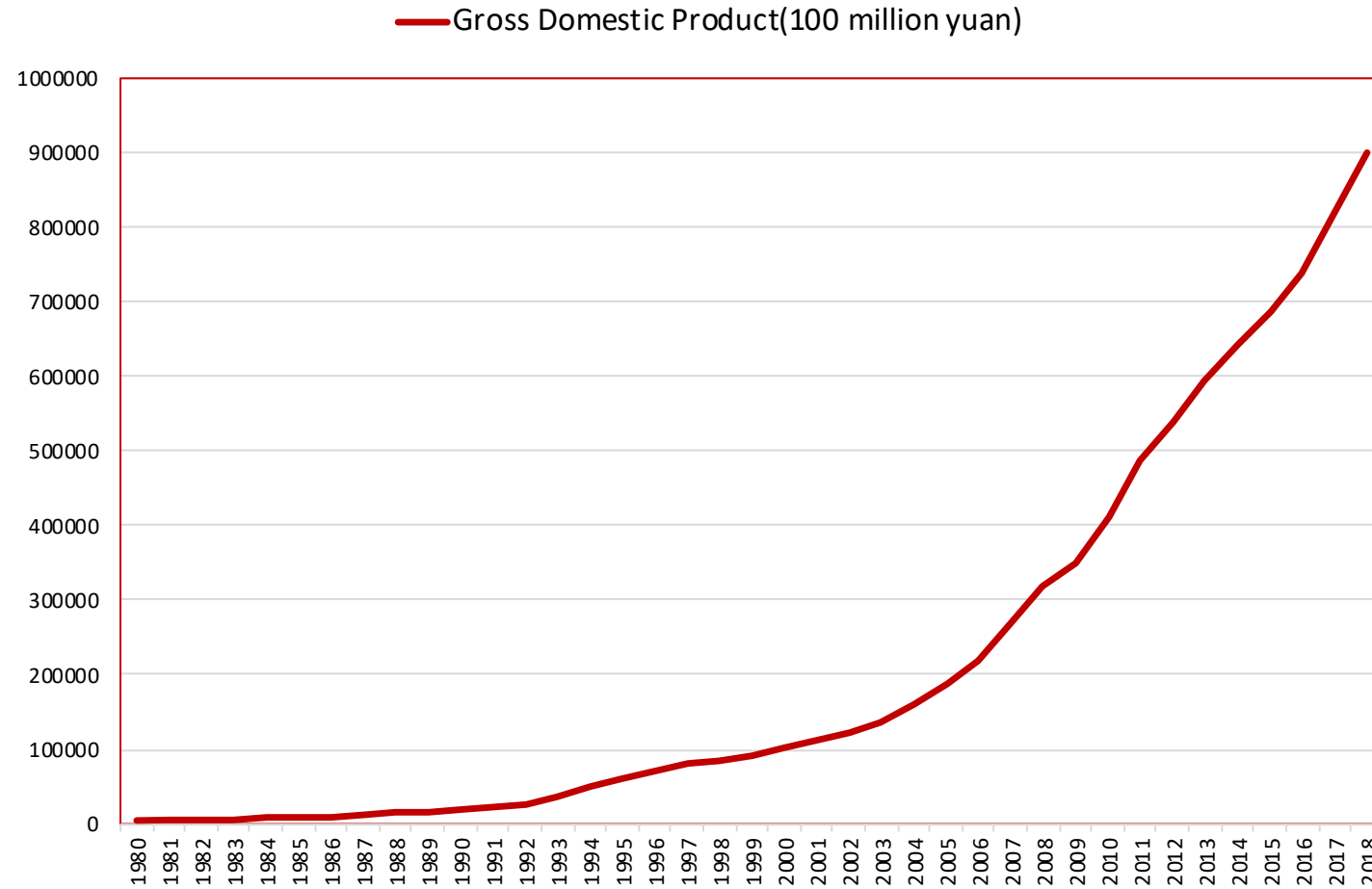
View of Pudong, Shanghai (1983)
上海浦东 (1983年)



Pudong, Shanghai
上海浦东

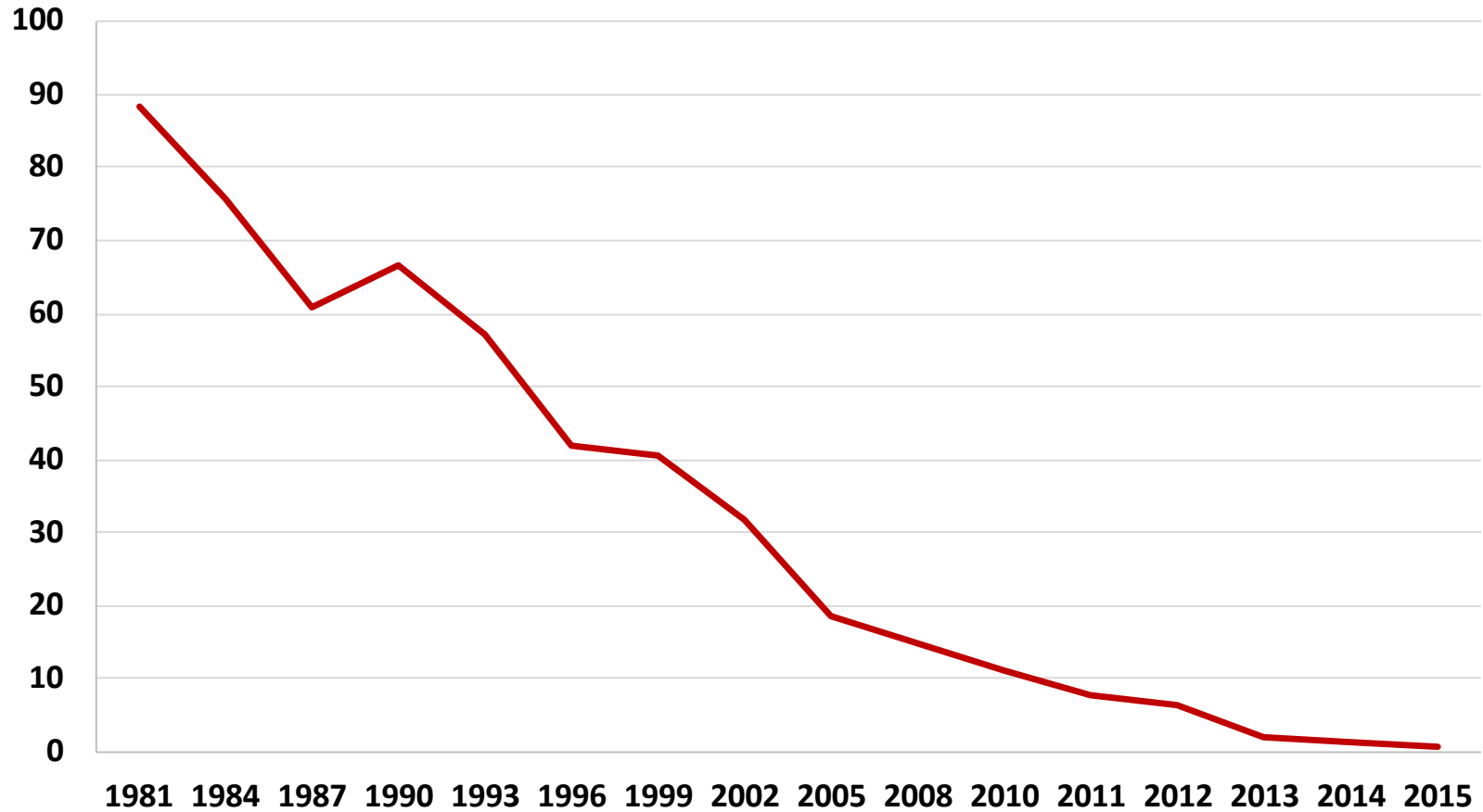


China Annual GDP 1980 - 2018



Source: National Bureau of Statistics of China

Percent of Population Living on Less Than \$1.90 per Day China 1980 - 2015



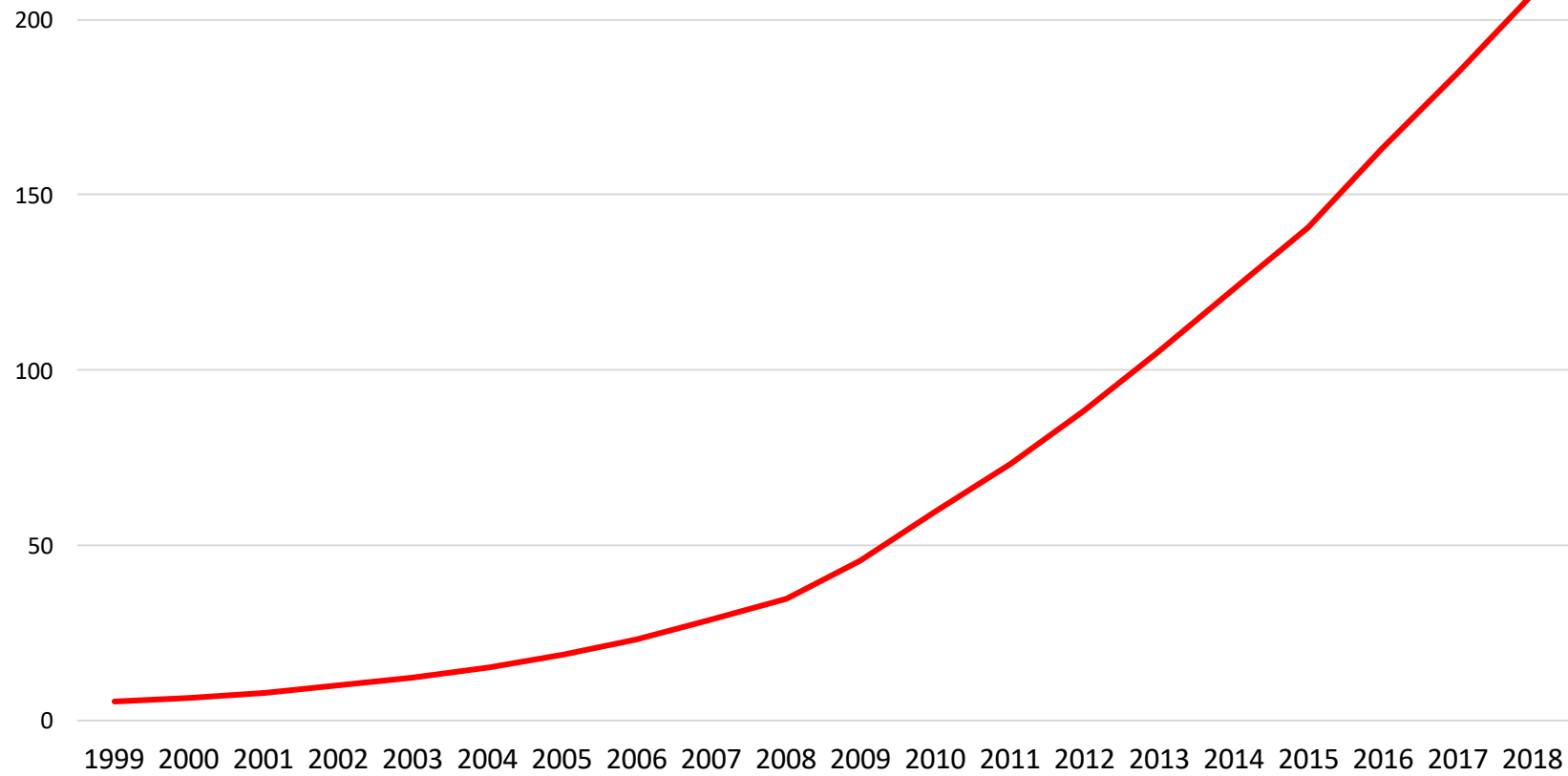
Source: World Bank Group







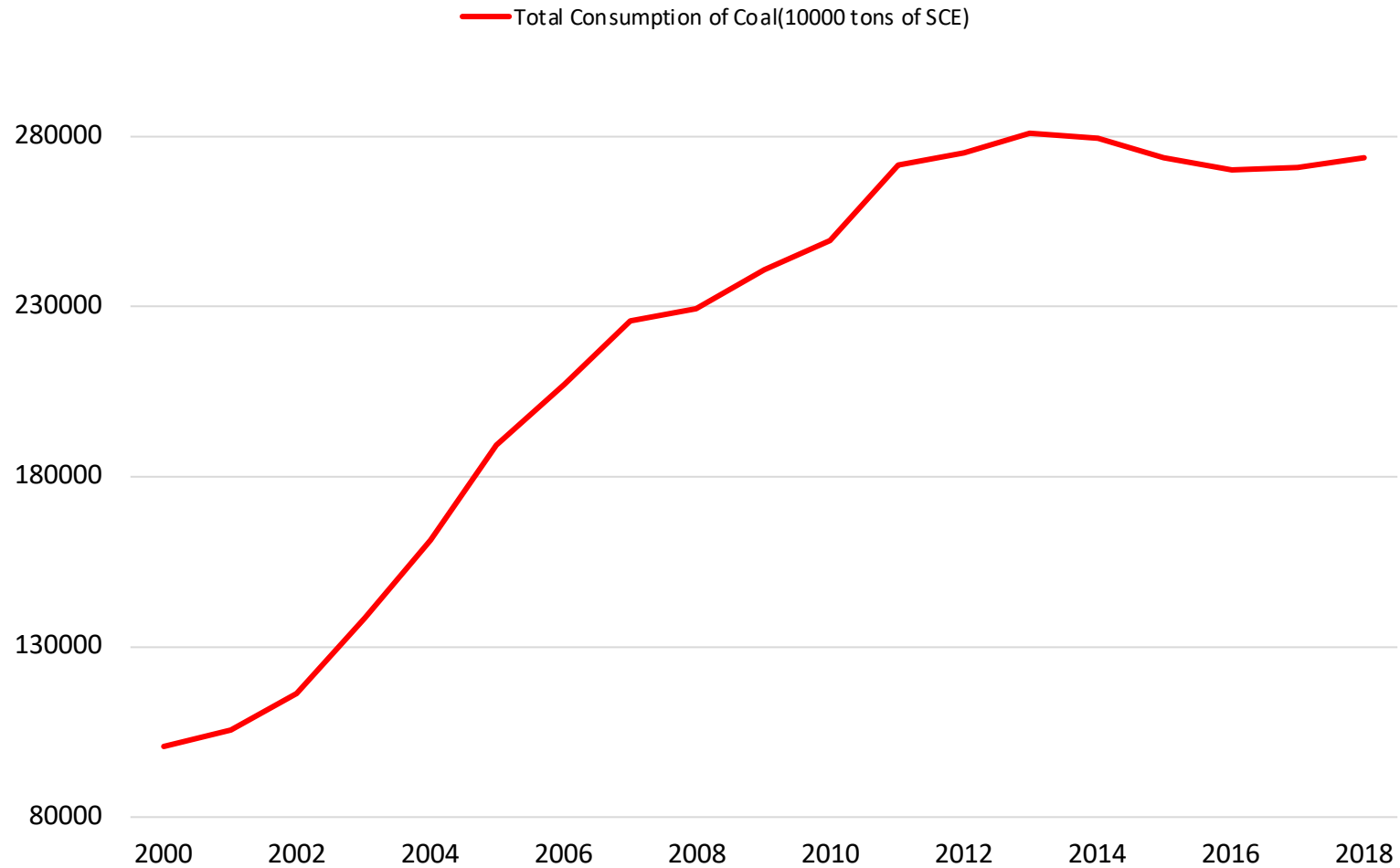
Private Vehicle Stock China 1999 to 2018 (millions)



Source: National Bureau of Statistics of China



Coal Consumption in China 1990 to 2018



Source: National Bureau of Statistics of China

Tiananmen Square, Beijing



Beijing Marathon October 2014

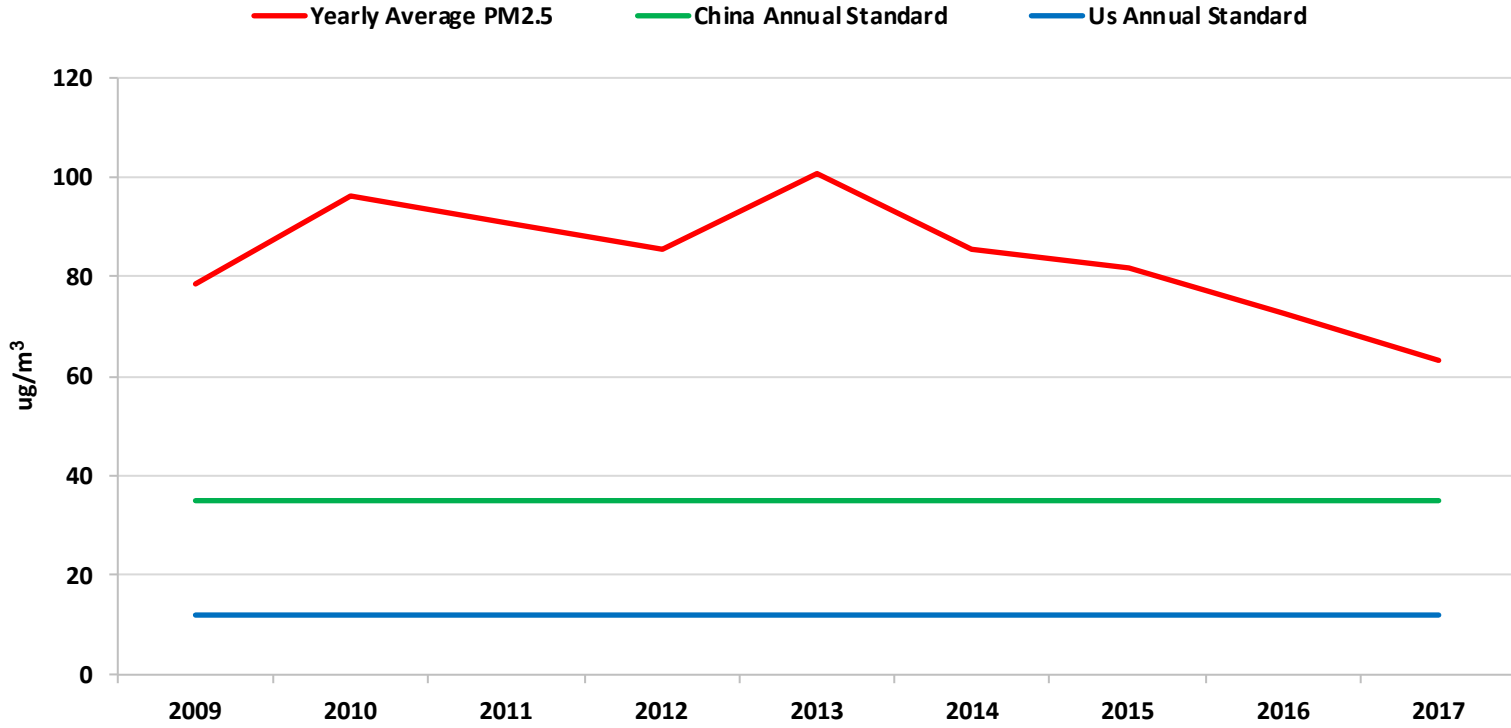




Beijing
January 10, 2017



Beijing Yearly Average PM2.5 2009 to 2017



Source: Department of State, stateair.net

Shanghai



Source: Xinhua

View of Pudong, Shanghai
上海浦东



Shanghai



Source: Xinhua





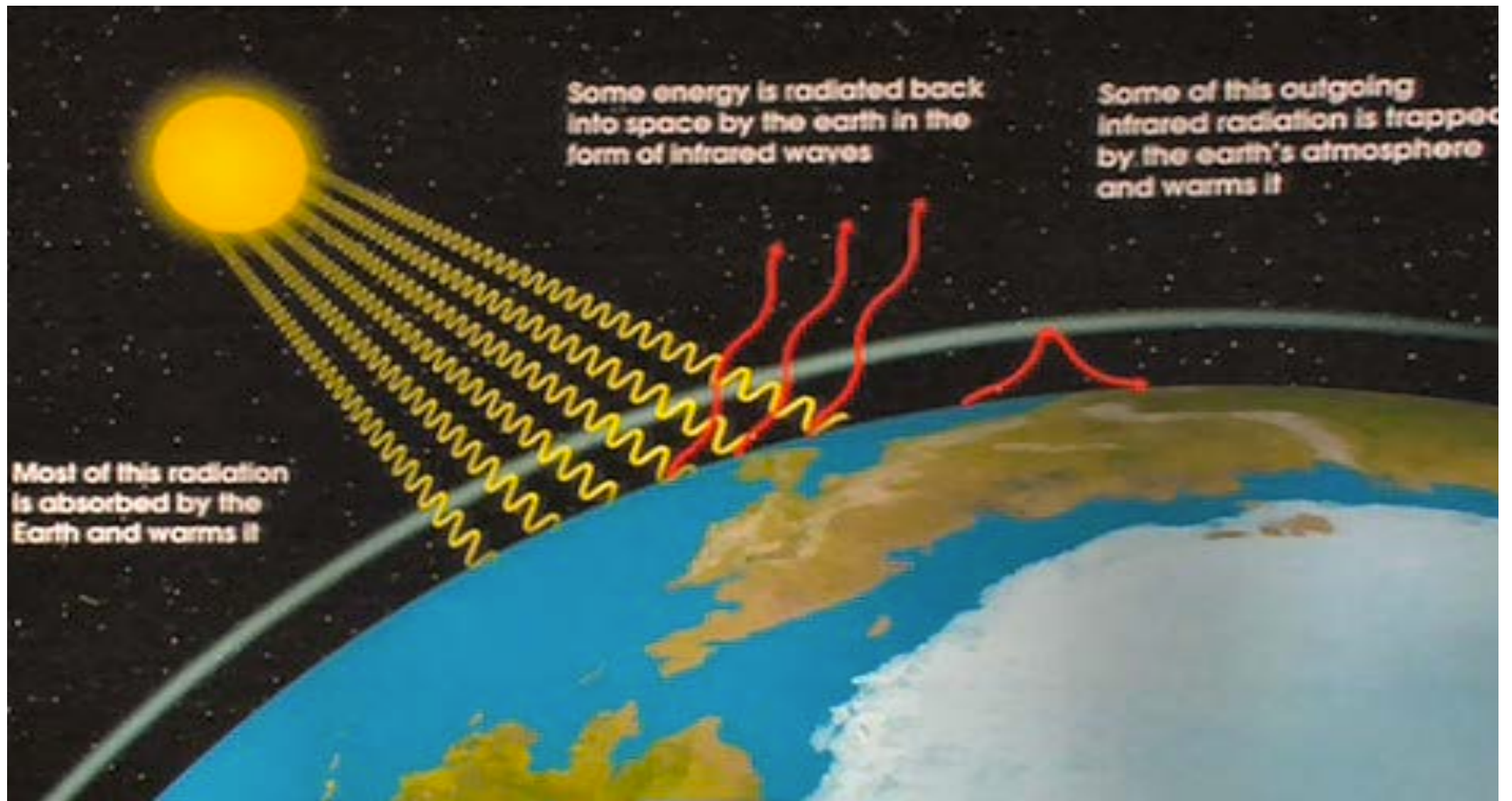


Los Angeles City Hall (October 7, 1968)



Los Angeles City Hall







GUIDE TO CHINESE CLIMATE POLICY 2018

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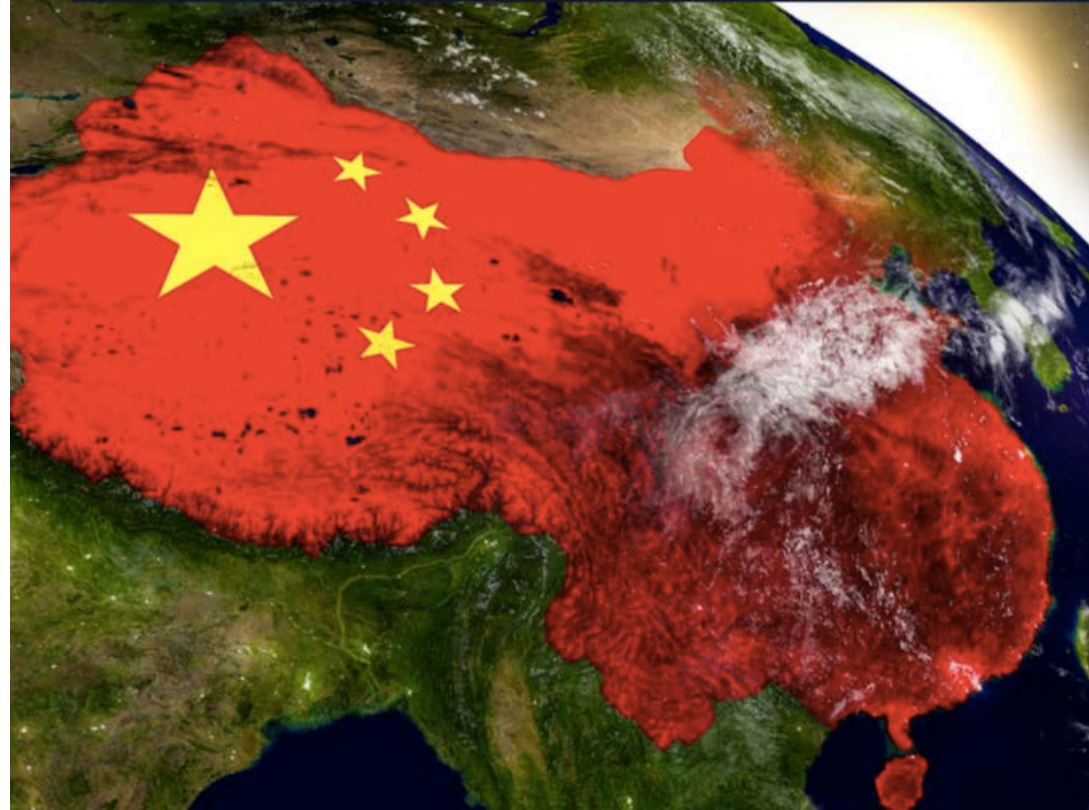
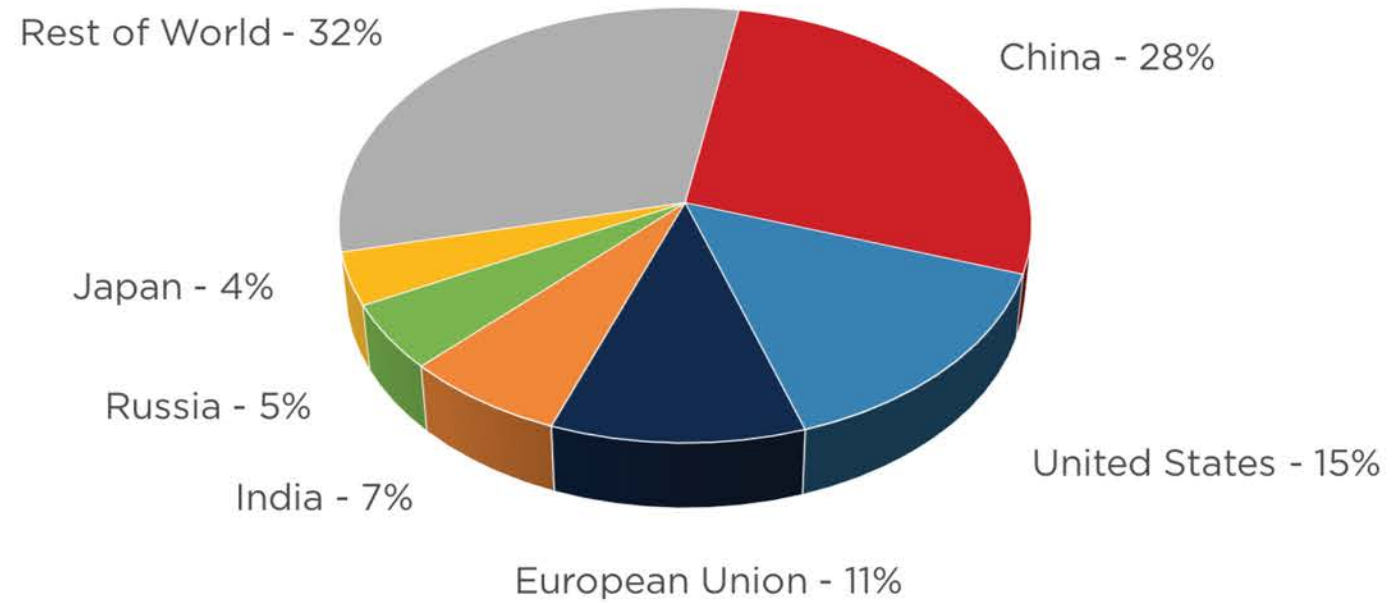
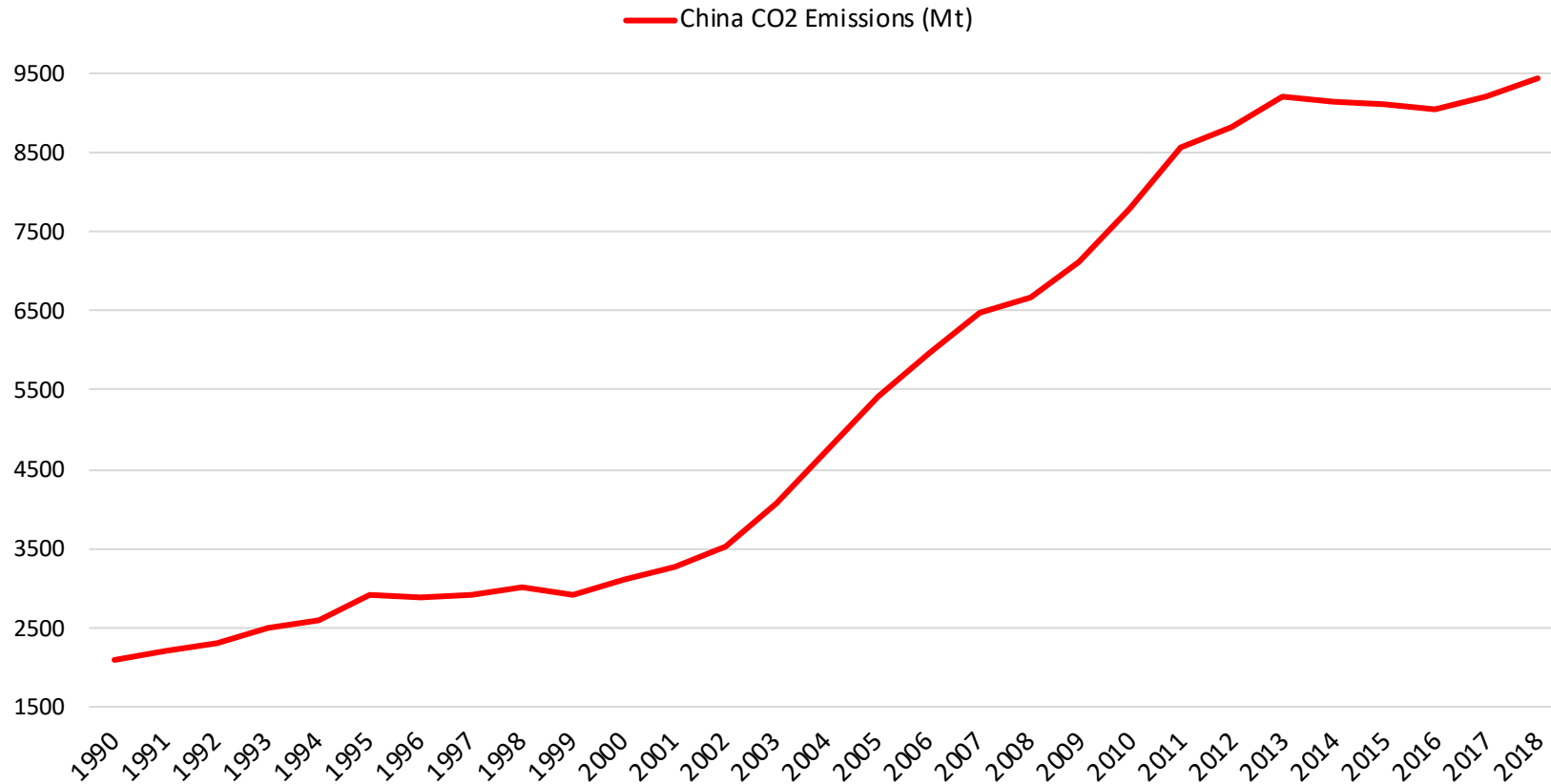


Figure 1-1: CO₂ Emissions 2017



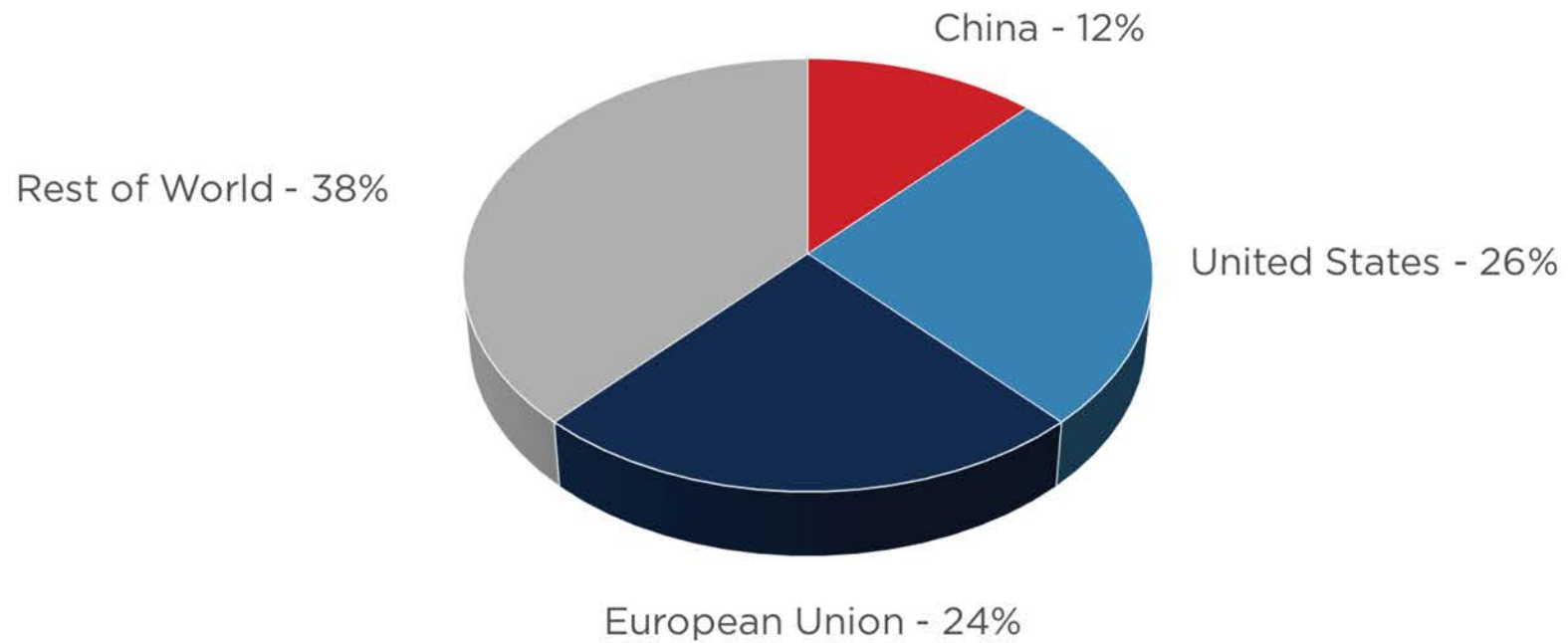
Source: BP Statistical Review of World Energy." (June 2018)³

China CO₂ Emissions 1990–2018



Source: International Energy Agency

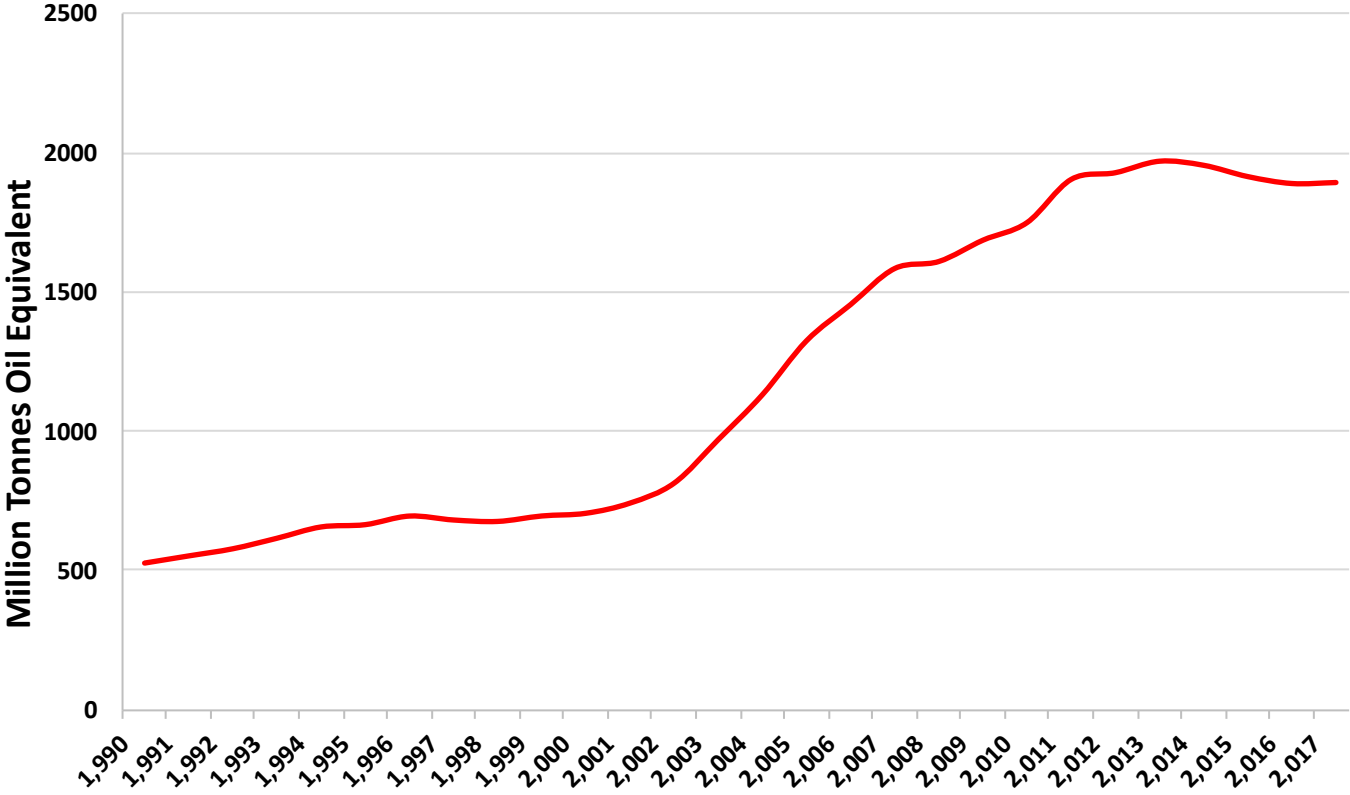
Figure 1-2: Cumulative CO₂ Emissions 1850 to 2014



Source: WRI's Climate Data Explorer⁷

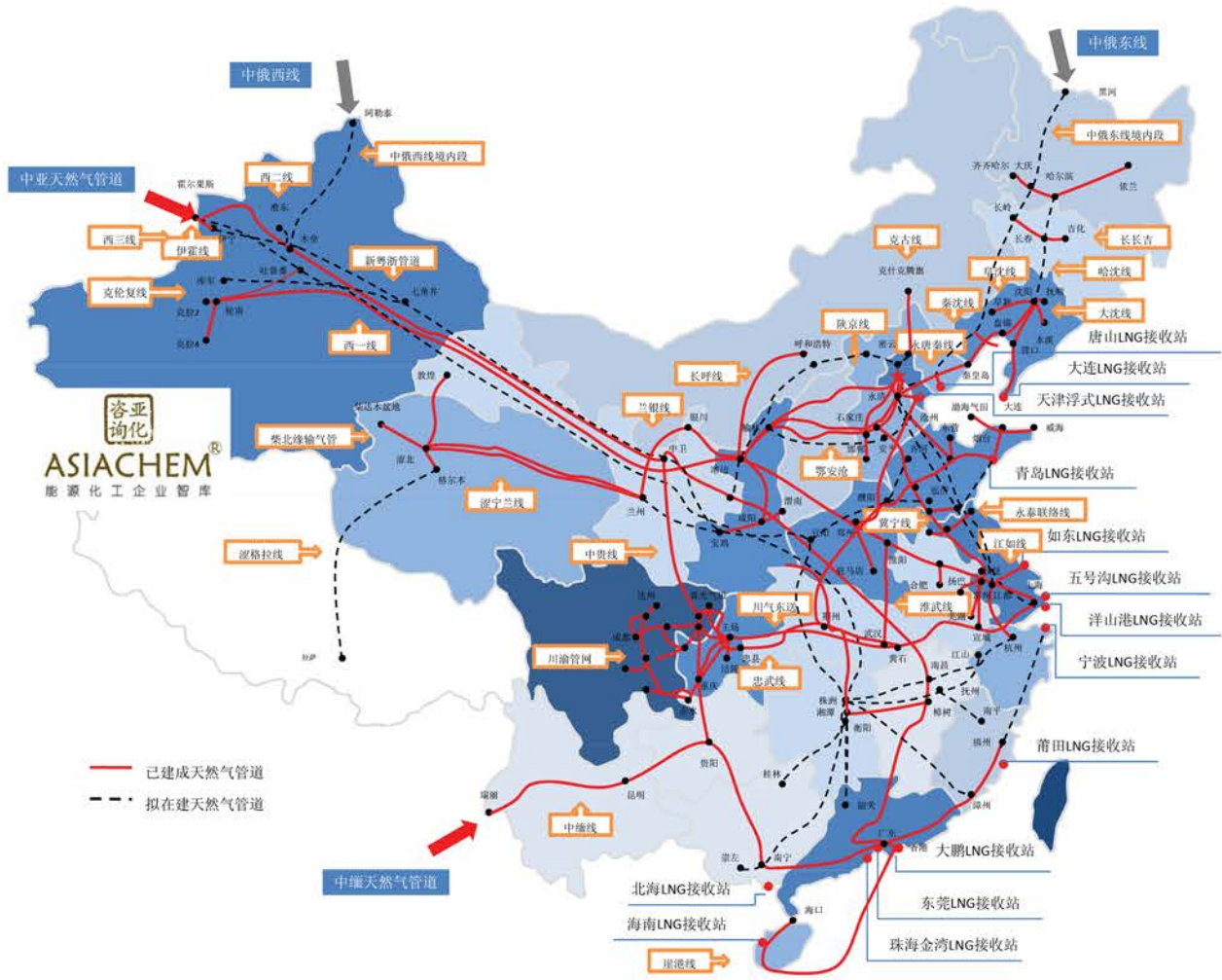


Coal Consumption in China 1990 to 2017



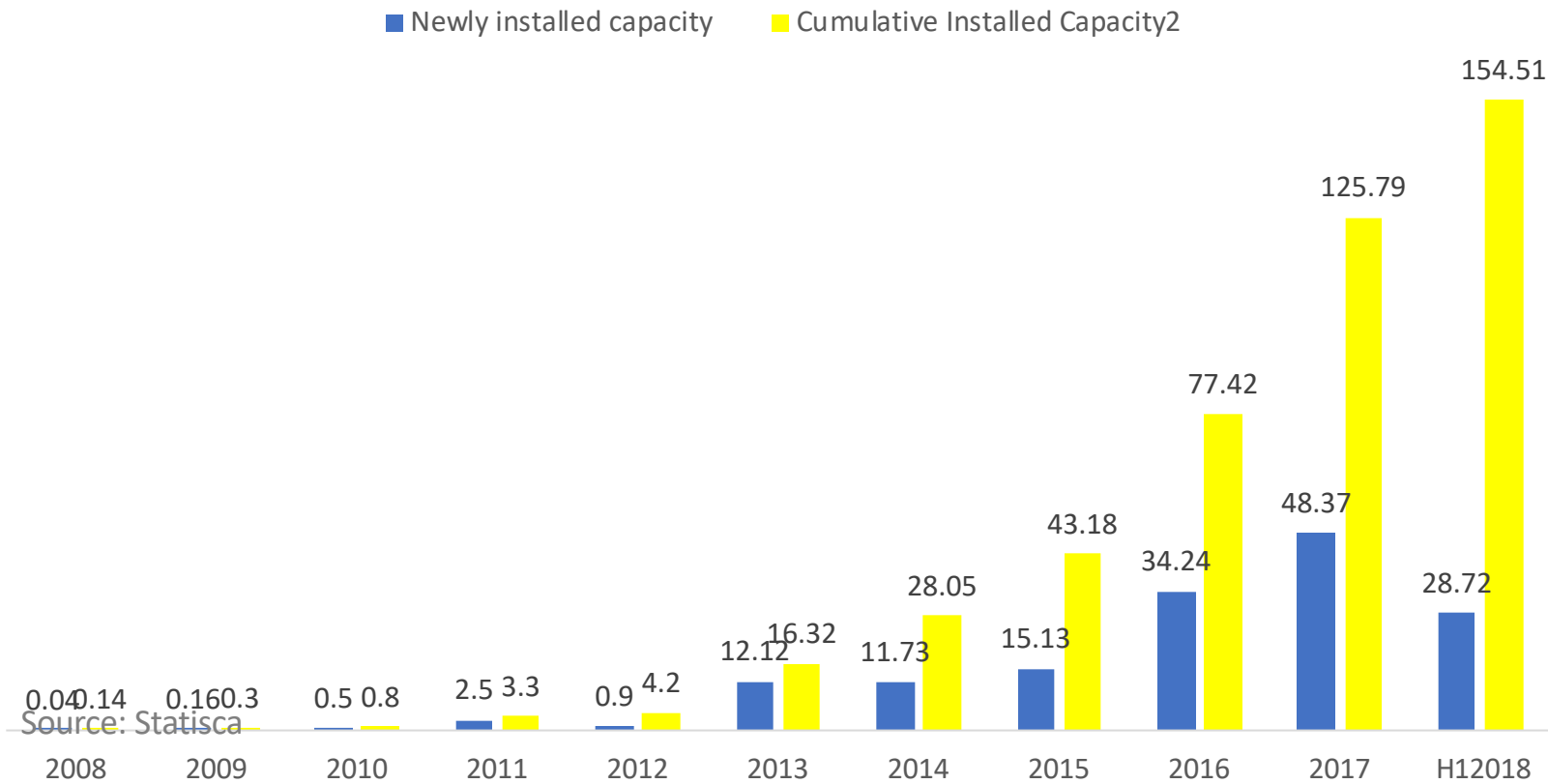
Source: BP Statistical Review of World Energy 2018

Figure 11-1: China Natural Gas Pipeline and LNG Terminal Layout (Updated in May 2016)



Source: Asiachem, <http://www.chemweekly.com/>

Solar power capacity China 2008-2018



Wind power capacity China 2007 to 2017 (in megawatts)

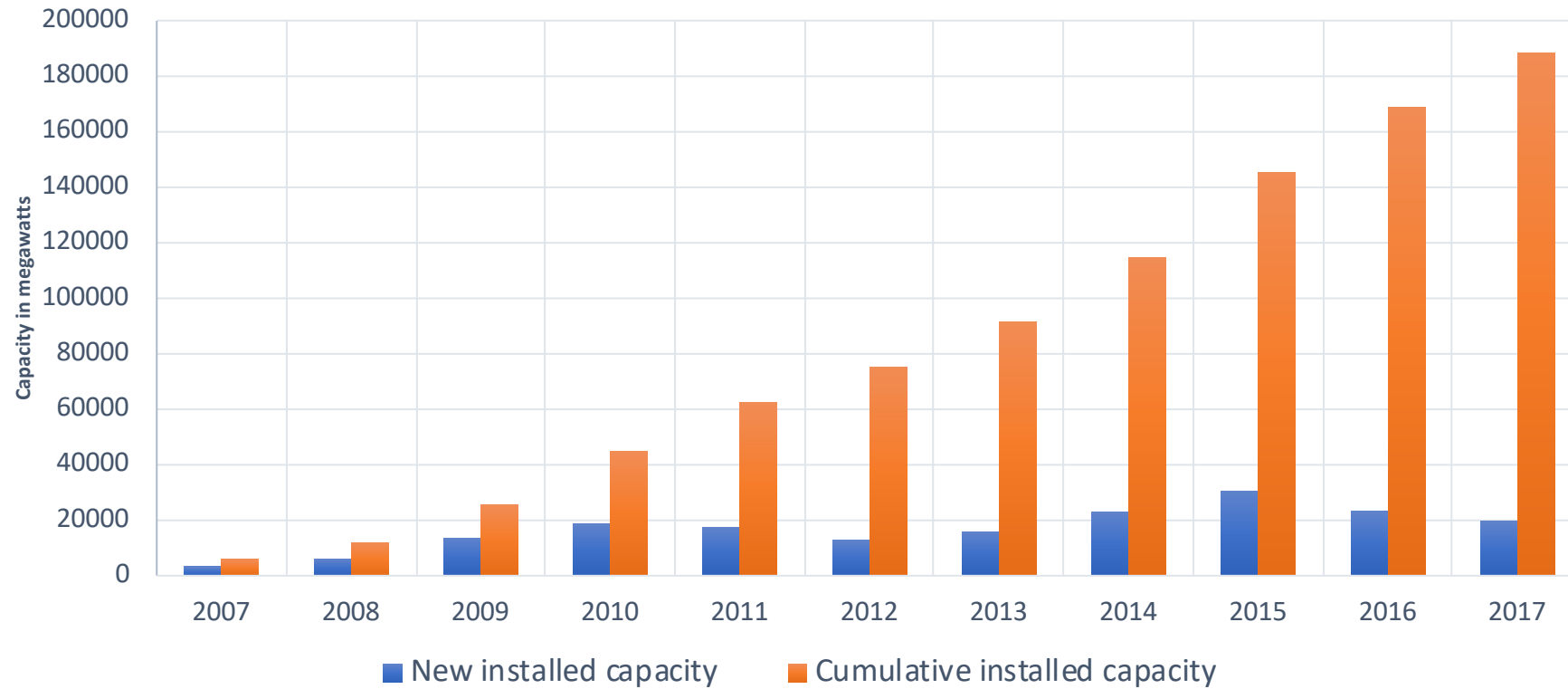


Figure 9-1: Hydropower Capacity and Deployment



Source: Nature.com¹¹

Figure 10-1: Nuclear Power Plants in China



Source: World Nuclear Association (June 2018).¹⁰

China and US are world's two largest EV markets

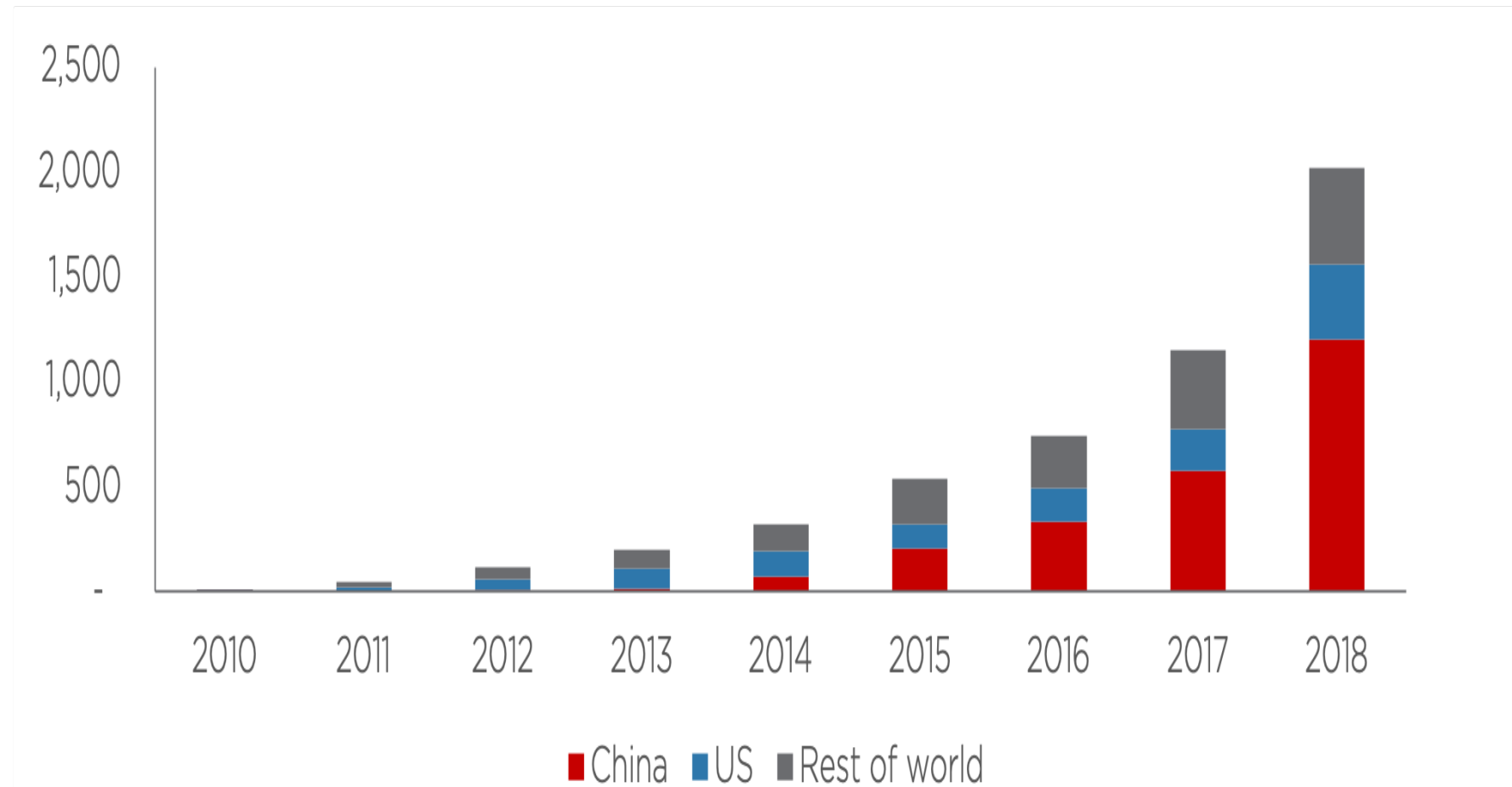
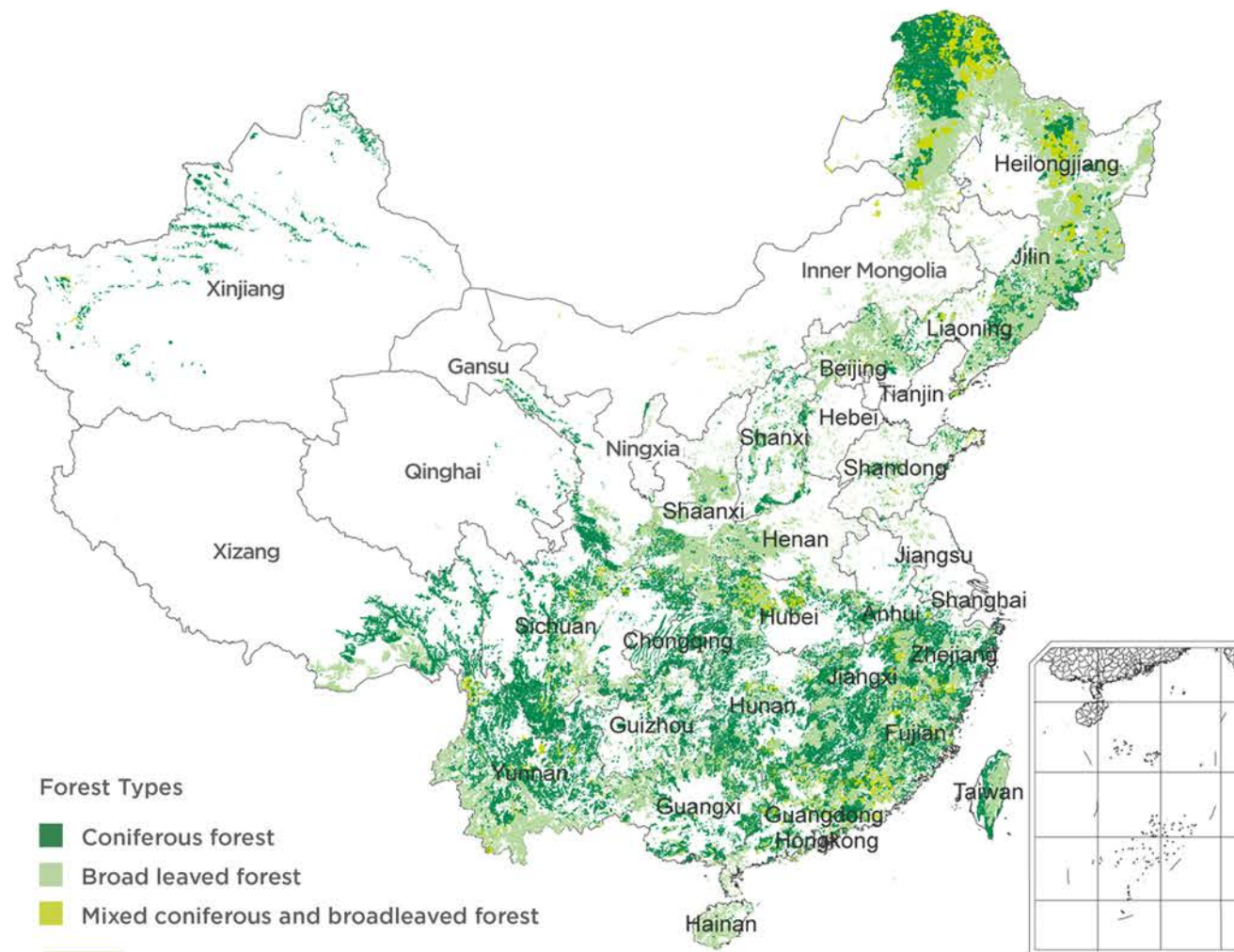


Figure 17-1: China's Forest Cover



Source: Shi et al. (2011)¹

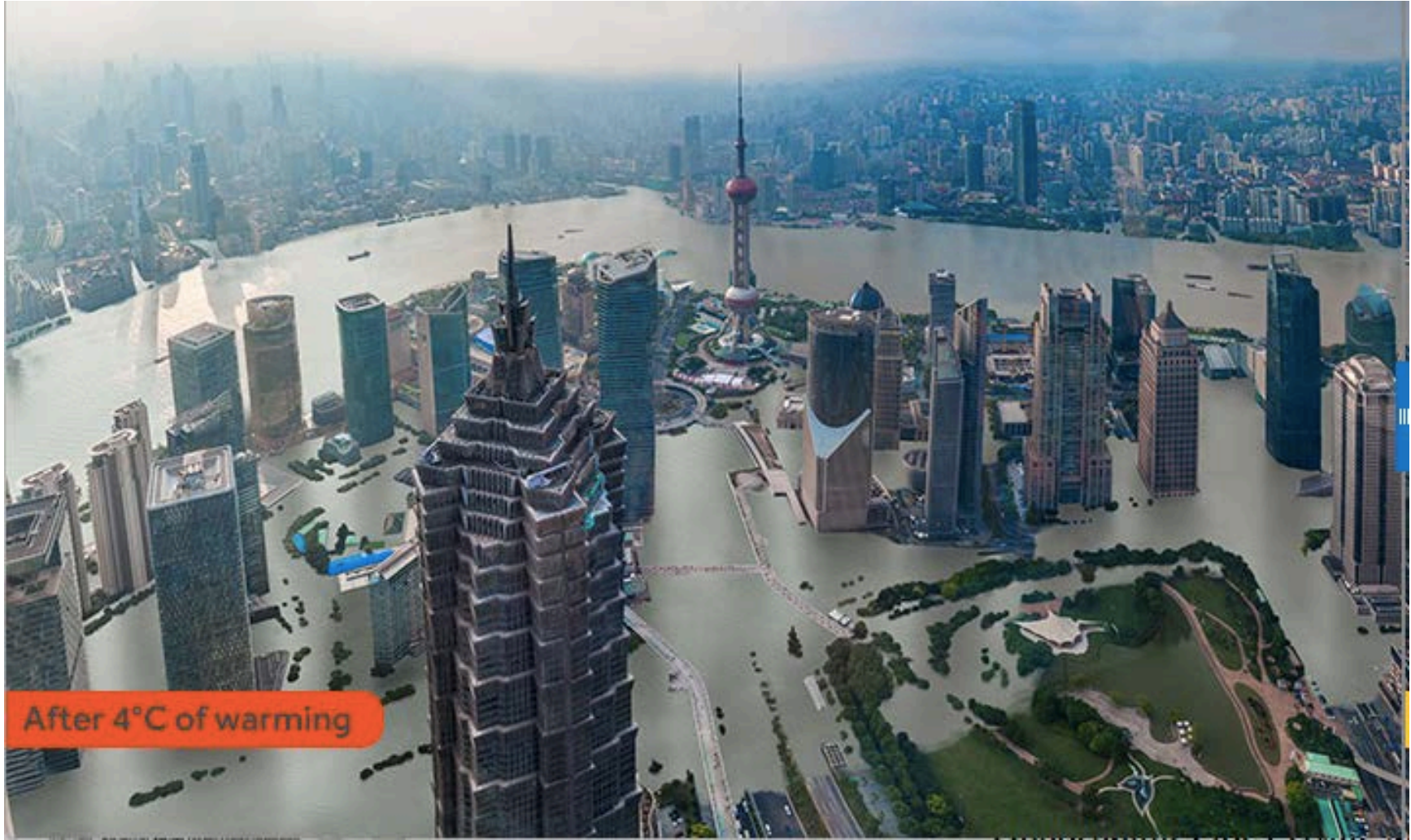
Figure 20-1: Belt and Road



Source: Quartz, citing Reuters.³



After 2°C of warming



MIAMI



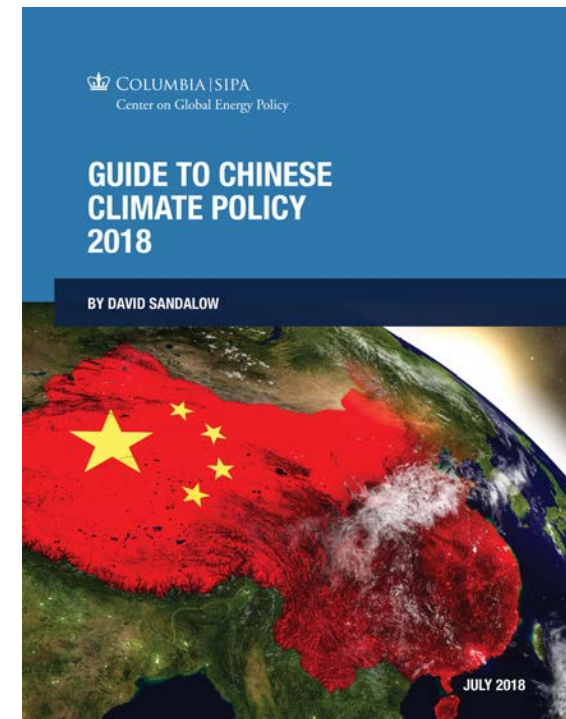
MIAMI



After 4°C of warming

1. The Chinese government is taking significant steps to address climate change.

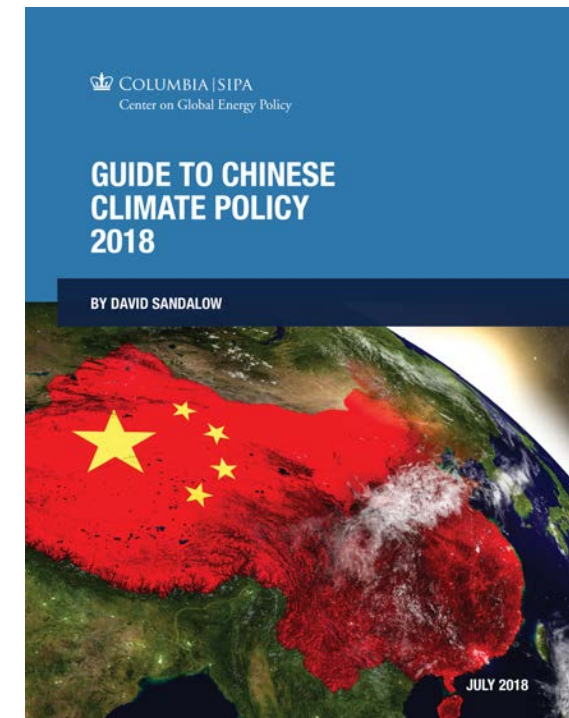
- Cutting Coal, Scaling Up Low-Carbon Alternatives
- Carbon Pricing
- Other Policies
- 2030 Peaking Goal
- Public Messaging



2. Many Chinese climate policies have multiple objectives.

- ***This is a strength from the standpoint of climate mitigation.***

3. China's governance systems have strengths and weaknesses when it comes to addressing climate change.



4. Some Chinese policies run counter to climate change goals.

- *Synthetic Natural Gas*
- *Overseas Coal-Fired Power Plants*

5. China – like all major emitters – will need to do more for the world to achieve its climate goals.

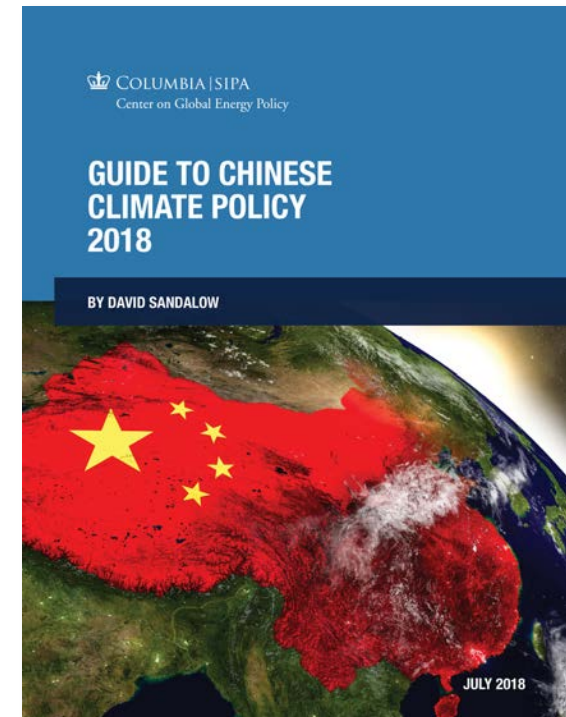


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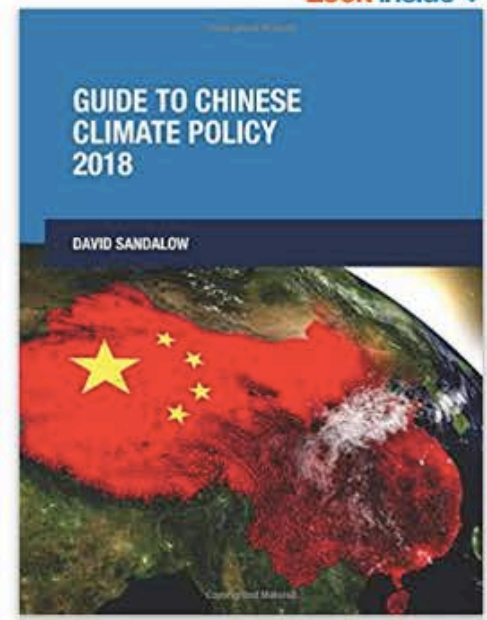




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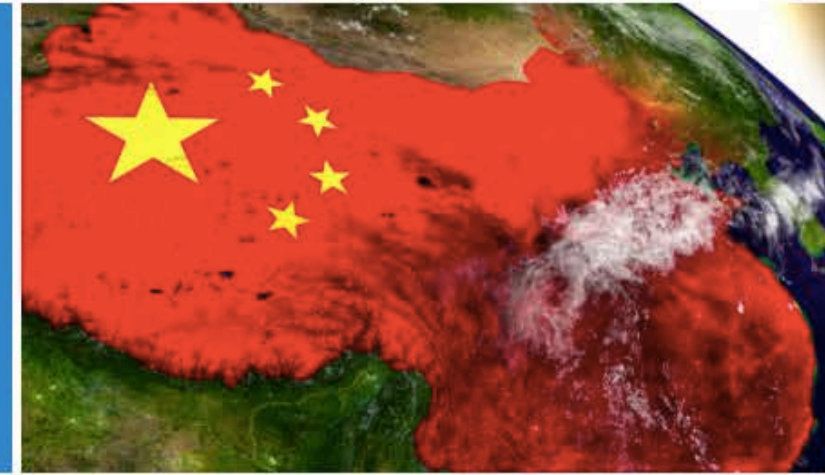
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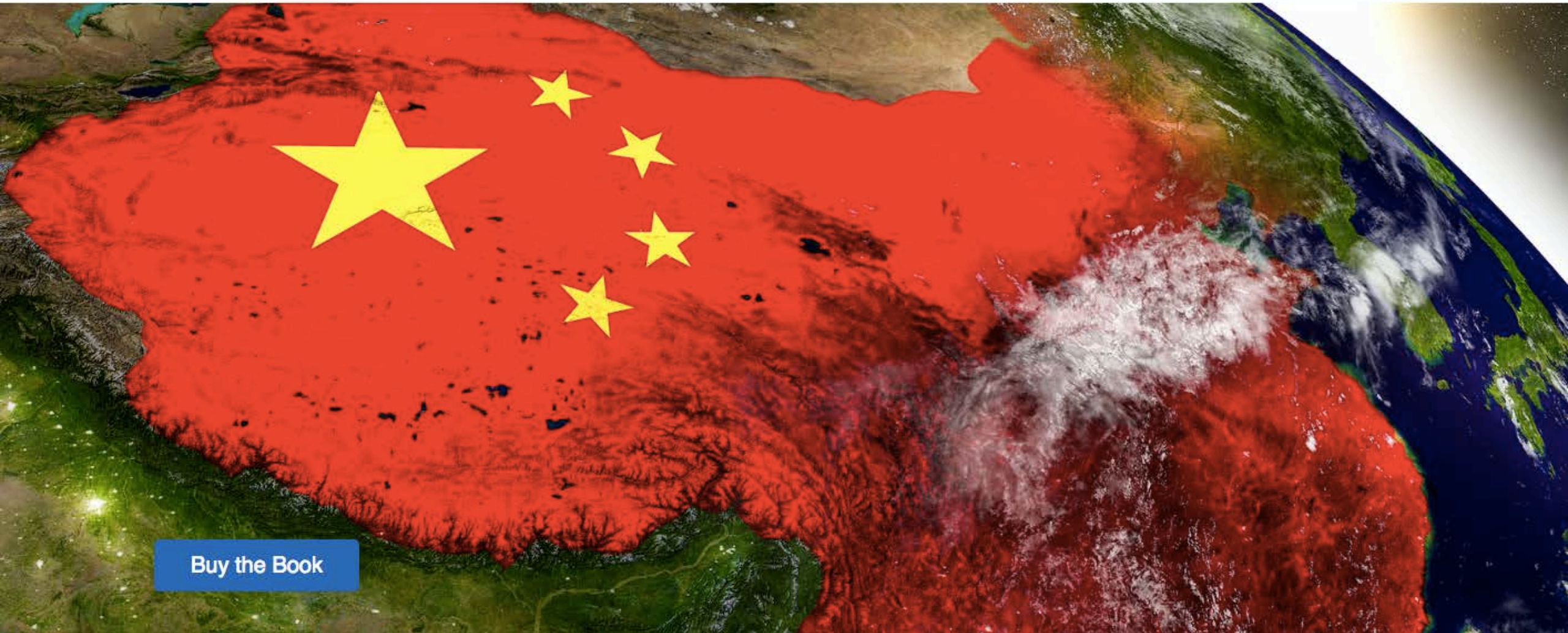
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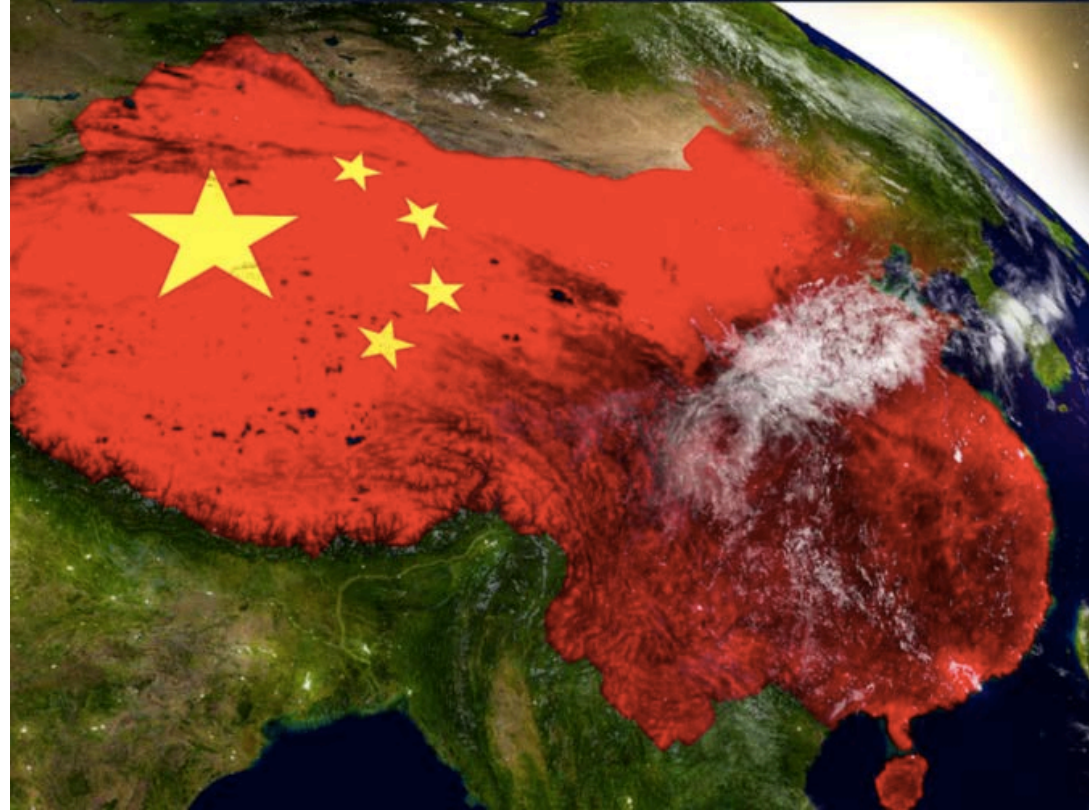
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DAVID SANDALOW



View of Pudong, Shanghai (1983)
上海浦东 (1983年)



Pudong, Shanghai
上海浦东



