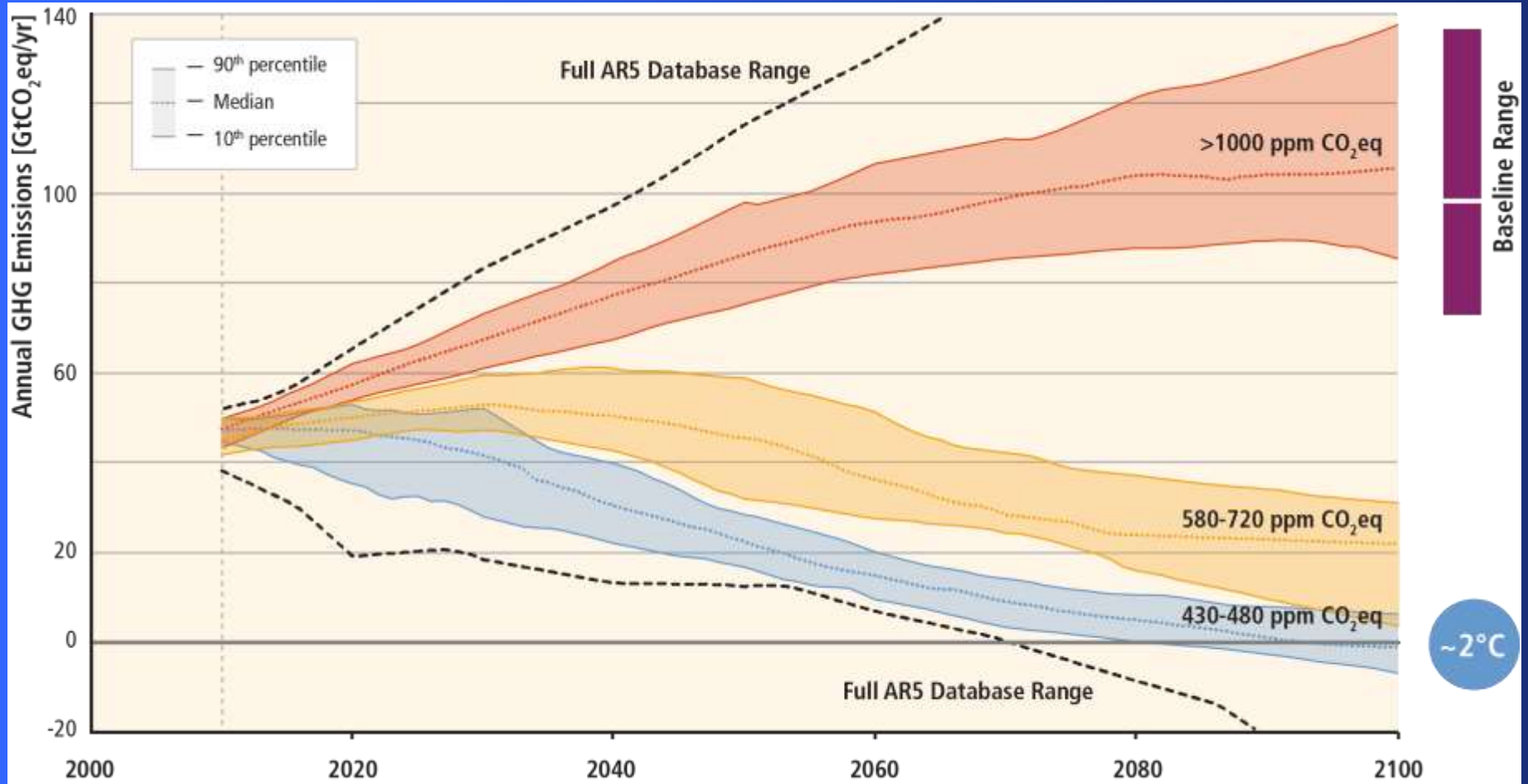


China's Low Carbon and Energy Transition -Peaking CO2 emission in 2020 to 2022 –

Jiang Kejun

Energy Research Institute, China

IPCC AR5 Scenarios



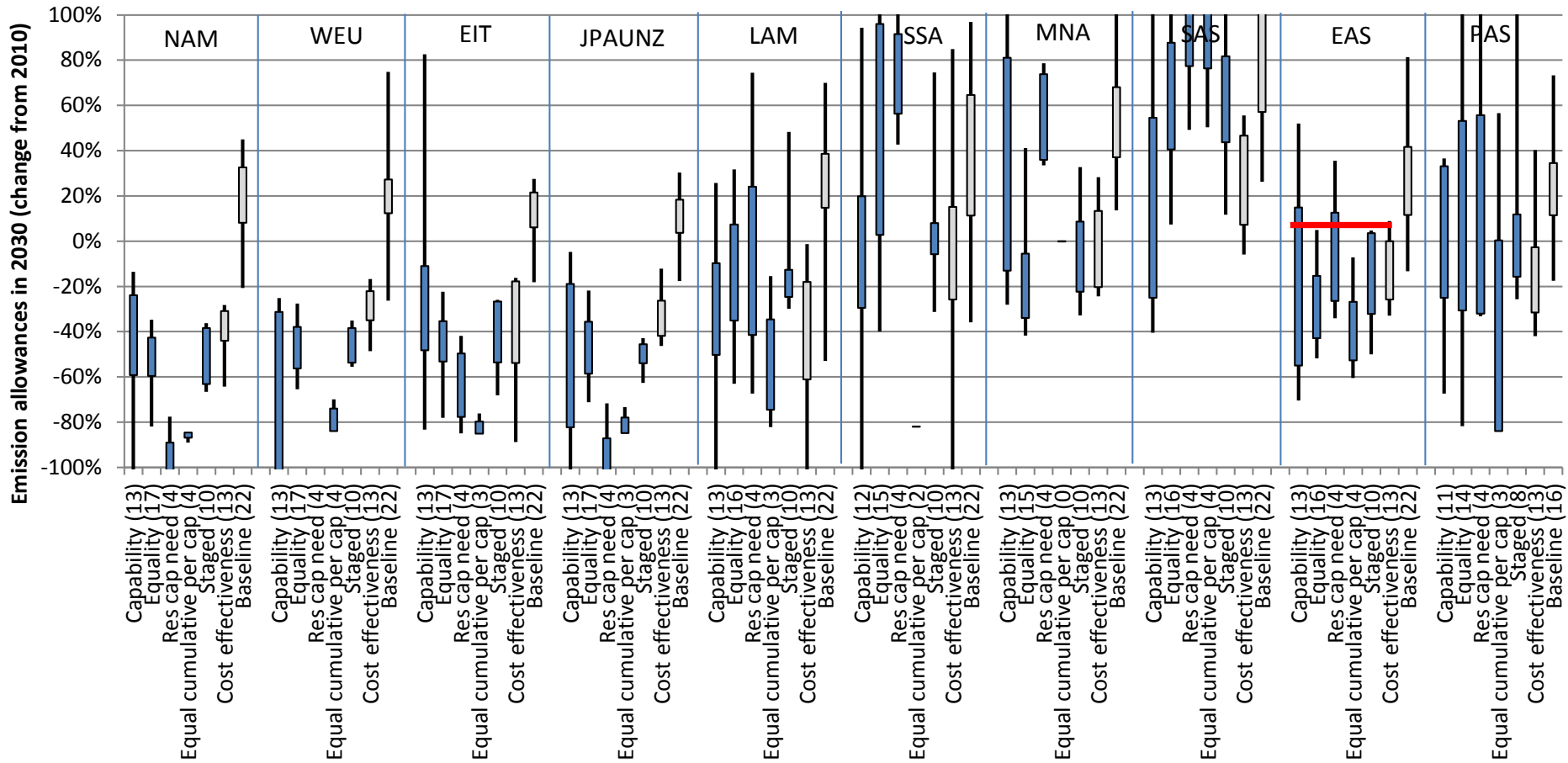
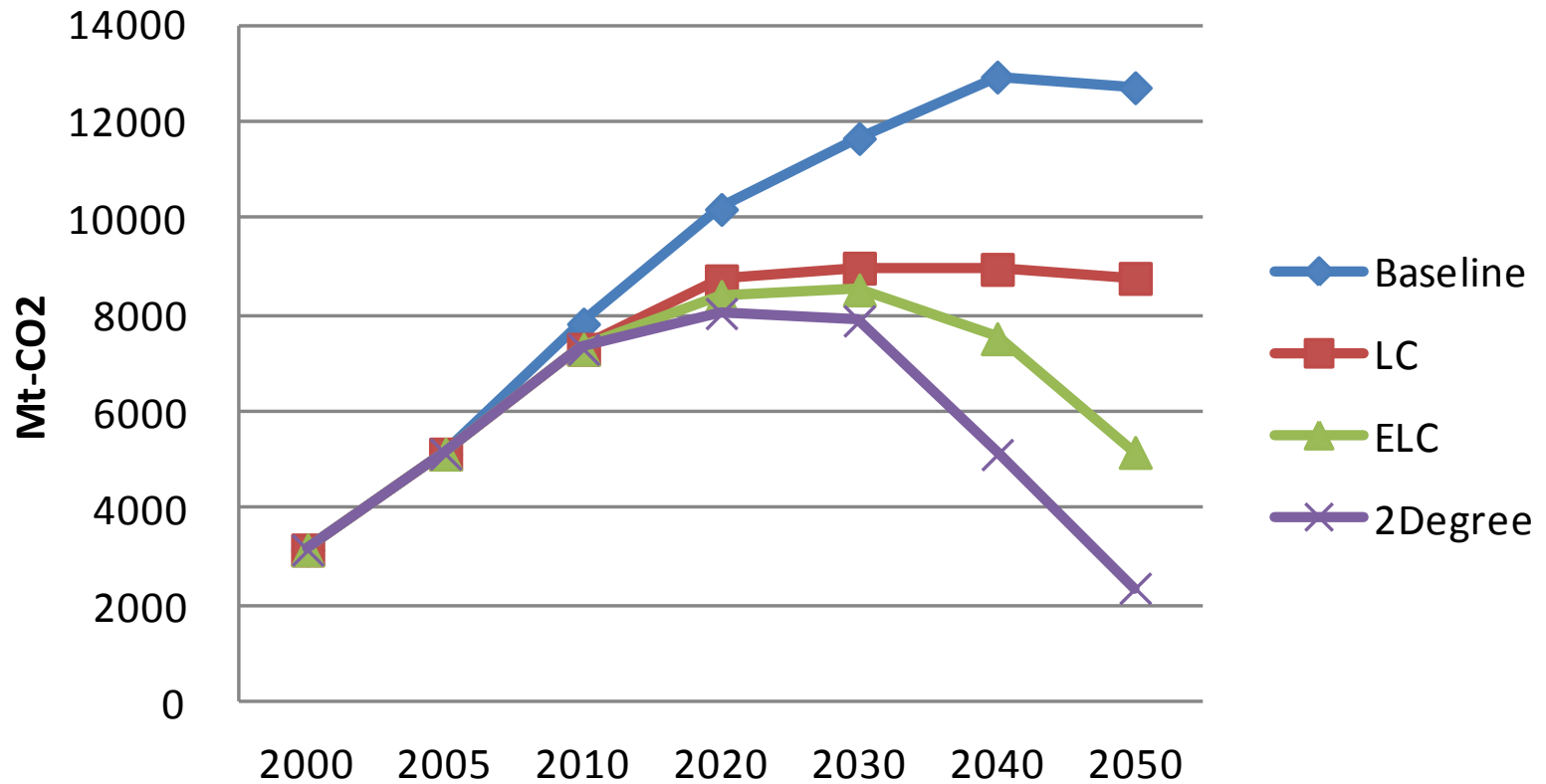


Figure 2. Emission allowances by allocation category for Cat 1, i.e. 425-475 ppmCO₂e, in 2030 relative to 2010 emissions (min, 20th percentile, 80th percentile, max). Number of studies in brackets. GHG emissions (all gases and sectors) in GtCO₂e in 1990 and 2010 were OECD90 13.4, 14.2, EIT 8.4, 5.6, ASIA 10.7, 19.9, MAF 3.0, 6.2, LAM 3.3, 3.8 .

Transformation: CO2 emission, a rapid change

CO2 Emission in China

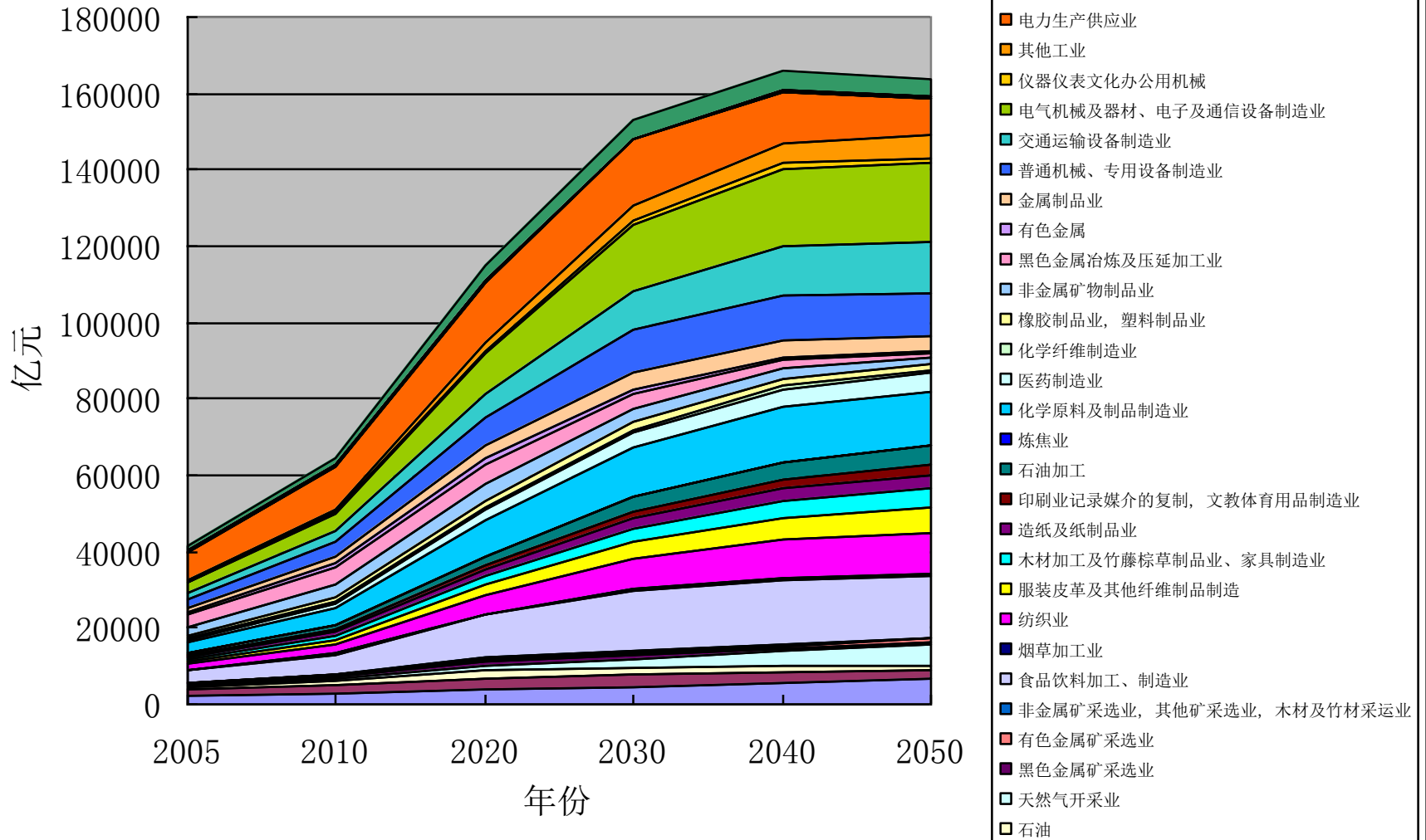


What's the future of China's low carbon policy: a big picture

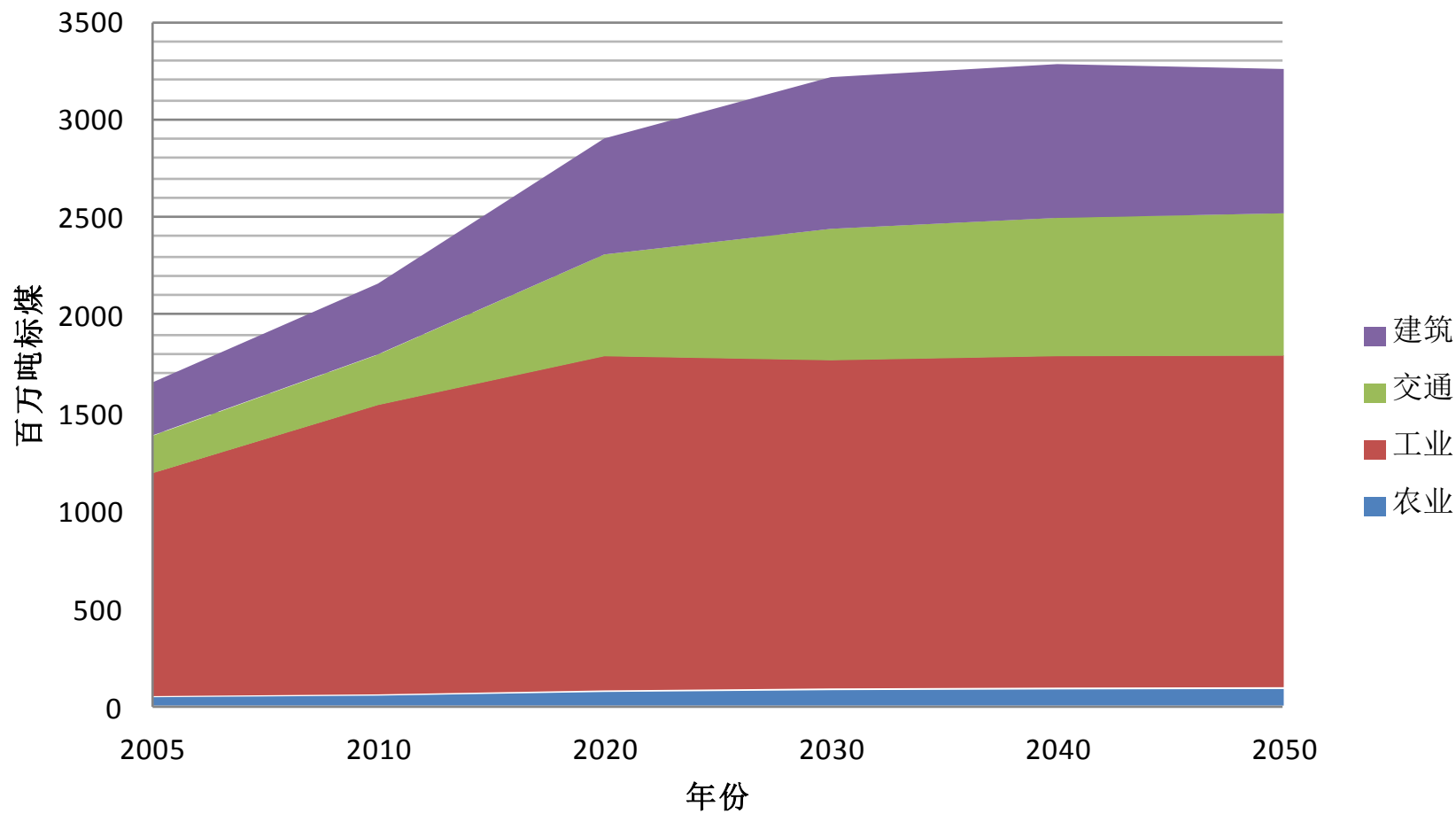
- Economic structure optimization policies
- Energy efficiency policies
- Renewable energy/nuclear power generation oriented policies
- CCS
- Low carbon consumption/ lifestyle
- Land use emission reduction policies: so far relatively poor

Investment by industrial sectors

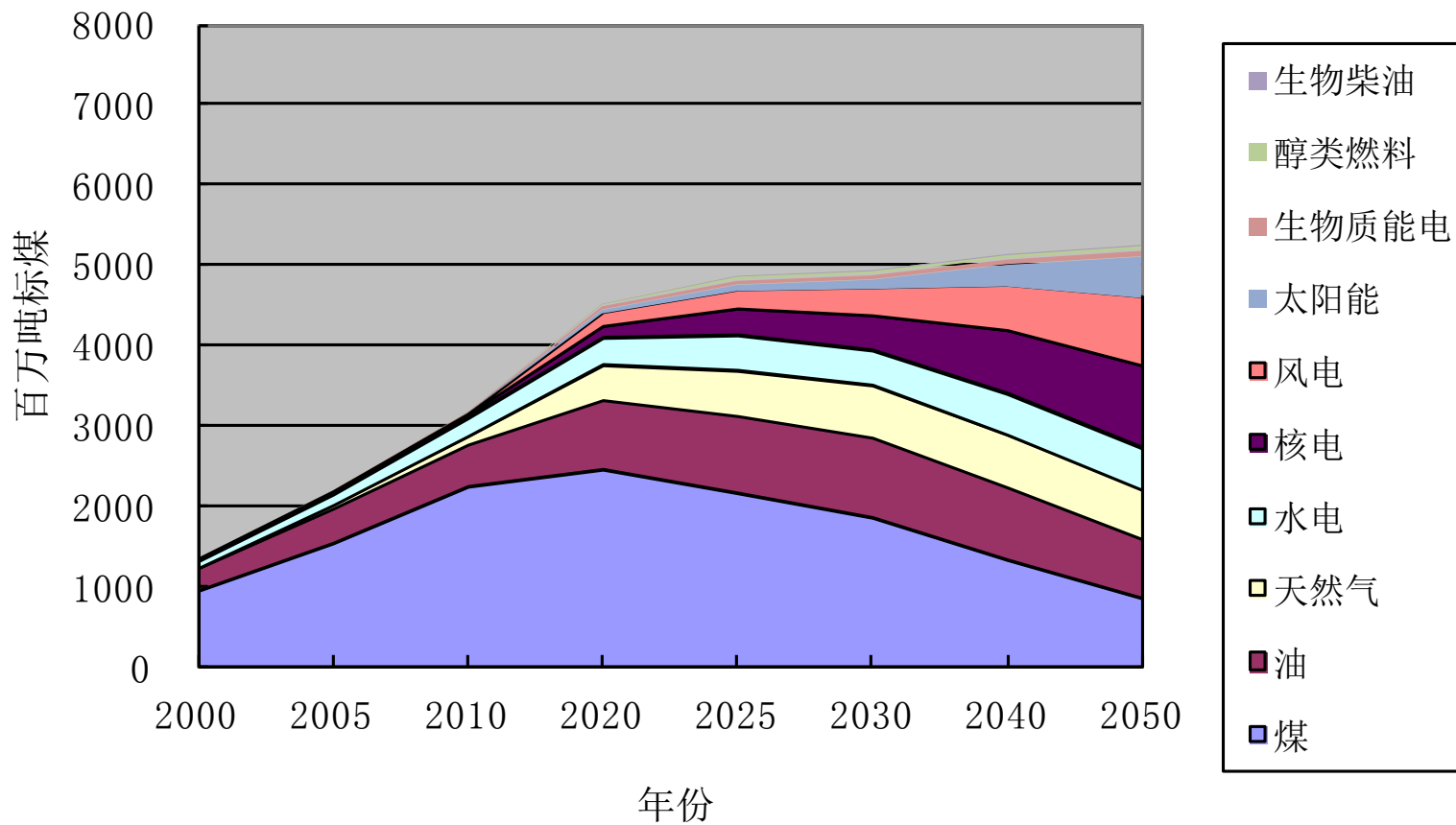
工业分部门投资



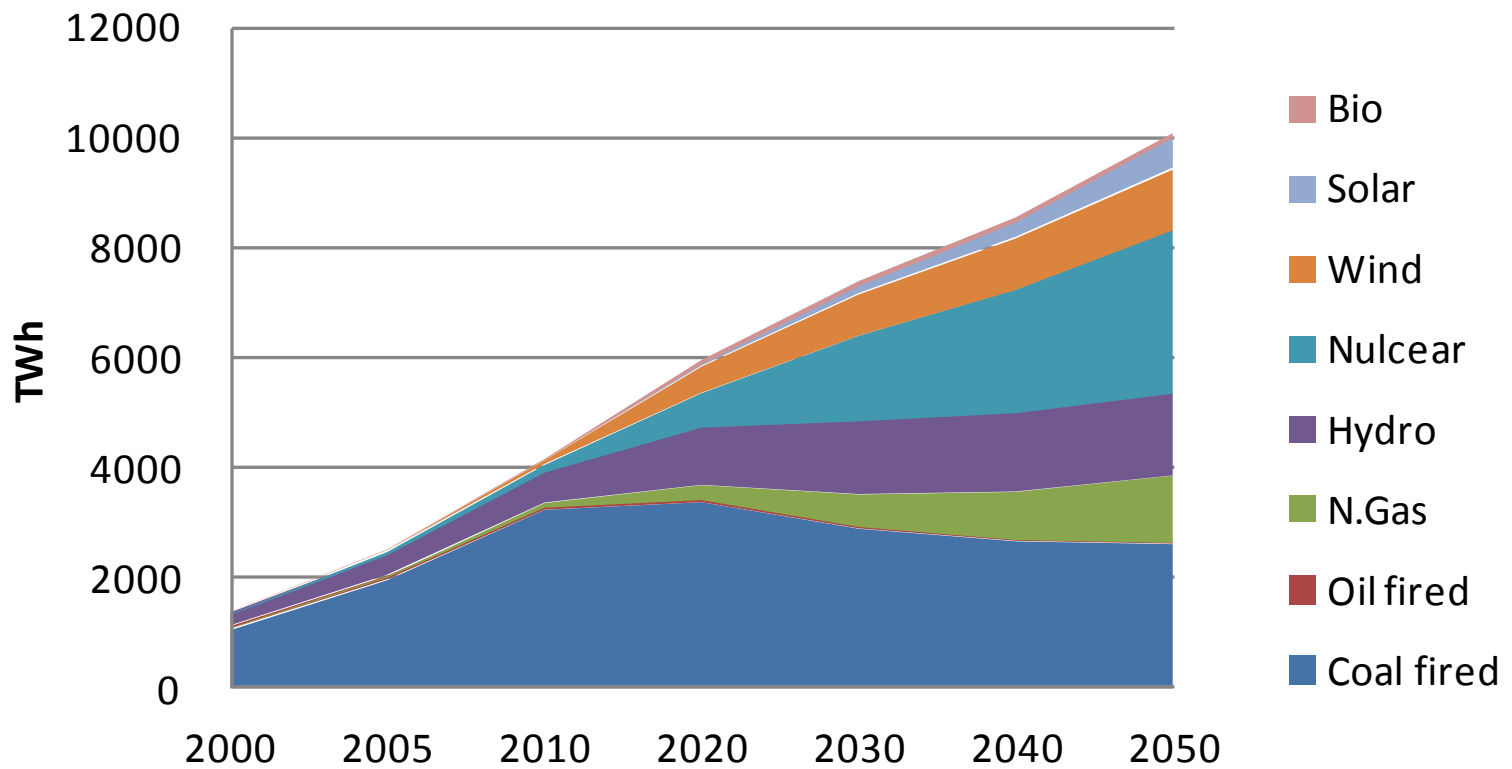
分部门终端能源需求量，当量法



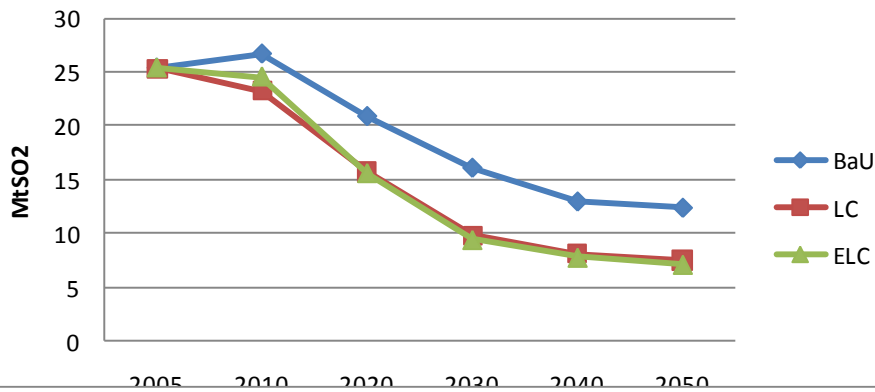
一次能源需求量：2度情景1



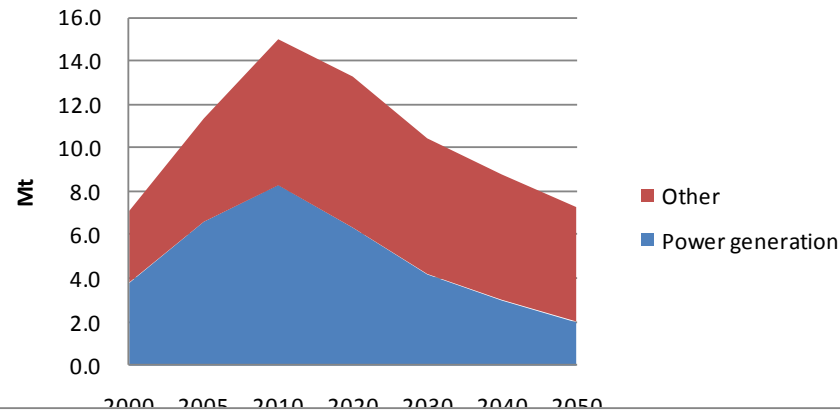
Power Generation



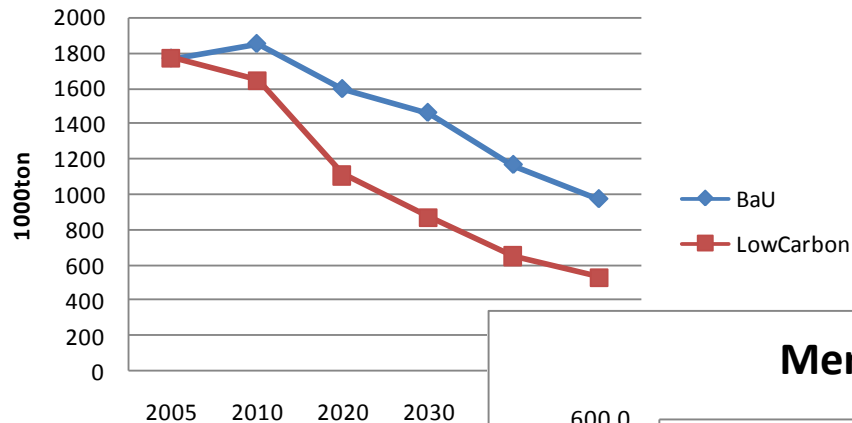
SO2 Emission



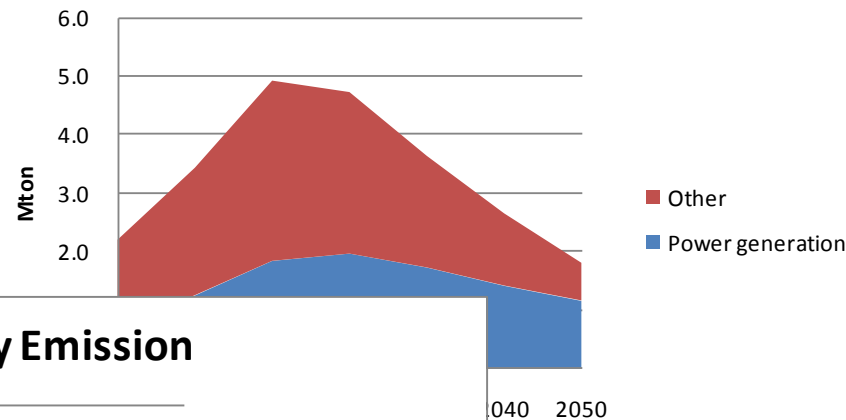
NOx Emission in China, ELC scenario



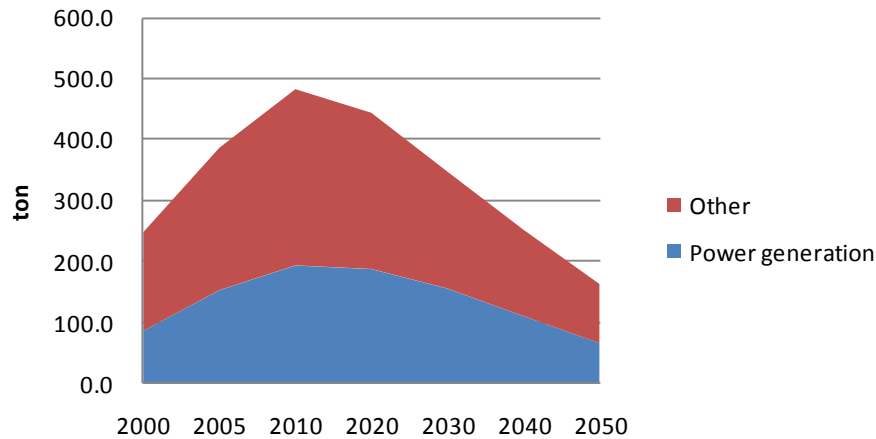
Black Carbon Emission in China



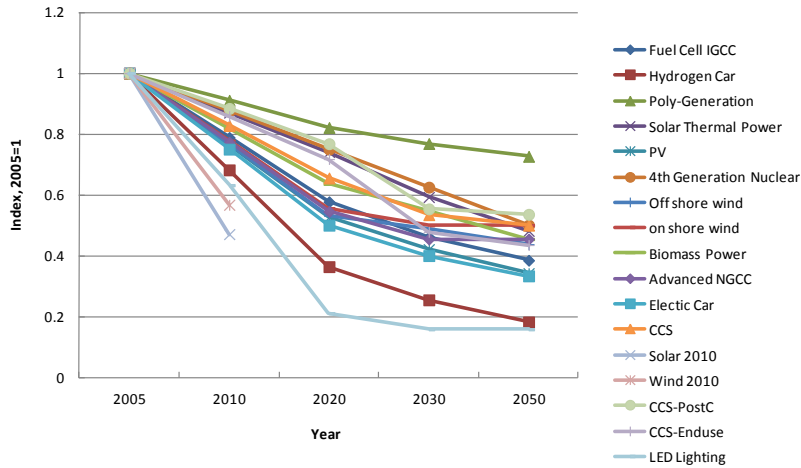
PM2.5 Emission



Mercury Emission



Technology learning curve



荣威E50的长/宽/高分别为3569/1551/1540mm, 其定位为A00级紧凑型车。



Price: US\$38000

Subsidy: US\$15000(Shanghai), no need to apply number plate(cost US\$10000)

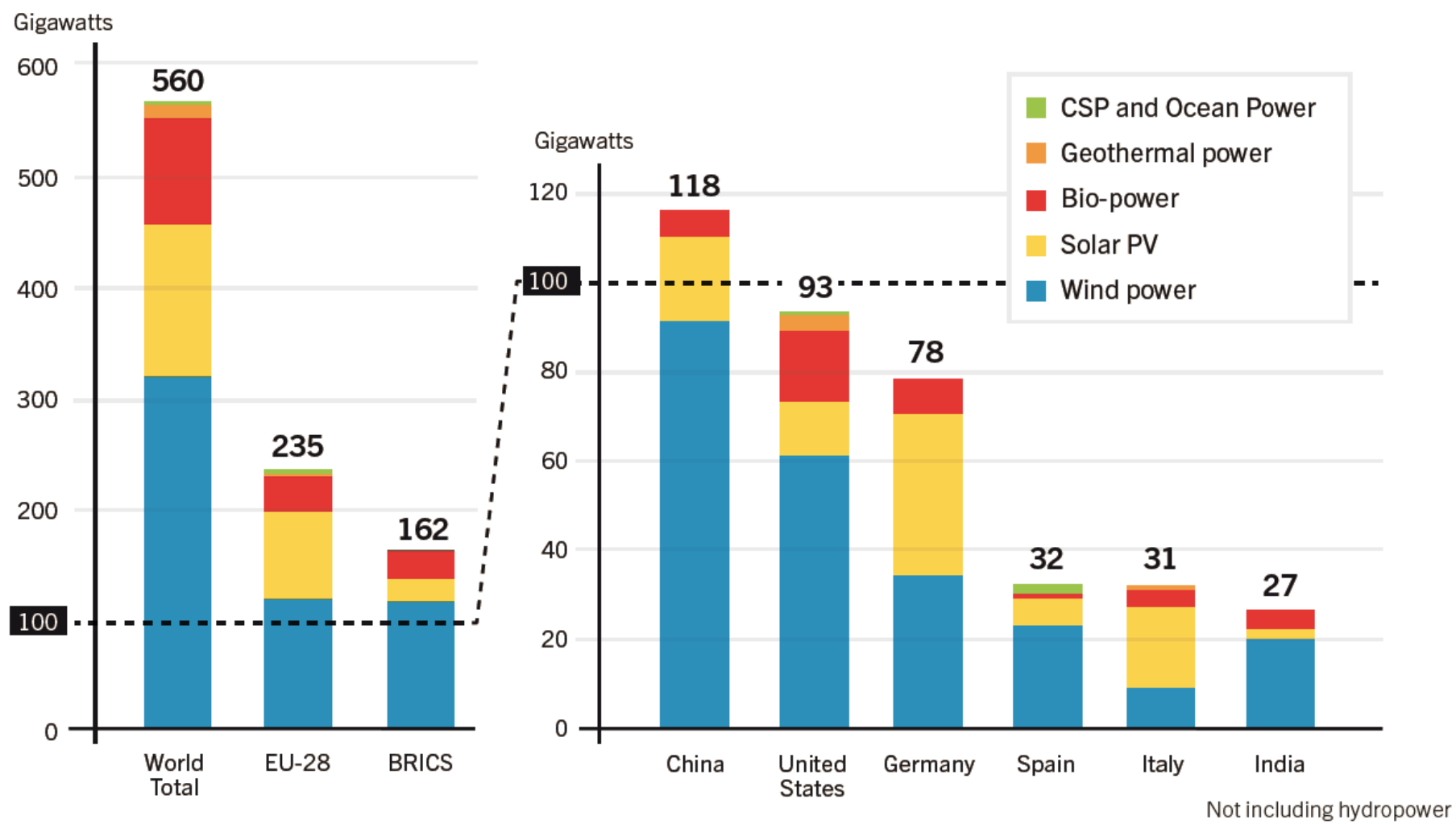
US\$18000(Beijing), no need to apply number plate(By Oct. 2012, 1.1 million people apply for 20000number plates per month),

By 2020, Wind 200GW to 250GW, Solar 50WG

The New China-US Announcement: keywords

- Considering global 2 degree target
- China: peak by 2030, make effort to peak earlier
- US: 26-28% emission reduction by 2025 compared with that in 2005
- Both Will make more strict target in future

Figure 4. Renewable Power Capacities in World, EU-28, BRICS, and Top Six Countries, 2013



Not including hydropower

China's INDC: released in June 30

- Wind power by 2020: 200GW
- Solar Power by 2020: 100GW
- Non-fossil fuel in TPE: 20% by 2030
- *New target in July 20: solar PV 150GW*

The New Five Year Plan on Air Pollution Control: can drive CO2 peak before 2025

- From 2013 to 2017
- Target: 10% to 25% improvement of air pollution
- A package of policies
- In which: reducing coal use in key areas including Beijing-Tianjin-Hebei region, Yangtze Delta Regions, Pearl River Delta Region
- Clean oil supply for vehicle, upgrade emission standard and oil quality
- Regulation on diffusion on high efficiency cars