



北京绿色金融与
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POLICIES AND ACTIONS TOWARDS CHINA'S CARBON NEUTRALITY PLEDGE

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The Pledge is not yet legally binding, but just as significant

SUMMARY OF CHINA'S CLIMATE GOALS:

Peak emission before 2030

Carbon neutrality before 2060

Non-fossil fuel share: 25% by 2030

Wind and Solar Capacity: 1200GW by 2030 (from 530GW by 2020)

- Comes directly from President Xi
- Aligns with China's long-term development strategy
- Aims at fostering a new economic growth engine
- First climate goal to imply an absolute carbon emissions reduction
 - Compared with carbon intensity goals
- Finance and business communities are actively responding

No comprehensive roadmap... YET

Strategies and Sectoral Policies Developed Since the Pledge

- **Economic Growth Strategy:** The State Council's guideline to accelerate the development of a green and low-carbon circular economic development system in six areas:
 - Production system
 - Logistics system (transportation)
 - Infrastructure system (buildings)
 - Consumption system
 - Technological innovation system
 - Enabling policies
- **Industrial Efficiency:**

By 2035, energy and resource utilization efficiency in key industries and for key products is expected to reach an [internationally-advanced level](#)
- **EV Goals:** Ministry of Industry - New-Energy Vehicles Development Roadmap 2035

In 2035, all sold vehicles are eco-friendly: 50% EV, 50% hybrid
- **Clean Energy:** National Energy Bureau

Plan to set minimum purchase of power from non-fossil fuel sources: 40% by 2030 in all regional grids, up from 28.2% in 2020

Provinces or Prefecture-level Cities Governments

Research or Develop Carbon Neutrality Action Plans in 2021 (>12 out of 31)

- Shanghai
- Beijing
- Shandong
- Shanxi
- Tianjin
- Shaanxi
- Xinjiang
- Zhejiang
- Hainan
- Henan
- Xizang
- ...

Carbon Peak Year Target

- Shanghai 2025, Beijing carbon emission decline steadily after peaking
- Nine provinces are planning to make peak commitment soon
- 60 out of 87 low carbon pilots are going to peak in 14th FYP.

Energy SOE-Tycoon

Three out of five big power generation SOEs (around half of China's total installed power capacity)

Top 1: State Power Investment 国家电投: carbon emissions peak by 2023

Top 3: Huaneng 华能: clean energy capacity 75% by 2035

Top 4: Datang 大唐: carbon emissions peak by 2025

SOEs have kicked off research efforts to develop their carbon neutrality action plan.

- China National Energy: Largest coal producer, and largest power generator
- JINNENG Holding Group (Shanxi) Second largest coal producer
- China National Offshore Oil Corporation
- Sinopec

STATE GRID released **the First Official Action Plan Towards Carbon Neutrality on March 1st**

BAOWU Iron&Steel, (largest of China, second of the world, 95M ton), **commits to peak carbon emission in 2023.**

Declaration on carbon neutrality from China National Petroleum Corporation and Petrochem Industrial Association. (repeating commitment to 3060)



Financial Regulators

Carbon neutrality as a PBOC priority

PBOC plans to:

- Renew green finance standards system including removing fossil fuel related projects from green bonds catalogue and adding climate-friendly projects
- Mandatory environmental information disclosure
- Integrate climate change into risk management system
- EU-China Taxonomy Harmonization
- US-China G20 Green Finance Task Force

Local progress:

- Six provinces, nine cities as green finance pilots
- Shenzhen, already requests mandatory environmental risks disclosure of all financial institutions

Financing Demand and Main Areas

Investment need 2020-2050

- 30 trillion USD 2020-2050
Tsinghua report
- 18 trillion USD for energy infrastructure, *Energy Research Institute*
- 10 trillion USD for several key areas, *RMI*
- 6 trillion USD for overall green investment needed in Chongqing, *IFS*

Main areas

- Renewables
- Industrial efficiency improvement and process renovation
- Grid and storage
- Hydrogen and its infrastructure
- EV and infrastructure
- Digitalization of power and industrial system
- Public transportation system

Green finance tools can leverage further changes

Progress

- Carbon Neutrality Bonds:
 - 30 billion USD for 12 SOEs
 - Supporting clean energy projects including wind, solar, public transport, airport projects

GAP (FIs = Financial institutions)

- Technical Support to FIs
Stress Test of climate change impact (physical and transitional risks)
- Mandatory requirements and capacity building in FIs
environmental risks disclosure
- Climate-friendly projects standards and pipelines

Solar and Wind power growth need to increase

*Annual Growth
>70GW*

To meet international
commitment
1200GW by 2030

*Annual Growth
>100GW*

Industry projection
1000GW by 2025

*NDRC Energy Research
Institute*

*Annual Growth
>150GW*

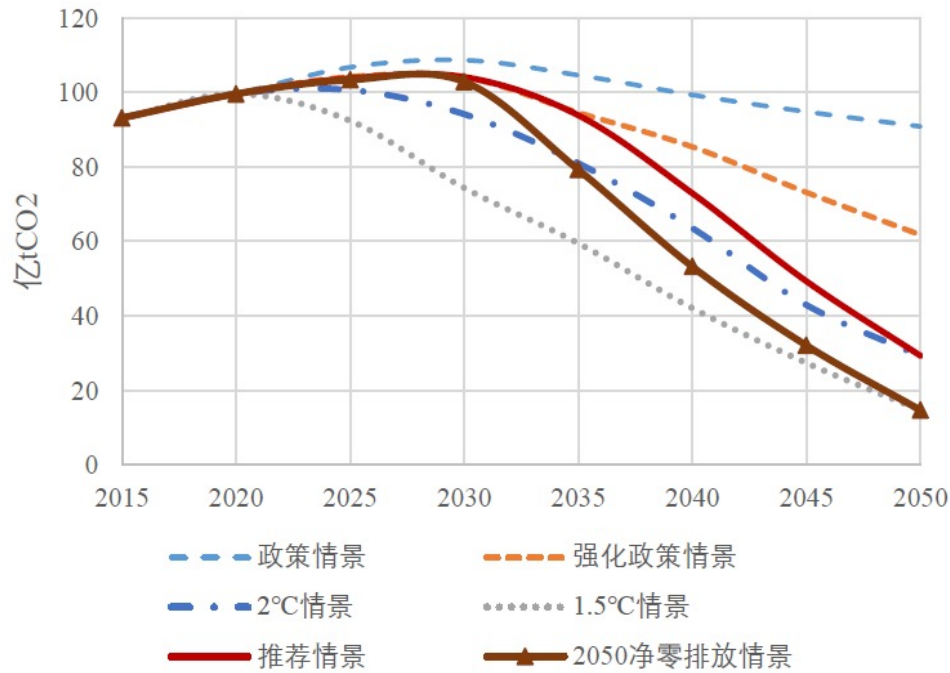
To meet carbon neutrality
4000-4500GW by 2050

*Tsinghua University 2050
Project*

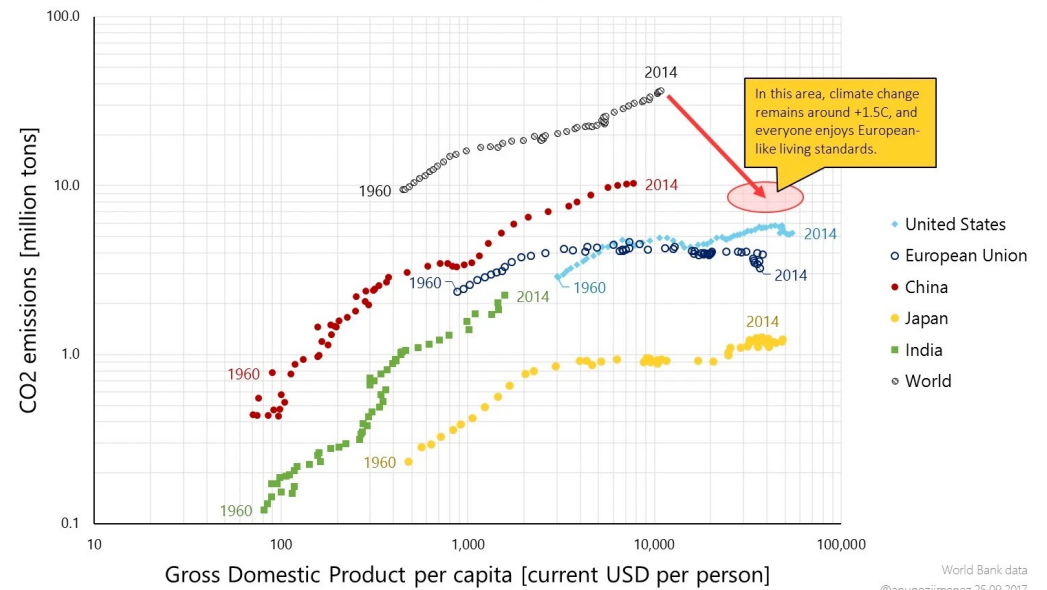
Ambitious actions needed to reduce coal use

	Policy trends	Expert recommendations for 2025
Total Coal Consumption billion TCE	2.83 by 2020 2.9 – 3 Growth in 14 th FYP 0.07-0.17	<2.8 <i>Plateau</i>
Coal Share of Total Energy Consumption	56.8% in 2020 50% by 2025 (past 5 year trend)	50% (<i>Coal Cap Program</i>)
Coal Power Capacity	1080GW by 2020 1296 GW	1100GW Coal Cap Program 1170GWSGERI

Challenges



Evolution of CO2 emissions and GDP per capita 1960-2014 for the world and top emitters





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Thank You

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