

China's Carbon Peaking and Carbon Neutrality "1+N" Policy Framework

Key takeaways for energy sector

In the end of October 2021, two weeks ahead of the UN Climate Change Conference of the Parties (COP26), the Communist Party of China Central Committee and the State Council jointly released a document titled *Working Guidance For Carbon Dioxide Peaking And Carbon Neutrality In Full And Faithful Implementation Of The New Development Philosophy* (hereafter refers to the *Guidance*), and the State Council released a document titled *Action Plan for Carbon Dioxide Peaking Before 2030* (hereafter refers to the *Action Plan*).

The *Guidance* and the *Action Plan* are the core policy documents of *China's Carbon Peaking and Carbon Neutrality "1+N" Policy Framework*, forming **multi-dimensional targets** and **multi-level task framework**. The *Guidance* is the "1" of "1+N", which is the systematic planning and overall deployment to achieve carbon peaking and carbon neutrality; the *Action Plan* is the first "N" issued, and the "N" is a series of programs to achieve the goals of the "1", including carbon reduction programs, carbon peaking implementation programs by sector and industry, as well as guarantee programs. The issuance of the two documents means that the most core part of "1+N" has been completed, and China will enter stage of the substantive implementation.

Multi-dimensional targets

01

Dimension of goals

The *Guidance* put forwards five main goals:

1. Build a green and low-carbon circular development system
2. Improve energy utilization efficiency
3. Increase the proportion of non-fossil energy consumption
4. Reduce carbon dioxide emissions
5. Improve carbon sink capacity of the ecosystem

02

Dimension of timeline

Both the *Guidance* and the *Action Plan* reiterated the key short- to medium- term goals for 2025 and 2030. On this basis, the *Guidance* also focuses on the long-term development of 2060, and clarifies the target that *non-fossil energy should account for 80% of total primary energy consumption by 2060* for the first time.

Main Targets



Energy consumption/GDP

Decreases by 13.5% by 2025 compared to 2020



Share of non-fossil in primary energy consumption

Reaches 20% in 2025, 25% in 2030, and 80%* in 2060



CO₂ emissions/GDP

Reduces by 18% by 2025 compared with 2020, and by more than 65% by 2030 compared with 2005



Forest coverage and forest reserves

Reaches 24.1%* and 18 billion m³* by 2025 respectively, and reaches 25% and 19 billion m³ by 2030 respectively



Total installed capacity of wind and solar power

Reaches over 1200 GW by 2030

*The ones with an asterisk are only mentioned in the *Guidance*, other goals are mentioned in both documents

03

Dimension of industry

The *Guidance* and the *Action Plan* put forward "overall" and "specific" goals for different industries respectively.

The Guidance

- Strictly control the growth of coal consumption during the 14th Five-Year Plan period, and to gradually decrease it during the 15th Five-Year Plan period.
- Oil consumption will enter a peak period during the 15th Five-Year Plan period
- Strictly control the scale of coal power installations, and accelerate the energy-saving and flexibility retrofit of active units
- Strictly implement the capacity replacement of energy-intensive and emission-intensive projects, and raise access standards with lower energy consumption
- Strictly control energy consumption intensity and CO₂ emission intensity, and coordinate the establishment of a total CO₂ emission control system
- Vigorously develop energy-saving buildings, deepen the application of renewable energy and clean heating in buildings
- Accelerate the development of new energy vehicles, green logistics, and low-carbon travelling
- Stabilize the existing carbon sequestration capacities of forests, grasslands, etc., strengthen ecosystem protection to enhance carbon sink capacity

The Action Plan

- 40 GW of installed hydropower capacity will be added both between 2021-2025 and 2026-2030, and a hydropower-based renewable energy system will be basically established in the southwestern region
- Develop nuclear power positively, safely and orderly, and regulate oil and gas consumption rationally
- The installed capacity of new-type energy storage will reach more than 30 GW in 2025; the installed capacity of pumped storage will reach about 120 GW in 2030, and the provincial power grid should have a peak-load response capacity of more than 5%
- Promote carbon peaks in the steel, non-ferrous metals, building materials, petrochemical and chemical industries
- By 2025, the renewable energy replacement rate of urban buildings will reach 8%, and the PV roof coverage rate of new public institutions and factory buildings will reach 50%
- By 2030, the proportion of new energy and clean energy powered transportation will reach about 40%, and land transport oil consumption strives to peak by 2030
- By 2030, the annual utilization of bulk solid waste will reach 4.5 billion tons, and the utilization ratio of household waste will increase to 65%

Multi-level task framework

Based on the establishment of multi-dimensional goals, the Opinions also clarifies the main tasks towards 2030 at the three levels of the central government, local governments, and markets and enterprises.

The first level- central government's overall planning and deployment

- Create a green and low-carbon circular development system, and continue to improve energy efficiency
- Integrate the 30-60 carbon targets into the country's medium and long-term planning over economic, development, territorial and spatial planning, and local planning at all levels
- Optimize the layout of major infrastructure, productivity and public resources, and build a spatial development pattern that is conducive to 30-60 carbon targets
- Promote legislative work in the field of 30-60 carbon targets to form a scientific, clear and enforceable national climate governance system

The second level- local government implementing goals and tasks

- Local party committees and governments at all levels should clarify the goals and tasks, and formulate implementation measures
- Formulate realistic action plans and timetables according to the local resources, industrial layout and development stages

The third level- the market and enterprises jointly supporting

- Promote the construction of market-oriented mechanisms and actively develop green finance
- Use incentive policies such as tax exemption and price control to promote enterprises to independently improve low-carbon performance
- Key energy-consuming departments should research and discuss on emission reduction paths, and formulate special action plans for specific enterprises.

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