

CHINA'S CARBON NEUTRALITY PLEDGE: HOW SIGNIFICANT IS IT?

CHEN Gang

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Executive Summary

1. In September 2020 China pledged to cut the country's carbon emissions to virtually zero by 2060, on top of its existing commitment to peaking emissions before 2030.
2. If fulfilled, it would slice off an estimated 0.2°C to 0.3°C from global warming forecasts for 2100, down to around 2.4°C to 2.5°C above pre-industrialised levels. This will still be well above the 1.5°C global temperature rise set by the Paris Agreement, a significant improvement over the business-as-usual scenario, nonetheless.
3. China ratified the Paris Agreement in 2016 after announcing a number of climate targets such as the Nationally Determined Contributions required by the Agreement even before Chinese President Xi Jinping's carbon neutrality pledge.
4. China has been taking its climate commitments seriously. According to the UNFCCC (The United Nations Framework Convention on Climate Change), China was three years ahead of its 2020 carbon intensity target.
5. As compared to the carbon intensity index, which is basically a gauge for economic and energy efficiency, the international community has long expected China to set carbon peak and carbon neutrality targets that require direct emission cutting or capping commitments.
6. Under the Paris Agreement, carbon neutrality targets for China and many other countries, developed and developing alike, have deviated from the UNFCCC's principle of "common but differentiated responsibility".
7. A pathway to net-zero by 2060 requires China to reduce emissions to 6,247 million tonnes from the baseline of 10,039 million tonnes by 2025, the last year of China's 14th Five-Year Programme (FYP). Therefore, aggressive mitigation effort has to feature prominently in the 14th FYP. The "proposals" formulated by the CCP Central Committee Plenum in October 2020 do not reflect such mitigation efforts.

8. In 2020, about 57.5% of China's total energy consumption still came from coal. Renewables including hydro, wind and solar power will have to make up for the bulk of the energy infrastructure by 2060, alongside nuclear, if the targets are to be met.
9. China's renewable energy development is overconcentrated in its northwestern and northern provinces, incurring huge waste and overcapacity costs. There is hence a need to develop more off-shore windfarms and solar PV projects in eastern China to meet the coastal areas' expanding energy appetite and increase investments in smart grid construction.
10. China's carbon neutrality pledge implies that it is ready to accept costly international obligations in exchange for leadership in global governance.