China's path to Net-Zero

Being a global leader in carbon emissions and clean technology may seem like an odd match, but China is pushing to be a leader in sustainable development. In 2020, China declared its intention to reach net-zero carbon emissions by 2060.

China's Impact at COP26

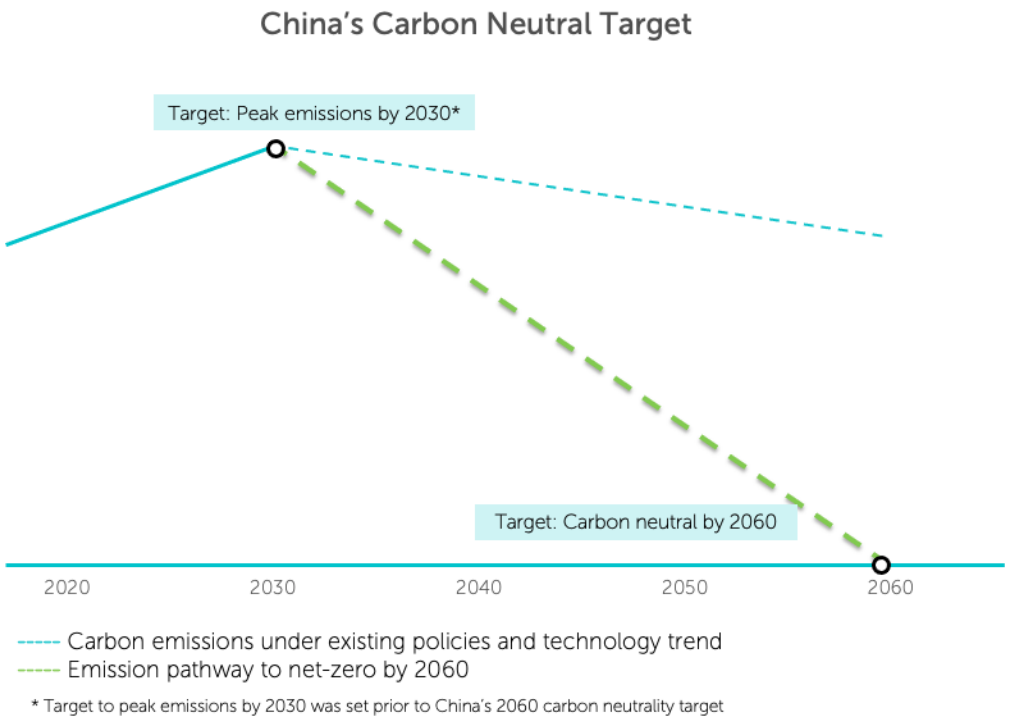
Yet, at COP26 in Glasgow, China seemed to take a less outspoken stance on climate and appeared much more reserved. Chinese President Xi Jinping did not attend the event and remained vague in his video address to the conference. He called for stronger action against climate change and more assistance for developing countries. While both are important, these points are well established and bring nothing new to the table.

Additionally, China did not make any additional climate commitments, which is surprising for a potential leader in sustainability. This raises the question – How serious is China about their climate targets, and is it realistic to think that they can, or will, meet them?

In Context – Pre COP26

To assess China's progress, we first have to look back. While the nation currently holds the dubious title of the world's largest polluter, China has actively sought to decarbonize its economy over the last several years.

For a long time, the nation's economic growth paralleled local rates of environmental degradation, but this changed coming into the new millennium. The change was followed by action towards fulfilling the United Nations' Sustainable Development Goals - and now commitments to meet net-zero emissions by 2060.



Source: Paia Consulting

"China's economic growth has not come without great sacrifice and with negative consequences for the environment and climate. But it is still encouraging to note these improvements. At the same time, it reminds us of the urgent need to solve major problems such as increased greenhouse gas emissions and inequality of income."

- Deliang Chen - professor of physical meteorology at the University of Gothenburg

Aware of its emissions and seeking to curb them, China acknowledges that its carbon emissions are yet to peak. The country finds itself in a conundrum - a paradox almost, considering the amount of investment it is putting forth into climate solutions. Already the world's largest EV manufacturer, slowly closing in on a monopoly of EV-related materials supply chains, and with the ability to rapidly enact social change, China could be an unlikely success story.

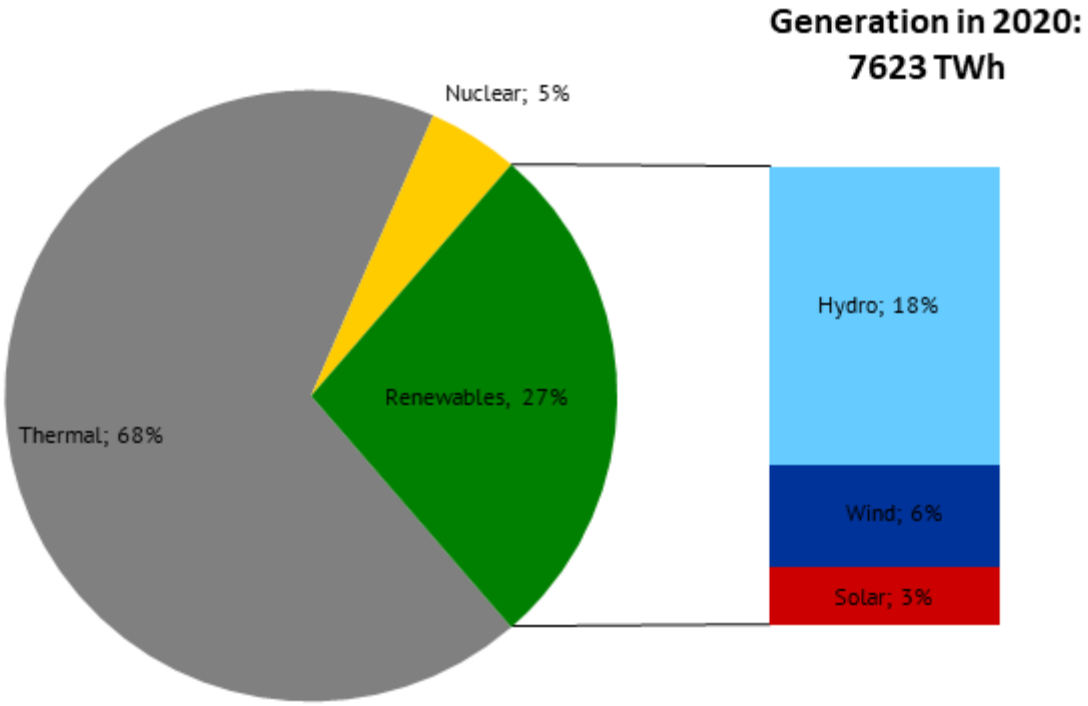
China's Net Zero Target – Models & Feasibility

China's short-term policies are still reliant on coal, and coal will play a significant role in its energy mix in the coming decade.

China's current goals are to reduce energy intensity by 13.5% by 2025 while simultaneously reducing carbon emissions per unit of GDP by 18%. In reality, achieving this requires a combination of reduced coal consumption and increased renewable energy use.

Looking at the progress, it appears they are struggling with the first part - the country extracted and imported more coal in 2021 than 2020. Though they have been pursuing the second part – the country had its largest growth in renewable energy capacity between 2020 and 2021.

Unfortunately, this is a zero-sum game – it will only be successful if the country achieves both pieces.



Source: Energy Brain Pool

Cautious Optimism Moving Forward

Although the country states it is serious about reducing emissions and transitioning towards a less carbon-intense economy - it remains off-track to limit global warming to 1.5°C.

It remains to be seen how successful China, like most global governments, will be in meeting its net-zero goals. China's recent COP26 appearance does inspire confidence, but it has made some progress over the last several years.

The country sits at a crossroads many regions will face in coming years: rising electrical demand, high dependency on coal, and a pressing need to decarbonize - but the potential is there.

"China has the means and capabilities to accomplish an even faster clean energy transition. An accelerated transition would put China's CO2 emissions into marked decline after 2025, opening up the possibility of China reaching carbon neutrality well before 2060."

- Faith Birol – Director of the International Energy Agency (IEA)

Like many projections, models, and pledges - we will only be able to tell their validity closer to the deadline.

.