

China agrees to enhance its role in global climate change mitigation

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A rapid process of urbanisation and an expanding middle class with increasingly western tastes will keep energy consumption and carbon dioxide emissions in China at high levels over the next 20 years. However, changes are unfolding in China that offer promise and opportunities for cutting emissions and for promoting sustainable energy and climate policies. This is among the findings of a research project funded by the Academy of Finland and the Chinese Academy of Social Sciences (CASS) under the research programme on climate change FICCA.

China accounts for some 30 per cent of the world's carbon dioxide [emissions](#). In comparison, the EU countries account for some 10 per cent. In per capita terms, China's emissions have exceeded those of the EU in 2014. In a recent announcement, China stated its commitment to halt its emissions growth by 2030, also pledging to improve its [energy efficiency](#) and increase the share of non-fossil fuels in its energy mix.

"From a global perspective, we're seeing that China is channelling investments into renewable energy. While the growth in renewable energy capacity has been fast, the demand for energy has grown even faster, forcing China to further increase its coal power capacity," says Research Director Jari Kaivo-oja from the Finland Futures Research Centre. Kaivo-oja says that the rapid rise in affluence and changing consumer preferences in China are driving up energy consumption and emissions.

"China has rapidly improved its energy efficiency per GDP unit in its manufacturing and energy systems, but the improvements won't be enough to curb the growth in energy consumption and emissions brought about by rising affluence and consumption."

China's increasingly crucial role in world trade has served to further push up the country's emissions. Kaivo-oja feels that international trade issues should be given more weight in studies on climate policy. On the other hand, the rise of the service sector as a driver of economic growth in the Chinese economy is partly driving down [energy consumption](#) and emissions thanks to active financial and societal policy-making by the Chinese government.

"This reflects a desire towards a new brand of sustainable policy where we could well do with an active exchange of ideas between the EU and China," says Kaivo-oja.

China is set to increase the non-fossil fuel share of its energy mix to 20 per cent by 2030. Earlier Chinese forecasts have set the date for peak [carbon dioxide emissions](#) between 2025 and 2040.

"Our research shows that the ongoing structural change visible in the Chinese economy will only curb the growth in [carbon emissions](#) by 25 per cent in comparison to the current economy, which is largely dependent on heavy industry. At present, the plans for the development of the country's [energy](#) system won't help China cap its emissions by 2030."

However, Kaivo-oja estimates that the ongoing transition in China will offer promising new opportunities to curb emissions growth.

"China is a country still in the midst of a wave of urbanisation. The infrastructure solutions in new urban areas and the consumer habits of a

developing and increasingly well-to-do [middle class](#) are two issues that can significantly influence future developments. China has made huge investments in sustainable cities and in sustainable development exercises, which are all very positive signals from the viewpoint of [sustainable energy](#) and climate policy."

Provided by Academy of Finland

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