China exports benefit West but not the environment

Following its recent and rapid industrialisation, significant CO₂ emissions are generated by China’s exports destined for the West. New research describes the significant role that the developed world plays in the growth of these emissions.

EU-China trade has increased dramatically in recent years. China is now the EU’s second trading partner behind the USA and the biggest source of imports³. Between 2002 and 2007, China’s CO₂ emissions almost doubled, making it the world’s biggest CO₂ emitter. China is under international pressure to cut emissions. However, China argues that limiting emissions would curb economic development and that its actual emissions per person are much lower than those in the developed world. It also argues that a large percentage of emissions are due to industrial production of exports for consumers in the West. Historically, China has not been a major emitter.

The study estimated the CO₂ emissions from the production of exports in China from 1987 to 2005. Their method includes inputs along the supply chain that contribute to the goods for export.

The findings demonstrated that, in 1987, 12 per cent of China’s domestic CO₂ emissions (230 megatonnes) were a result of export production. However, this figure steadily grew, reaching 33 per cent (1700 megatonnes) in 2005. These figures closely mirror the rise of exports as a percentage of GDP; exports are, on average, no more or less carbon intensive than products for domestic consumption. In 2005, China’s export emissions of 1700 megatonnes were similar to the combined emissions of Germany, France and the UK (1850 megatonnes).

2002-2005 was the period of most rapid economic growth in the timeframe studied. During this period, China’s CO₂ export-related emissions jumped from 22 per cent of GDP to 33 per cent of GDP in 2005. The increase in exports is the biggest contributor to China’s increase in overall emissions. The Chinese economy now produces increasingly high value export items, with products such as electronics taking a bigger share.

Small countries typically have larger shares of emissions from exports and larger, more self-sufficient, countries have lower shares. As a large country with a large share of exports, China is unusual. Compared with other countries, its exports have a greater impact on its environmental profile. Production costs in China may be low, but the environmental costs are often higher than elsewhere, largely due to coal-fired power.

Some 27 per cent of China’s export-related emissions are tied to exports to the US and 19 per cent to the EU-27. This complicates attempts to persuade Chinese policy makers to reduce carbon emissions without compensation from developed nations.

China’s economy benefits from export growth, as do consumers in developed countries. Some argue that if western consumers were made partially responsible for China’s export emissions, China might consider greater action to prevent climate change.

The EU’s open market has been a large contributor to China’s export-led growth. The EU has also benefited from the growth of the Chinese market and the EU is committed to open trading relations with China. However, the EU works to try and ensure that China trades fairly, respects intellectual property rights and meets its WTO obligations¹.


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