

Researchers say China's export trade impacts climate

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Carnegie Mellon University's Christopher L. Weber argues that China's new title as the world's largest greenhouse gas emitter is at least partly due to consumption of Chinese goods in the West.

As the world's greatest athletes prepare to participate in the 2008 Olympic Games in Beijing, there is increasing concern from some athletes about the growing pollution caused by smoke and smog from coal-fired plants that helped boost Chinese exports 21 percent last quarter to a whopping \$665 billion in trade.

"We found that in 2005, fully one-third of China's greenhouse gas emissions were due to production of exports. This proportion has risen quickly, from 12 percent in 1987 and only 21 percent in 2002," said Weber, a research professor in Carnegie Mellon's Department of Civil and Environmental Engineering.

Weber and a team of international researchers from Norway and the United Kingdom found that soaring exports and energy use caused Chinese emissions to rise to 6 percent of global CO₂ emissions from fossil fuels. These results beg the question of who should be held responsible for China's immense growth in emissions.

The 1997 Kyoto accord on climate change did nothing to slow growth in China because, as a developing country, China is not required under the protocol to make cuts in carbon emissions — and that is not likely to change by 2012. China is desperate for energy to fuel the economic expansion that is pulling its citizens out of poverty, and despite bold investments in renewable energy sources and energy efficiency, much recent energy growth is coming from coal, the only traditional energy source in abundance in China.

Weber and colleagues Glen P. Peters of the Norwegian University of Science and Technology, Dabo Guan of the University of Cambridge and

Klaus Hubacek of the University of Leeds, urge the Chinese to clean up their production practices by working with business to audit energy consumption and develop a fund to help bankroll the installation of more efficient equipment in factories and power plants. However, the fact that such a large proportion of Chinese emissions are in exports means that the West must be responsible for helping the Chinese increase energy efficiency.

"It is clear that urgent improvements are needed, especially in China's electricity sector," Weber said. "Installing more renewable power and overcoming the financial and technological hurdles involved with new technologies such as carbon sequestration should be the first priority of both China and its export partners."

Source: Carnegie Mellon University

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