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# Global industrial carbon emissions to reach all-time high in 2018

*Latest predictions dash hopes that industrial carbon dioxide emissions have peaked.*

Jeff Tollefson



Carbon emissions keep on rising globally. Credit: Reuters

Global industrial emissions of carbon dioxide are likely to have risen by 2.7% in 2018 to reach an all-time high, marking a second year of strong growth after a brief period of relatively stable emissions, an international consortium of scientists reports.

The findings were released in a trio of papers<sup>1,2,3</sup> by the Global Carbon Project on 5 December at the 24th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP24) in Katowice, Poland — and they underscore the challenge of reining in fossil-fuel consumption.

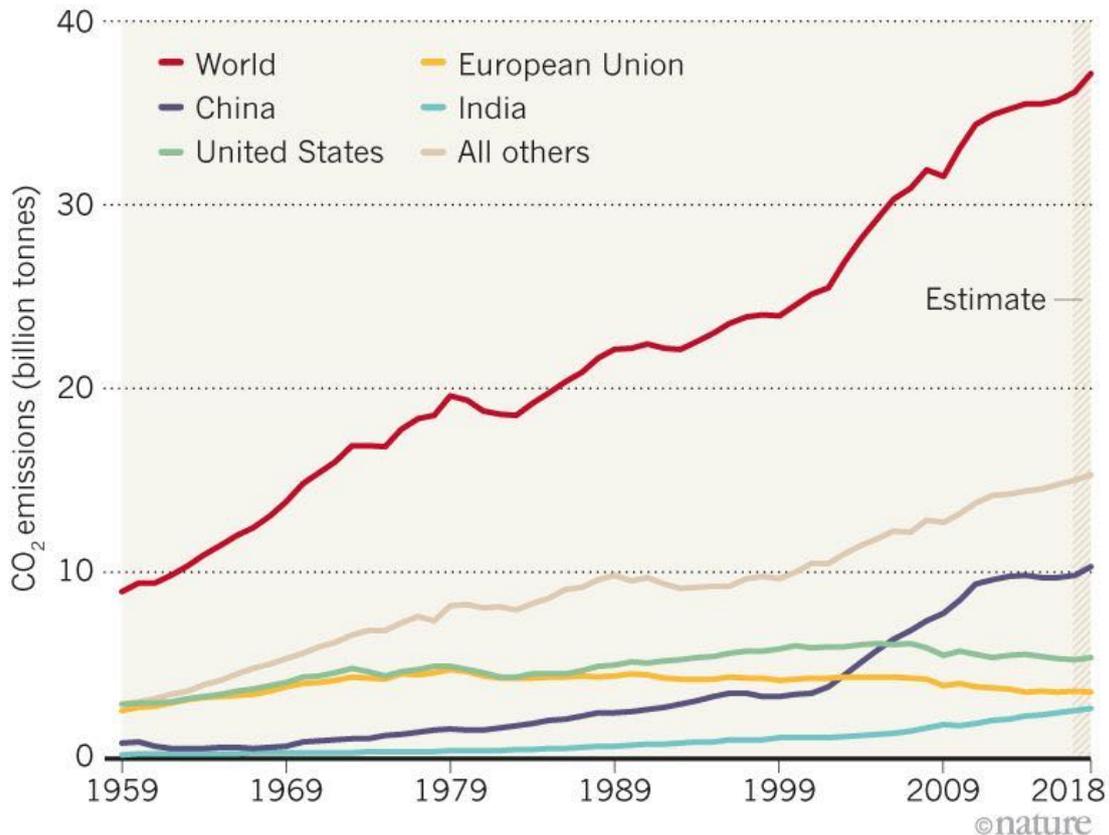
The scientists also said that deployment of renewable energies such as wind and solar power is increasing rapidly around the world, but not fast enough to displace coal use in places such as India and China or a growing global demand for oil and natural gas.

The projections indicate that industrial CO<sub>2</sub> emissions will hit an all-time high of 37.1 billion tonnes this year; the total, including CO<sub>2</sub> emissions from deforestation and other activities on land, will reach 41.5 billion tonnes — also the highest since record began.

CO<sub>2</sub> emissions grew by 1.6% in 2017. The spikes in 2017 and 2018 follow a three-year period in which emissions growth slowed to a crawl (see 'Carry on rising').

## CARRY ON RISING

Industrial carbon-dioxide emissions are projected to rise again globally this year, even as individual countries' emissions look very different.



Source: Global Carbon Project

"We had hoped that emissions had peaked beginning in 2014, but with strong growth two years in a row, that is clearly incorrect," says Rob Jackson, an Earth scientist at Stanford University in California and chair of the Global Carbon Project, which tracks emissions and changes in the Earth's carbon cycle.

But the global economy is becoming more efficient, with economic growth outpacing emissions; the researchers report that 19 countries experienced economic growth while reducing their emissions over the past decade.

But it's not enough for governments to just promote renewable energy, says Glen Peters, a researcher at the Center for International Climate Research in Oslo who worked on the emissions analysis. "We need more policies focusing on putting the fossil fuels away," he says, "but it's much harder politically to penalize established industries."

The biggest driver of emissions growth is a rise in coal consumption in China, which accounts for more than 46% of the projected increase in industrial CO<sub>2</sub> emissions in 2018.

India's emissions rose by 6.3%, owing to strong economic growth and increasing coal use. And in the United States, where emissions have fallen over the past decade, they are projected to rise by around 2.5%, partly due

to increased energy consumption during a cold winter and hot summer.

Fossil-fuel infrastructure is still expanding, the scientists say, particularly in developing countries. Overall, Jackson notes, humanity's energy portfolio remains as carbon intensive as it was three decades ago.

Peters says that the long-term trend is hard to decipher, because carbon emissions still rise and fall on the basis of economic activity as well as weather trends. Since 2010, he says, global emissions growth has averaged about 1% per year, compared with 3% per year in the 2000s. That's progress, he adds, "but it's still not good enough".

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