

CO2 emissions 'increased at slower rate in 2012'

October 31 2013



Exhaust rises from cooling towers at the Neurath lignite coal-fired power station at Grevenbroich near Aachen, southern Germany on September 11, 2012

The world's carbon dioxide (CO₂) emissions increased at a slower rate in 2012—1.1 percent compared to a 2.9 percent annual increase over the past decade, a report said Thursday.

This was despite a global [economic growth rate](#) of 3.5 percent and was

partly the result of a shift to [hydroelectric power](#) in China and shale gas in the United States, according to an analysis by the Netherlands Environmental Assessment Agency.

"This development signals a shift towards less fossil fuel-intensive activities, more use of renewable energy and increased energy saving," said a statement.

The output still represented a new record 34.5 billion tonnes.

CO₂ is the greenhouse gas chiefly responsible for man-made global warming—which the UN has said must be limited to 2.0 degrees Celsius (3.6 deg Fahrenheit) above pre-Industrial Revolution levels.

Scientists have said this is possible only if CO₂ emissions from 2000 to 2050 do not exceed 1.0 to 1.5 trillion tonnes—yet an estimated 466 billion tonnes have been emitted since 2000, according to data cited in the report.

In May this year, the concentration of climate-altering [carbon dioxide](#) (CO₂) in the atmosphere exceeded 400 particles per million for the first time since humans have walked the Earth.

The report said China's CO₂ emissions increased by 3.0 percent last year to 9.9 billion tonnes from 2011—a low rate compared to annual increases of about 10 percent over the past decade.

In the United States, emissions decreased by four percent to 5.2 billion tonnes, mainly due to a shift from coal to shale gas in the power sector. It was the lowest emissions level in the United States since 1993.

The European Union saw its emissions drop by 1.6 percent as the economic downturn continued to dampen energy consumption and road

freight transport.

China was responsible for 29 percent of emissions in 2012, the United States 15, the European Union 11 percent, India six percent, Russia five percent and Japan four percent.

Fossil-fuel burning accounted for 90 percent of total CO2 [emissions](#) and power generation was the biggest contributing sector.

The use of nuclear energy has decreased in the aftermath of the Fukushima accident, but hydropower output increased by 4.3 percent from 2011 to 2012, said the report.

© 2013 AFP

Citation: CO2 emissions 'increased at slower rate in 2012' (2013, October 31) retrieved 23 April 2024 from <https://phys.org/news/2013-10-co2-emissions-slower.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.