

Lockdown emissions fall will have 'no effect' on climate

August 7 2020, by Patrick Galey



Global emissions from the burning of coal, oil and gas are likely to fall up to eight percent in 2020

The unprecedented fall in greenhouse gas emissions from lockdowns during the pandemic will do "nothing" to slow climate change without a lasting switch from fossil fuels, an international team of researchers said

Friday.

Global emissions from the burning of coal, oil and gas could fall up to eight percent in 2020 after governments moved to confine billions of people to their homes in a bid to slow the spread of COVID-19.

But absent a systemic change in how the world powers and feeds itself, experts warned in the study on Friday that the emissions saved during lockdown would be essentially meaningless.

Using open source data, the team calculated how levels of 10 different greenhouse gases and air pollutants changed in more than 120 countries between February and June this year.

They found that pollution such as [carbon dioxide](#) and nitrogen oxides fell in the period by between 10 and 30 percent.

However, given that the "massive behavioural shifts" during lockdown were only temporary, lower emissions so far this year are unlikely to influence the climate.

Even assuming travel restrictions and social distancing continue to the end of 2021, the team concluded that this would only save 0.01 C of warming by 2030.

"Lockdown showed that we can change and change fast, but it also showed the limits of behaviour change," Piers Forster, study co-author and director of the Priestley International Centre for Climate at Britain's University of Leeds.

"Without underlying structural change we won't make it," he told AFP.

1.5 C 'unlikely'

The 2015 Paris climate deal saw nations commit to limit temperature rises to "well below" two degrees Celsius (3.6 Fahrenheit) above pre-industrial levels through sweeping emissions cuts.

It also set a safer goal of a 1.5 C cap.

The United Nations says that in order to keep 1.5 C in play [global emissions](#) must fall 7.6 percent annually this decade.

That is roughly equivalent to the anticipated emissions fall this year. But given that took one of the largest economic slowdowns in history, Forster said it was unlikely to be repeated as countries look to recover.

"If I'm brutally honest, the world is unlikely to decarbonise at the rates required for 1.5 C, but getting anywhere close will make our children's future better," he said.

The study, published in *Nature Climate Change*, also modelled options for post-lockdown recovery which the authors said showed a unique opportunity for structural change to the global economy.

Options for policymakers include lowering traffic pollution by prioritising [public transport](#) and cycle lanes.

A "strong green stimulus", which would see an additional 1.2 percent of gross domestic product invested in low carbon technology could slash emissions by half by 2030 compared with a fossil fuel-led recovery, the authors said.

"The fall in emissions we experienced during COVID-19 is temporary and therefore it will do nothing to slow down climate change," said co-author Corinne Le Quere from the University of East Anglia.

"But the government responses could be a turning point if they focus on a green recovery, helping to avoid severe impacts from [climate](#) change."

Pete Smith, professor of soils and global change at the University of Aberdeen said that a return to business as usual post-COVID would mean "we will have thrown away our best chance of getting the world on track to net zero emissions".

"We have a small window of opportunity to get this right, and we can't afford to waste it," said Smith, who was not involved in the research.

More information: Piers M. Forster et al. Current and future global climate impacts resulting from COVID-19, *Nature Climate Change* (2020). [DOI: 10.1038/s41558-020-0883-0](https://doi.org/10.1038/s41558-020-0883-0)

© 2020 AFP

Citation: Lockdown emissions fall will have 'no effect' on climate (2020, August 7) retrieved 20 March 2024 from <https://phys.org/news/2020-08-lockdown-emissions-fall-effect-climate.html>

<p>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.</p>
--