

*MCC Press Release*

## UN report with MCC involvement warns of 2.8C global heating

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There is a large ambition and implementation gap in climate policy, with a turnaround still to come. William Lamb led the chapter on emissions in the UNEP Emissions Gap Report.

**Berlin, 27/10/2022.** Despite various new climate protection announcements, the world has made very little progress with regard to the declared goal of limiting global heating to 1.5 degrees Celsius. According to the “Emissions Gap Report 2022” published today by the UN Environment Programme (UNEP), the implementation of all existing announcements would only limit global heating to 2.4C, compared to 2.6C projected in the 2021 report – and as before, the plans already implemented in current policies are still only sufficient for 2.8C. A key feature of the report are new comprehensive calculations on greenhouse gas emissions. The relevant chapter was lead-managed at the Berlin-based climate research institute MCC (Mercator Research Institute on Global Commons and Climate Change).

“The coronavirus dip did not last long; the provisional data for 2021 show a new record high,” reports [William Lamb](#), researcher in the MCC working group Applied Sustainability Science, and lead author of the chapter on “Global Emission Trends” in the new UNEP report. Total CO<sub>2</sub> emissions from fossil fuel combustion and from industrial processes, as well as emissions of CH<sub>4</sub>, N<sub>2</sub>O, and F-gases, fell sharply in the wake of the pandemic lockdowns, but by 2021, at 52.8 gigatonnes of CO<sub>2</sub> equivalent, they were already 0.26 gigatonnes higher than in 2019. “This rebound effect is evident across almost all sectors, with the major exception of aviation,” Lamb says. “However, passenger statistics suggest emissions will spike in this sector too.”

Regionally, the two-year comparison across the coronavirus dip varies considerably. China, by far the largest greenhouse gas producer, emitted 5.9 percent more in 2021 than in 2019; India, Russia, Brazil and Indonesia are also clearly up. In contrast, the USA and the EU have seen a decline of 6.7 and 4 percent, respectively. Historically, however, these last two regions have emitted the lion's share of CO<sub>2</sub>, namely 42 percent between 1850 and 2019. This compares to 13 percent in China – and 0.5 percent in the 46 “least developed countries” currently representing 880 million people. There are also large disparities within countries. The richest hundredth of the world's population in terms of consumption currently contributes to the climate crisis with 17 percent of the greenhouse gas emissions, whereas the entire poorer half of the world emits just 12 percent.

The emissions chapter of the UNEP report also highlights the role of land sinks, i.e. soils, forests, and peatlands. The statistics aggregated from national data only cover the period up to 2020. These show that

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such land sinks generate a small amount of climate relief globally, but in Brazil and Indonesia they are responsible for a considerable amount of climate pollution. The chapter also addresses the fact that scientific climate models show a net emission of greenhouse gases for the land sinks even in global terms: it finds that this apparent contradiction based on a different delineation of man-made and natural effects in this area.

“Overall, there has been some progress in the fight against global heating,” concludes MCC researcher Lamb. “After all, climate policy measures and technological change have at least slowed the growth of global greenhouse gas emissions, and some countries are past their peak. But after the coronavirus dip, we now urgently need a real global turnaround.” The UNEP report illustrates the urgency of taking action in this way: in order to get on the desired track of the 1.5-degree target by 2030, the world would have to curb its climate gas emissions by 45 percent – in just eight years.

**Reference of the cited article:**

Lamb, W., Grassi, G., et al., Global emissions trends, Chapter 2, UNEP (2022). The Emissions Gap Report <https://www.unep.org/resources/emissions-gap-report-2022>

**About MCC**

MCC explores and provides solution-oriented policy portfolios for climate mitigation, for governing the global commons in general, and for enhancing the many aspects of human well-being. Our seven working groups are active in fields like economic growth and development, resources and international trade, cities and infrastructure, governance, and scientific policy advice. Co-founded by the Mercator Foundation and the Potsdam Institute for Climate Impact Research. | [www.mcc-berlin.net/en](http://www.mcc-berlin.net/en) | [https://twitter.com/MCC\\_Berlin](https://twitter.com/MCC_Berlin)

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