

UNEP's Emissions Gap Report 2020

December 10, 2020

In news

UNEP's 11th edition of Emissions Gap Report 2020 says that "the world is still heading for a temperature rise in excess of 3°C this century"

What does the UNEP report say?

- As per UNEP's executive director the year 2020 is on course to be one of the warmest on record, while wildfires, storms and droughts continue to wreak havoc
- The UNEP report measures the gap between anticipated emissions and levels consistent with the Paris Agreement goals of limiting global warming this century to well below 2°C and pursuing 1.5°C".

Key findings

- **Increased GHG emissions:** "Global GHG emissions continued to grow for the third consecutive year in 2019, reaching a record high of 52.4 Gigatonne carbon equivalent (GtCO₂e)
- **Fossil carbon dioxide (CO₂) emissions:** It dominates total GHG emissions including LUC (65 per cent) and consequently the growth in GHG emissions. Preliminary data suggest that fossil CO₂ emissions reached a record 38.0 GtCO₂ (range: ±1.9) in 2019
- **Forest Fire behind increased GHG:** Since 2010, GHG emissions without LUC have grown at 1.3 per cent per year on average, with preliminary data suggesting a 1.1 per cent increase in 2019. When including the more uncertain and variable LUC emissions, global GHG emissions have grown 1.4 per cent per year since 2010 on

average, with a more rapid increase of 2.6 per cent in 2019 due to a large increase in vegetation forest fires.

- **The bulk of the emission is from G20 countries:** Over the last decade, the top four emitters (China, the United States of America, EU27+UK and India) have contributed to 55 per cent of the total GHG emissions without LUC. The top seven emitters (including the Russian Federation, Japan and international transport) have contributed to 65 per cent, with G20 members accounting for 78 per cent.
- **GHG Emission rate:** The report states that there is some indication that the growth in global GHG emissions is slowing. However, GHG emissions are declining in Organisation of Economic Cooperation and Development (OECD) economies and increasing in non-OECD economies.
- **Consumption-based emissions:** Both territorial based and higher consumption-based emissions have declined at similar rate
- **COVID-19 pandemic impact on the emission level:** CO₂ emissions could decrease by about 7 per cent in 2020 (range: 2–12 per cent) compared with 2019 emission levels due to COVID-19, with a smaller drop expected in GHG emissions as non-CO₂ is likely to be less affected. However, atmospheric concentrations of GHGs continue to rise.
- **COVID-19 and sector-wise emission:** The reduction in GHG emissions in 2020 due to COVID-19 is likely to be significantly larger than the 1.2 per cent reduction during the global financial crisis in the late 2000s. Studies indicate that the biggest changes have occurred in transport, as COVID-19 restrictions were targeted to limit mobility, though reductions have also occurred in other sectors.
- **Greenhouse Gases (excluding Carbon dioxide) level:** it states that although CO₂ emissions will decrease in 2020, the resulting atmospheric concentrations of major GHGs (CO₂, methane (CH₄) and nitrous oxide (N₂O))

continued to increase in both 2019 and 2020.

- As per the report sustained reductions in emissions to reach net zero CO₂ are required to stabilise global warming, while achieving net-zero GHG emissions will result in a peak then decline in global warming
- **On the net-zero level:** It states that At the time of completing this report, 126 countries covering 51 per cent of global GHG emissions have net-zero goals that are formally adopted, announced or under consideration. If the United States of America adopts a net-zero GHG target by 2050, as suggested in the Biden-Harris climate plan, the share would increase to 63 per cent.