



## United in Science 2021: WMO

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### Why in News

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Recently, the **World Meteorological Organization (WMO)** released a report named **United in Science 2021**.

- It is a **multi-organization high-level compilation** of the latest climate science information.
- The report is coordinated by the WMO, with inputs from the **United Nations Environment Programme, World Health Organization, Intergovernmental Panel on Climate Change**, Global Carbon Project, World Climate Research Programme and the Met Office (UK).



## Key points

- **Climate Change:**
  - The pace of **climate change** has not been slowed by the global **Covid-19 pandemic** and the world remains behind in its battle to cut carbon emissions.
    - It has caused only a **temporary downturn in carbon dioxide (CO<sub>2</sub>)** emissions in 2020.
    - **High latitude regions** and the **Sahel** are likely to be **wetter** over 2021–2025, than the recent past.
  - Reduction targets are not being met and there is a **rising likelihood the world will miss its Paris Agreement target** of reducing global warming to 1.5 degrees Celsius above pre-industrial levels.
    - There is an increasing likelihood that **temperatures would temporarily breach the threshold of 1.5 degrees Celsius** above the pre-industrial era, in the next five years.

- **Temperature:**
  - Average global **temperature for the past five years** was among the **highest on record**.
  - Rising global temperatures are **fuelling devastating extreme weather throughout the world**, with spiralling impacts on economies and societies.
    - Climate hazards such as heatwaves, wildfires and poor air quality combine to threaten human health worldwide, putting vulnerable populations at particular risk.
- **Greenhouse Gases:**
  - Concentrations of major **greenhouse gases** in the atmosphere continued to increase last year and during the first half of 2021.
- **Fossil Fuel Emissions:**
  - Fossil fuel emissions from coal, gas, cement, etc were back to 2019 levels or even **higher in 2021**.
- **Sea Level:**
  - Global **mean sea levels rose 20 cm** from 1900 to 2018. Even **if emissions are reduced to limit warming to well below 2°C**, global mean sea level would **likely rise by 0.3-0.6 m by 2100**, and could rise **0.3-3.1 m by 2300**.
- **Loss of Work Hours:**
  - An excess of **103 billion potential work hours were lost globally in 2019**, compared to 2000.
    - It was due to heat-related mortality and work impairment, caused by rising temperatures.
- **Suggestions:**
  - More countries should develop **long-term strategies** that are **consistent with the 2015 Paris Agreement**.
  - Net-zero commitments needed to be translated into **strong near-term policies and action**.
  - **Adaptation strategies are needed** where they do not exist – especially in low-lying coasts, small islands, deltas and coastal cities.
  - Covid-19 **recovery efforts should be aligned with national climate change and air quality strategies** to reduce risks from compounding and cascading climate hazards, and gain health co-benefits.

## Way Forward

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- World **needs a breakthrough on protecting people and their livelihoods**, with at least half of all public climate finance committed to building resilience and helping people adapt.
- And it needs much **greater solidarity, including full delivery of the long-standing climate finance pledge** to help developing countries take climate action.

**Source: DTE**