

The Global Methane Assessment baseline report

November 26, 2022

In news– The Global Methane Assessment: 2030 Baseline Report was launched at the Climate and Clean Air Ministerial Meeting at COP27 to the United Nations Framework Convention on Climate Change (UNFCCC).

Key highlights of the report-

- Report was prepared by the Climate and Clean Air Coalition and United Nations Environment Programme (UNEP).
- As per the report, **methane emissions can rise 5-13 per cent above 2020 levels by 2030** under a business-as-usual scenario.
- This represents an estimated increase of 20-50 million tonnes of methane per year above current levels.
- This greenhouse gas is responsible for nearly 45 percent of current net warming, the report underlined.
- The report evaluated the baseline, a scenario of **what would happen without efforts such as the Global Methane Pledge**.
- **The Global Methane Pledge was announced last year at CoP26**. The goal is **to slash global methane emissions** by at least 30 per cent from 2020 levels by 2030.
- Achieving the pledge could eliminate over 0.2 degree Celsius of warming from 2040-2070.
- At CoP27, 150 nations joined the pledge. **India and China have not made the commitment yet**.
- Around 95 per cent of the Nationally Determined Contributions (NDC) now include methane or will include it in revised versions.
- Methane levels in the atmosphere in 2021 reached a record high of 1908 parts per billion. This is 262 per

cent of the preindustrial era levels.

- Agriculture, fossil fuels as well as solid waste and wastewater are the three major sources of methane.
- Human activities release 350-390 million tonnes of methane annually. Emissions from the agriculture and fossil fuel energy sectors are around 120-140 million tonnes per year, roughly twice that of the waste sector.
- Emissions are projected to rise by about 11 million tonnes annually by 2030 under a business-as-usual scenario from the agriculture sector.
- Emissions from fossil fuels and waste are estimated to go up by 10 million tonnes and 9 million tonnes respectively by the decade's end under the same scenario.
- But the world could reduce emissions from these sectors by roughly 180 million tonnes per year (45 per cent) by 2030 using currently available measures.
- It added that **the least-cost scenario requires reducing methane emissions by about 60 per cent from fossil fuels, 30-35 per cent from waste and 20-25 per cent from agriculture by 2030**, compared to 2020. This can help contain global warming to 1.5°C – the goal set by the Paris Agreement.
- The **report highlighted substantial uncertainties in tracing emissions to specific sub-sectors such as livestock or oil.**
- At CoP27, the UN launched the **Methane Alert and Response System (MARS) to track methane emissions.** It will go live in January 2023.
- These developments, according to the report, will guide mitigation efforts more effectively, while also helping track changes in emissions over time as methane reduction policies are implemented.