IEA's annual Methane Global Tracker report

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<u>In news</u>— International Energy Agency's (IEA) has published the annual Methane Global Tracker report recently.

Key findings-

- According to the report, fossil fuel companies emitted
 120 million metric tonnes of methane into the atmosphere
 in 2022, only slightly below the record highs seen in
 2019.
- It added that these companies have done almost nothing to curb the emissions despite their pledges to find and fix leaking infrastructure.
- The implementation of such measures would cost less than three per cent of the net income received by the oil and gas industry in 2022, but fossil fuel companies failed to take any substantial action regarding the issue.
- It shows that some progress is being made but that emissions are still far too high and not falling fast enough — especially as methane cuts are among the cheapest options to limit near-term global warming.
- The energy sector accounts for around 40 per cent of the total average methane emissions from human activity, as oil and natural gas companies are known to release methane into the atmosphere when natural gas is flared or vented.
- The greenhouse gas is also released through leaks from valves and other equipment during the drilling, extraction and transportation process.
- -More than 260 billion cubic metres (bcm) of natural gas (mostly composed of methane) is wasted through flaring and methane leaks globally today
- Although it's impossible to avoid all of this amount,

the right policies and implementation can bring 200 bcm of additional gas to markets.

- In the oil and gas sector, emissions can be reduced by over 75 per cent by implementing well-known measures such as leak detection and repair programmes and upgrading leaky equipment.
- It further mentioned that 80 per cent of the available options to curb the release of methane could be implemented by the fossil fuel industry at net zero cost.
- •Ultimately, reducing 75 per cent of the wastage of natural gas could lower global temperature rise by nearly 0.1 degree Celsius by mid-century.
- This would have the same effect on the soaring global temperatures as immediately stopping greenhouse gas emissions from vehicles such as cars, trucks, buses and two- and three-wheeler vehicles across the world.
- However, fossil fuel companies have done little to tackle the problem.

How are methane emissions driving climate change?

- Methane is a greenhouse gas, which is responsible for 30 per cent of the warming since preindustrial times, second only to carbon dioxide. A report by the United Nations Environment Programme observed that over a 20-year period, methane is 80 times more potent at warming than carbon dioxide.
- In recent years, scientists have repeatedly sounded the alarm regarding the increasing amount of methane in the atmosphere.
- In 2022 the US National Oceanic and Atmospheric Administration (NOAA) said that the atmospheric levels of methane jumped 17 parts per billion in 2021, beating the previous record set in 2020.

International Energy Agency-

- It is a Paris-based autonomous intergovernmental organisation, established in 1974, that provides policy recommendations, analysis and data on the entire global energy sector, with a recent focus on curbing carbon emissions and reaching global climate targets, including the Paris Agreement.
- The 31 member countries and 11 association countries of the IEA represent 75% of global energy demand.
- The IEA was set up under the framework of the Organisation for Economic Co-operation and Development (OECD) in the aftermath of the 1973 oil crisis to respond to physical disruptions in global oil supplies, provide data and statistics about the global oil market and energy sector, promote energy savings and conservation, and establish international technical collaboration on innovation and research.
- Since its founding, the IEA has also coordinated use of the oil reserves that its members are required to hold.
- In subsequent decades, the IEA's role expanded to cover the entire global energy system, encompassing traditional fuels such as gas, and coal as well as cleaner and fast-growing energy sources and technologies including renewable energy sources; solar photovoltaics, wind power, biofuels as well as nuclear power, and hydrogen, and the critical minerals needed for these technologies.
- The core activity of the IEA is providing policy advice to its 31 member states, as well as to its 11 Associated countries, which include Argentina, Brazil, China, India, Indonesia, South Africa, Ukraine, Singapore, Thailand, Egypt and Morocco to support their energy security and advance their transition to clean energy.
- The Agency publishes policy recommendations and solutions to help all countries ensure secure, affordable and sustainable energy, as well as analysis, roadmaps, policy reviews, detailed data on more than 150 countries.

• Recently, it has focused in particular on supporting global efforts to accelerate clean energy transition, mitigate climate change, and reach net zero emissions.