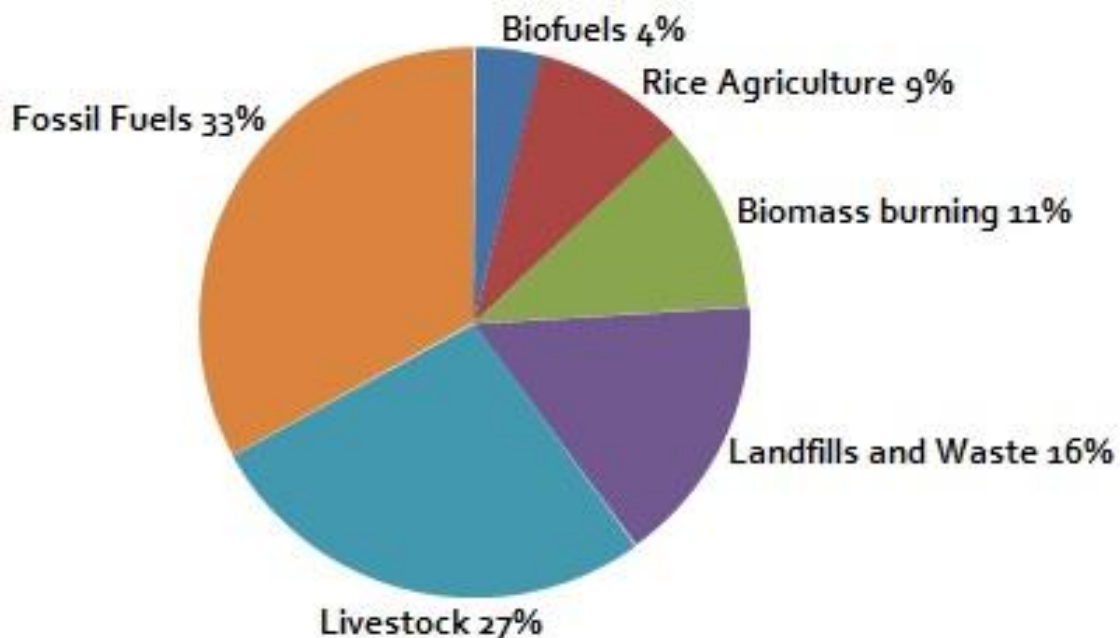


The Big News

12th November 2022

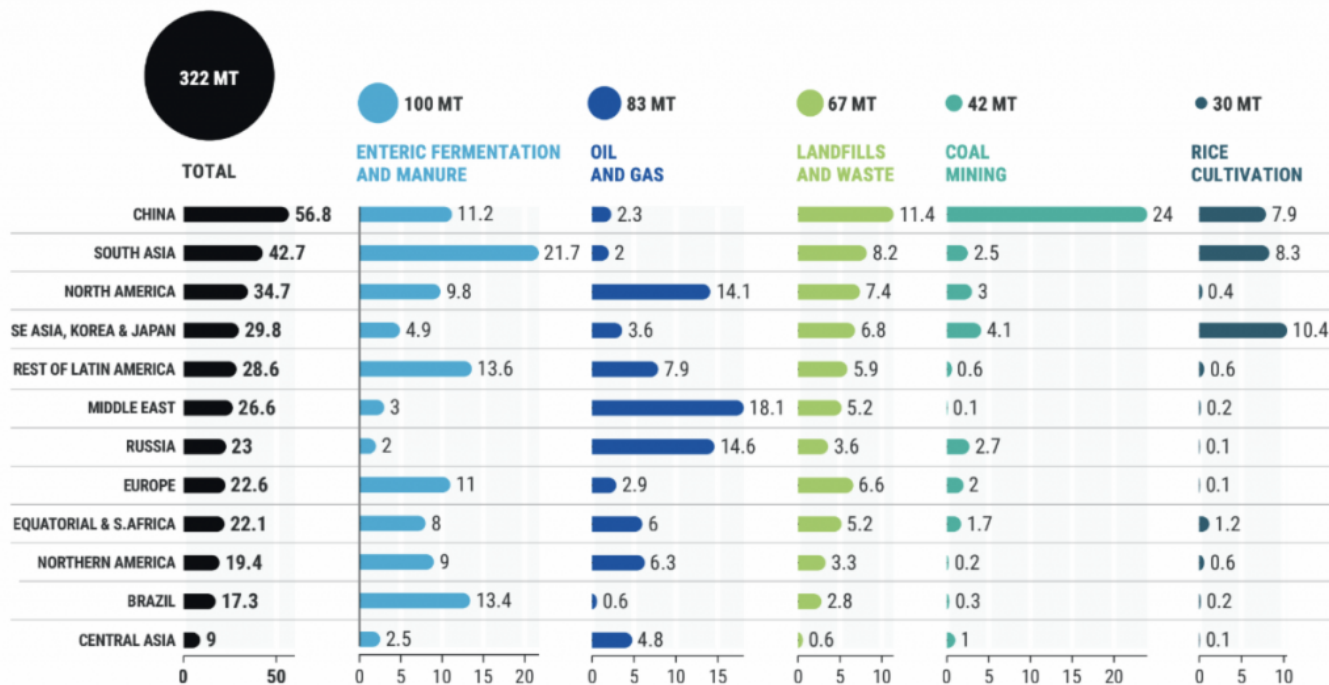
Methane Alert and Response System (MARS)



According to the UN, 25 per cent of the warming that the world is experiencing today is because of methane, a greenhouse gas, which is also a component of natural gas.

NASA notes that human sources (also referred to as anthropogenic sources) of methane are responsible for 60 per cent of global methane emissions.

Figure 1. Estimated annual methane emissions by sector and region, excluding Oceania, in 2017



	Methane	Carbon Dioxide
DEFINITION	Methane is a major greenhouse gas which has the chemical formula CH_4	Carbon dioxide is a major greenhouse gas that has the chemical formula CO_2
SOURCES	Enters the atmosphere during the production and transport of coal, natural gas and oil	Enters the atmosphere mainly through burning fossil fuels
LIFESPAN IN ATMOSPHERE	Much shorter	Comparatively longer
EFFICIENCY	More efficient in trapping radiation	Comparatively less efficient in trapping radiation



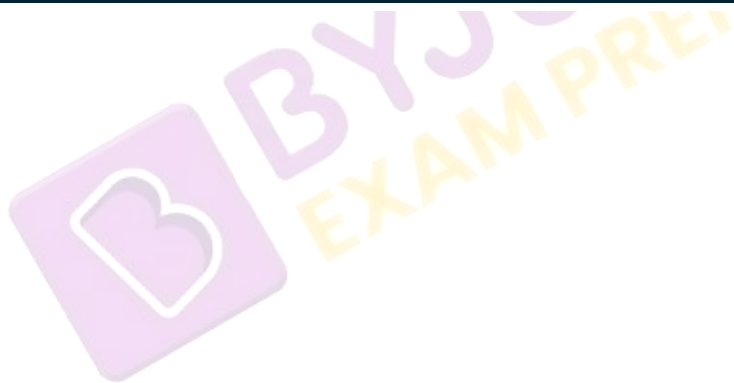
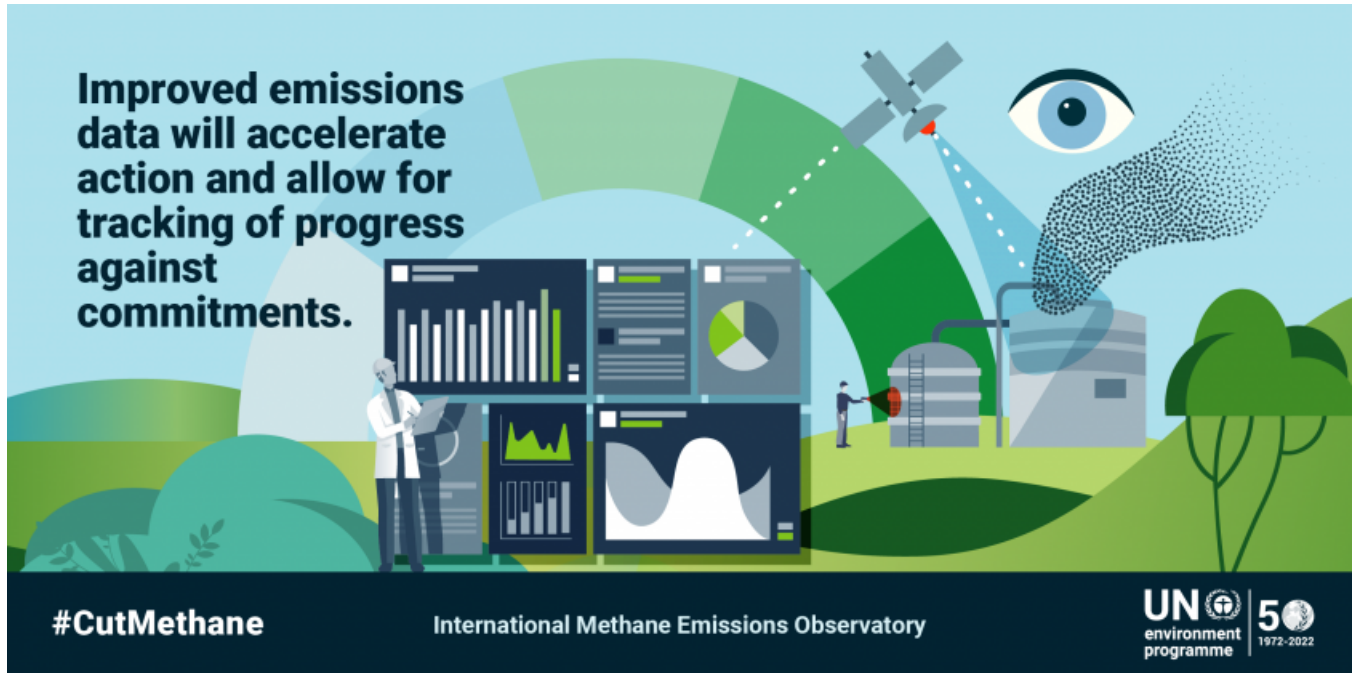


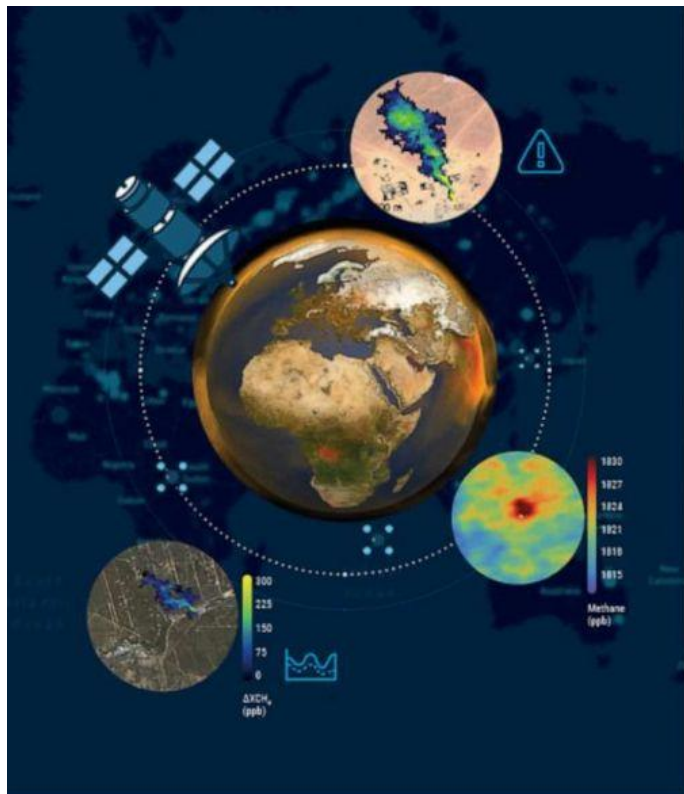
BREAKING

Over 100 Countries Join the Global Methane Pledge to Reduce Methane Emissions by 30% by 2030



Launched at the G20 Summit, the International Methane Emissions Observatory (IMEO) is a data-driven, action-focused initiative by the UN Environment Programme (UNEP) with support from the European Commission to catalyse dramatic reduction of methane emissions, starting with the energy sector.





MARS HAS FOUR COMPONENTS



- 1**  **METHANE Detect and Attribute**

IMEO will coordinate with the Committee on Earth Observation Satellites and work with existing global mapping satellites (EU/ESA Copernicus Sentinel 5/TROPOMI) to identify very large methane plumes and methane hot spots and conduct further analysis using other satellites (e.g. ASI PRISMA; EU Copernicus Sentinel-2; NASA Landsat; DLR EnMAP) and datasets to enable attribution of the event to a specific source.
 - 2**  **ALERT Notify and Engage Stakeholders**

IMEO will work directly and through partners to notify relevant governments and companies to large emission events happening in or near their jurisdictions or operations and will continue this engagement as more information becomes available.
 - 3**  **RESPONSE Stakeholders Take Abatement Action**

It will be up to the notified stakeholders to determine how best to respond to the notified emissions and share their actions with MARS to show initiative. As appropriate, MARS partners will be available to provide support services at this stage, e.g. assistance with assessing mitigation opportunities and/or support for mitigation actions.
 - 4**  **SYSTEM Track, Learn, Collaborate, Improve**

IMEO will continue to monitor the event location for future emissions as mitigation efforts proceed. Once the MARS system is fully operational, IMEO and partners will make data and analysis publicly available between 45 and 75 days post detection. IMEO will foster collaboration across the MARS ecosystem to draw lessons from these notified events that can be applied to improve MARS and methane action in general.
-  In implementing MARS, IMEO will collaborate with various institutional partners, including the International Energy Agency and the Climate and Clean Air Coalition.

- Developed in the framework of the Global Methane Pledge Energy Pathway – with initial funding from the European Commission, the US Government, Global Methane Hub, and the Bezos Earth Fund – MARS will allow UNEP to corroborate emissions reported by companies and characterize changes over time.
- In addition to supporting MARS, the Global Methane Hub and the Bezos Earth Fund are providing funding for other UNEP IMEO activities.