Global Methane Pledge

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In news- Recently, the Global Methane Pledge was launched at the ongoing UN COP26 climate conference in Glasgow.

About Global Methane Pledge-

- It is an effort **led jointly by the United States and the European Union.**
- It is essentially an agreement **to reduce global methane emissions.**
- One of the central **aims of this agreement is to cut down methane emissions by up to 30 per cent from 2020 levels by the year 2030.**
- The pledge covers countries which emit nearly half of all methane, and make up 70% of global GDP.
- Over 90 countries have signed this pledge so far.

About Methane & its sources-

- Methane is the second-most abundant greenhouse gas in the atmosphere, after carbon dioxide.
- It is also a component of natural gas.
- Around 40% of CH4 comes from natural sources such as wetlands but the bigger share now comes from a range of human activities, ranging from agriculture such as cattle and rice production to rubbish dumps.
- Human sources of methane include landfills, oil and natural gas systems, agricultural activities, coal mining, wastewater treatment, and certain industrial processes, the US Environmental Protection Agency notes.
- The oil and gas sectors are among the largest contributors to human sources of methane.
- Human sources of methane are responsible for 60 per cent of global methane emissions.
- These emissions come primarily from the burning of fossil fuels, decomposition in landfills and the

agriculture sector.

Its impact on the environment-

- As per International Energy Agency (IEA), methane has a much shorter atmospheric lifetime (12 years as compared to centuries for CO2).
- It is a much more potent greenhouse gas simply because it absorbs more energy while it is in the atmosphere.
- As per UN, methane is a powerful pollutant and has a global warming potential that is 80 times greater than carbon dioxide, about 20 years after it has been released into the atmosphere.
- According to the latest Intergovernmental Panel on Climate Change report, methane accounts for about half of the 1.0 degrees Celsius net rise in global average temperature since the pre-industrial era.
- According to the UN, 25 percent of the warming that the world is experiencing today is because of methane.

Coalbed methane-

- CBM, like shale gas, is extracted from what are known as unconventional gas reservoirs – where gas is extracted directly from the rock that is the source of the gas (shale in case of shale gas and coal in case of CBM).
- The methane is held underground within the coal and is extracted by drilling into the coal seam and removing the groundwater.
- The resulting drop in pressure causes the methane to be released from the coal.
- In India, for instance, in 2019, the Ministry of Coal asked state-run coal miner Coal India Limited (CIL) to produce 2 MMSCB (million metric standard cubic metres) per day of coalbed methane (CBM) gas in the next 2 to 3 years.