



2021-IP23: The Global Methane Pledge

Atmospheric levels of methane have risen 150% since the 19th century, much faster than CO₂ levels which have risen around 50% over the same time period. Methane traps over 80 times the heat that CO₂ does in its first two decades in the atmosphere but degrades rapidly, so fast action on methane will have a fast effect on the Earth's temperature and this pledge could help reduce global warming by 0.2°C¹. A 2021 UN report noted that without tackling methane emissions, the Paris Agreement would not be achieved.

The Global Methane Pledge was first announced by the EU and the US in September 2021. It was officially launched this week at COP26 and has been backed by over 100 countries² (originating from just 9 initially). The pledge, which commits to reduce methane emissions by 30% by 2030 (from 2020 levels), shows a strong indication of the determination of many countries to commit to more action on reducing greenhouse gas emissions. This commitment now covers countries representing nearly half of global methane emissions, thanks to this week's push at the COP26 summit from the US and EU. Of note was US President Joe Biden's rousing address which emphasised the importance of such climate action pledges and thanked those signatories for their commitment to this specific feat.

"Together, we're committing to collectively reduce our methane by 30% by 2030. And I think we can probably go beyond that"

"It's going to boost our economies, saving companies money, reducing methane leaks, capturing methane to turn it into new revenue streams, as well as creating good paying union jobs for our workers."
US President Joe Biden, COP26 Summit

Specifically, 105 countries have signed the pledge as of early November 2021, including some of the world's biggest emitters including the EU, Indonesia and Iraq. However, some significant nations are missing, including China, India, Russia and Australia³. It is hoped that more countries will join this commitment over the coming months.

¹ Bloomberg, '**Why the Global Methane Pledge Is a Big Deal for the Climate**', <https://www.bloomberg.com/news/articles/2021-11-01/why-the-low-key-methane-pledge-is-a-big-deal-for-the-climate> (accessed on 2nd November 2021)

² Reuters, '**More than 100 countries join pact to slash planet-warming methane emissions**', <https://www.reuters.com/world/middle-east/more-than-100-countries-join-pact-slash-planet-warming-methane-emissions-2021-11-02/> (accessed on 2nd November 2021)

³ New Scientist, '**COP26: 105 countries pledge to cut methane emissions by 30 per cent**', <https://www.newscientist.com/article/2295810-cop26-105-countries-pledge-to-cut-methane-emissions-by-30-per-cent/> (accessed on 2nd November 2021)



The US' new set of measures to act on the pledge, the US Methane Emissions Reduction Action Plan⁴, is an ambitious initiative to redouble efforts and reduce emissions, focussing on cutting pollution in the US from the largest sources of methane emissions. It outlines steps to tackle emissions from the oil and gas sector (thought to account for 30% of US methane emissions), including:

- EPA updated rules for methane from new oil and gas sources and regulatory limits on existing sources,
- Looking to tackle the venting and flaring of methane from operations and well closures (including a requirement to plug leaks in wells, have more stringent leak monitoring and would require capture of natural gas found alongside oil instead of atmospheric release),
- Upgrading and expanding pipeline rules to cut methane leaks and excursions.

Methane emissions from landfills will also be targeted according to the US action plan, as will emissions from the agriculture sector. The Biden Administration intends to cover 75% of all US methane emissions in this plan and is working with the EU to create incentives, new disclosure rules and regulations to lead this effort globally.

This ambitious action plan from the US White House precedes expected methane legislation from the EU and Canada later this year.

It is key to remember that although the Global Methane Pledge and its associated positive intentions for action from countries will greatly assist in reaching the goals of the Paris Agreement, the importance of significantly reducing CO₂ emissions too must not be forgotten. Although reducing methane emission levels could have a faster climate impact, it is not a substitution for CO₂ emissions reduction. The Pledge and US Action Plan also do not seem to cover the potential for methane removals, an emerging research area, which is explored in and proposed by some of the unofficial side events at COP26. Engineered methane removal approaches could potentially be combined with CO₂ removal technologies, such as in a hybrid DAC / methane oxidation plant.

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04/11/2021

⁴ The White House Office of Domestic Climate Policy, '**U.S. Methane Emissions Reduction Plan**', November 2021, <https://www.whitehouse.gov/wp-content/uploads/2021/11/US-Methane-Emissions-Reduction-Action-Plan-1.pdf> (accessed on 2nd November 2021)