# Executive Summary

**Cutting methane emissions is the fastest, most cost-effective way to slow near-term warming as broader decarbonization efforts advance. With only 52 months until 2030, achieving the Global Methane Pledge target—a 30 per cent reduction in global methane emissions by decade's end—is more urgent than ever.**

**The United Nations Environment Programme's International Methane Emissions Observatory (IMEO) is a core implementing partner to the Global Methane Pledge, supporting the more than 150 country signatories with data and tools to reduce emissions and meet Paris Agreement targets. IMEO combines rigorous industry reporting, satellite data and scientific research campaigns to turn transparency into action.**

## UNEP's Oil and Gas Methane Partnership 2.0 (OGMP 2.0)

remains the world's most comprehensive framework for methane measurement and reporting in the oil and gas sector. Over the past five years, membership has more than doubled and now includes 153 companies across 90 countries, covering 42 per cent of global oil and gas production. Members are shifting to measurement-based emission inventories, uncovering previously undetected emissions and implementing cost-effective mitigation measures. In 2025, more than 65 companies achieved Gold Standard status (see Box 1), representing 17 per cent of global oil and gas production. A further 50 companies recognized with Gold Standard Pathway are on track to reach the highest levels of quality data, positioning the industry to mitigate emissions rapidly and effectively.

## Through the Methane Alert and Response System (MARS),

UNEP has sent over 3,500 alerts to 33 countries since its inception—pairing satellite data and artificial intelligence tools with scientific expertise to detect large methane emissions—quickly notifying those who can act on the ground. Despite a twelve-fold increase year-over-year of "responses", almost 90 per cent of MARS alerts still lack follow-up. While MARS focused initially on the oil and gas sector, new system capabilities will target coal mines and waste sites—sectors where measurement is scarce, but targeted mitigation opportunities exist.

## IMEO has launched 46 methane science studies across six continents

In 2025, five new new studies began and seven were completed. Initial studies have filled critical knowledge gaps in the fossil fuel sector, where the highest potential for emission reductions exists, by testing new technologies for measuring emissions from oil and gas facilities and quantifying emissions from major coal-producing regions. The work is expanding to agriculture and waste—sectors responsible for 60 per cent of human-caused methane emissions—filling data gaps and guiding targeted action. By the end of the year, six additional studies will have started, including two baseline studies in Nigeria and Colombia, as well as an agricultural study in Colombia. IMEO is already advancing research on waste sector emissions at a major landfill in Spain alongside partners including the European Space Agency. IMEO is also developing estimates for country-level agricultural methane emissions from rice and livestock through measurement-based, multi-sector baseline studies.

## The Steel Methane Programme (SMP)

targets emissions from metallurgical (met) coal, which adds on average a quarter to steel's climate footprint. Mining met coal produces around 12 million metric tons of methane emissions each year—equal to nearly 990 million metric tons of CO2—presenting a one gigaton reduction opportunity at just one per cent the cost of steel.

Despite the availability of low-cost solutions, like ventilation air methane oxidation and drainage systems, met coal methane remains largely overlooked in steel decarbonization efforts, which focus on important but slower-deploying technologies like green hydrogen transition and carbon capture. The SMP will bring new transparency to the sector through a Steel Methane Transparency Database of mine-level emissions that combines empirical studies, satellite data and industry partnerships. When operational, it will present a clear example of the data-to-action approach at the heart of IMEO.

## By bringing together diverse methane data streams —

through the Eye on Methane data platform—IMEO centralizes and democratizes access to validated methane data that empowers decision-makers. Since COP29, the platform has drawn over 75,000 views and thousands of downloads. This approach provides a robust foundation for accountability and targeted mitigation.

## Finally, UNEP through IMEO

builds the knowledge and networks needed to turn data into action through its Methane Training Series, which has trained nearly 2,000 people across almost 40 countries—including engineers, asset managers, regulators and policymakers. This includes around 300 newly trained individuals in 2025. These sessions—complemented by technical guidance, peer mentorship and targeted national engagement—ensure stakeholders can interpret data, apply best practices and overcome institutional barriers to deliver meaningful methane progress.