

OGMP 2.0 LEVEL 5 FEASIBILITY CASE STUDIES

Helping oil and gas companies improve the quality of emissions data within UNEP's flagship oil and gas reporting and mitigation framework.



DONOR:
European Commission (EC)



**BENEFITTING COUNTRIES
OR REGIONS:**
Worldwide



SECTOR:
Oil & Gas



Subsector, if applicable:
-

STATUS : Manuscript drafting

TIMELINE : 2024-2025



**IMEO SCIENCE
OBJECTIVE :**

→ **Initiate scientific studies in support of data assurance and to characterize regions/sources with high uncertainty or discrepancies in the integrated data**



KEY FINDINGS

This study assesses strategies for site-level emissions monitoring based on source-level reporting, local weather conditions and atmospheric modelling. The study aims to provide insights for companies working to achieve OGMP 2.0 Level 5 emissions reporting, which requires the reconciliation of source- and site-level data.

RATIONALE

UNEP's Oil and Gas Methane Partnership 2.0 (OGMP 2.0) is the global standard for measurement-based emissions reporting for the oil and gas sector. Level 5 is the highest data quality level in the five-tier framework and requires reconciling emissions at both the source and site level. Achieving Level 5 reporting is necessary for OGMP 2.0 member companies to improve accuracy, thoroughness and confidence in their reported emissions and uncertainties, providing a basis for targeting and tracking efforts to reduce emissions.



RELATED PUBLICATIONS

In progress



SIGNIFICANCE FOR DECISIONMAKERS

For Industry: OGMP 2.0 member companies must demonstrate efforts to advance to Level 5 reporting to achieve the partnership's "Gold Standard" in emissions reporting. This research will inform these efforts by helping companies reconcile their emissions at the source and site levels, allowing for more effective mitigation targeting and tracking. **For Policymakers:** A number of jurisdictions, such as the European Union, are moving to require companies to report on their emissions in line with OGMP 2.0's reporting framework. This research can inform the implementation of standards requiring companies to accurately report emissions through measurement-based data.

For Policymakers: OGMP 2.0's "Gold Standard" for emissions reporting is a valuable indicator for investors evaluating a company's ability to effectively manage methane emissions. This research will provide a valuable resource for oil and gas companies to demonstrate their ability to manage emissions and reach "Gold Standard" reporting.



STUDY APPROACH/ACTIVITIES

The study will collect technical and operational requirements relating to weather conditions, detection limits and uncertainties for a subset of available technologies, particularly drone-based monitoring platforms. The study will incorporate data from prior research on emissions uncertainties into assessment methodology, enabling researchers to both predict plume size and concentrations over different weather conditions and emission rates, as well as the potential range in site-level estimates. This will give insight into the management of high uncertainties and how they may be reduced to allow better reconciliation.

The UN Environment Programme's International Methane Emissions Observatory (IMEO) exists to provide open, reliable, and actionable data to the individuals with the agency to reduce methane emissions. IMEO does this by integrating and reconciling data across sources, including its global methane science studies. IMEO supports measurement and research studies around the world to close the knowledge gap on methane emissions and provide policy-relevant insights to decisionmakers.



CATALYZING ACTION

IMEO engages OGMP 2.0 member companies in a community of practice to facilitate shared learning and collective progress in measuring, reporting and managing emissions. This includes sharing technical guidance documents, convening stakeholders at OGMP 2.0's annual implementation conference and connecting companies to the latest scientific research that can support mitigation and transparency efforts.

OTHER SUPPORTERS/STAKEHOLDERS

Principal Investigator: **Queen Mary University of London, UK**