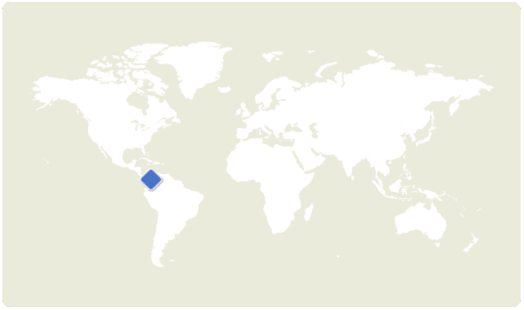
MULTI-SCALE MEASUREMENTS IN COLOMBIA

Addressing a critical lack of actionable methane measurement data in Colombia.



DONOR:
European Commission / Germany

BENEFITTING COUNTRIES OR REGIONS:
Colombia

SECTOR:
Oil & Gas

Subsector, if applicable:
-

STATUS:
Analysis ongoing

TIMELINE:
Measurements completed (aerial, 2024; ground-based, 2025)

IMEO SCIENCE OBJECTIVE:

→ **Advance reconciliation and data integration approaches for multi-scale emissions data**

KEY FINDINGS

This study will combine measurements at the regional, site and source level to characterize emissions from oil and gas production in Colombia.

RATIONALE

There are few empirically-based estimates of methane emissions from South American oil and gas producing countries. This study will combine measurements at the regional, site and source level to characterize emissions from oil and gas production in Colombia.

United Nations Environment Programme | International Methane Emissions Observatory
1 rue Miollis 75015 Paris, France | www.unep.org/imeo
For more information, please contact imeo@un.org

UN environment programme

RELATED PUBLICATIONS

In progress

SIGNIFICANCE FOR DECISIONMAKERS

This study is being undertaken in close collaboration with the local oil and gas operator to produce a measurement-based methane inventory for oil and gas production in Colombia. This is critical to identify key emission sources for mitigation and accurately track progress on methane emission reductions. The findings will help inform progress relating to Colombia's methane regulations, which were issued in 2022, and identify opportunities for further progress.

STUDY APPROACH/ACTIVITIES

The project will establish robust procedures to produce a quantitative measurement-based inventory of oil and gas methane emissions in Colombia. The study will combine measurements from the air, using Gas Mapping LiDAR technology to survey thousands of sites. This will be complemented by a detailed ground-based campaign to further investigate sources across multiple scales.

CATALYZING ACTION

The work will be a core contribution to generating a multi-sector methane baseline emissions estimate for Colombia.

OTHER SUPPORTERS/STAKEHOLDERS

Principal Investigator: **Carleton University**

Revision History: **18 August 2025**

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.