BASELINE SCOPING STUDY OF EMISSIONS IN NIGERIA

Scoping the first multi-sector study of methane emissions on the African continent.



DONOR:
European Union Delegation to Nigeria

BENEFITTING COUNTRIES OR REGIONS:
Nigeria

SECTOR:
Multisector

STATUS: **Submitted to journal**

TIMELINE: **Scoping started 2024**

IMEO SCIENCE OBJECTIVE: → **Advance science studies in support of countries targeting methane mitigation.**

KEY FINDINGS

The scoping study will determine the availability of methane data, establish a research consortium, and develop a feasibility study and quantification plan for a full two-year baseline study in Nigeria. A baseline study proposal has been approved by IMEO's Scientific Oversight Committee. The Nigeria methane baseline study would be the first multi-sector (oil and gas, waste and agriculture) scientific study of anthropogenic methane emissions on the African continent, and one of the first in the world.

RATIONALE

Nigeria, like many countries, faces challenges in setting effective methane reduction targets and tracking progress due to a lack of measurement-based emissions data across sectors. As a Global Methane Pledge Champion, the country has demonstrated leadership in methane reduction efforts and is in great need of improved data to support this.

RELATED PUBLICATIONS

In progress

CATALYZING ACTION

In October 2024, IMEO facilitated an in-country training workshop on oil and gas methane emissions to engage key stakeholders across government, industry and civil society. This programming built knowledge and capacity needed to leverage methane data for mitigation efforts. In February 2025, Queen Mary University of London and IMEO organized a science workshop in Abuja, Nigeria, during which the feasibility and study plan were discussed with Nigerian academic partners and governmental institutions.

SIGNIFICANCE FOR DECISIONMAKERS

For Policymakers:
Nigerian government and policy stakeholders will benefit from the baseline study through:
1) improved understanding of methane emissions at both national and sectoral levels;
2) enhanced ability to set realistic targets and track progress toward emission reductions;
3) identification of priority areas for mitigation efforts;
4) support for national reporting to the UNFCCC with more comprehensive and contextualized data.

STUDY APPROACH/ACTIVITIES

The scoping study has completed a synthesis of the current status of methane emission estimates from Nigeria, including data quality metrics, gaps and recommendations for improvement. A workshop held in Abuja, Nigeria, in February 2025 brought together potential project partners from academia, industry and government. Finally, a feasibility study and quantification plan have been developed, detailing the baseline study needs; required actions; and accompanying risks and logistical, legal and other requirements.

OTHER SUPPORTERS/STAKEHOLDERS

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

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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.