

EGU24-20055, updated on 19 Jan 2025

<https://doi.org/10.5194/egusphere-egu24-20055>

EGU General Assembly 2024

© Author(s) 2025. This work is distributed under the Creative Commons Attribution 4.0 License.



Transparent Horizons: IMEO's Methane Data Empowering Global Climate Action

Daniel Zavala-Araiza¹, Steven P. Hamburg¹, Andreea Calcan², Stefan Schwietzke¹, James Lawrence France¹, Cynthia Randles², Marci Rose Baranski², Meghan Demeter², Roland Kupers², Robert Field², and Manfredi Caltagirone²

¹Environmental Defense Fund, Office of the Chief Scientist, Utrecht, Netherlands (dzavala@edf.org)

²International Methane Emissions Observatory, United Nations Environment Program, Paris, France

Ambition on methane emissions reduction is growing, and open, reliable, measurement-based and actionable data is essential to track changes in emissions over time. The ability of countries and companies to meet their goals requires a thorough understanding of the magnitude and location of methane emissions, as well as being able to demonstrate progress towards these goals.

As a core implementing partner of the Global Methane Pledge, the UN Environment Programme's International Methane Emissions Observatory (IMEO) has been tasked with creating a sound scientific basis for methane emissions estimates and is providing reliable, public, policy-relevant data to facilitate actions to reduce methane emissions. IMEO is collecting and integrating diverse methane emissions data streams, including satellite remote sensing data, science studies, national inventories, and measurement-based industry reporting to establish a global, centralized public record of empirically verified methane emissions.

Here, we will show the progress of IMEO towards developing its global, public dataset of policy-relevant methane data, highlighting successful mitigation case studies for the oil and gas industry from the pilot phase of IMEO's Methane Alert and Response System (MARS), and from IMEO's Methane Science Studies. We demonstrate how empirical data can drive real, tangible mitigation action in countries around the world.