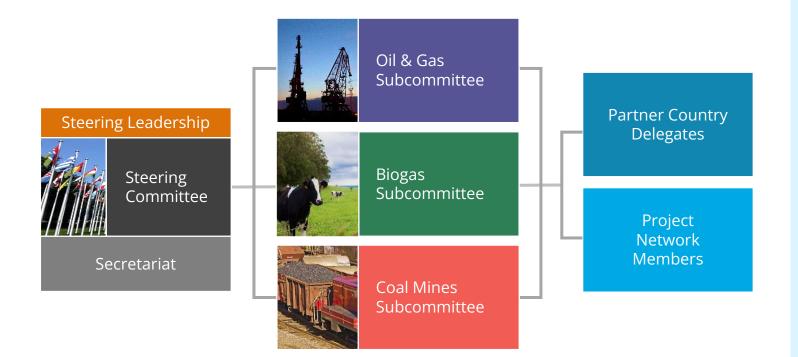
GMI Oil & Gas Subcommittee Meeting



Geneva, Switzerland 27 March 2025

Global Methane Initiative (GMI)

GMI is an international public-private partnership committed to reducing methane emissions and capturing methane as a valuable energy source.





- 49 Partner Countries
- 1,000+ Project Network members
- Alliances with international organizations focused on methane recovery and use











GMI Partner Countries represent approximately 75% of methane emissions from human activities.



Celebrating 20 Years

GMI launched a new webpage to showcase accomplishments, Partner Countries, case studies, technical resources, and events!

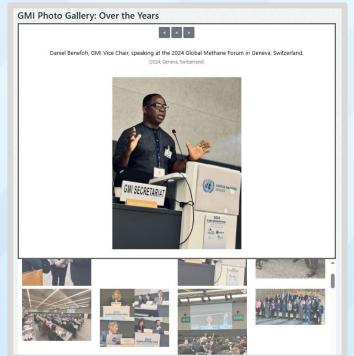
globalmethane.org/20years



Links to **UPDATED** comprehensive Partner Country Profiles detailing emissions and actions

Celebrating 20 Years

of Methane Action



Includes a GMI Photo Gallery with more than 100 images from the past 20 years

10:15 Strategic Partner Updates

Global Methane Tracker – Tomas de Oliveira Bredariol, IEA
Climate and Clean Air Coalition (CCAC) Fossil Hub – Carlos de Regules, CCAC
International Methane Emissions Observatory (IMEO) – Giulia Ferrini, UNEP
OGMP 2.0 – Georgie Passalaris, UNEP



Fossil Fuel Regulatory Programme:

Addressing the breach to 1.5°C

GMI-UNECE

March 26, 2025

Curbing CH4 in a way that is meaningful for 1.5°C requires mandatory obligations

- → A Robust Case for CH4 mitigation
 - Global Warming, Public Health, Food Security, Energy Security
- ... BUT Barriers to Aggressive Mitigation
 - Portfolio prioritization
 - Infrastructure
 - Culture of CH4 mitigation
 - Misaligned incentives
 - Longevity of corporate policies

Regulation elevates CH4 in the priority list...





...becomes integrated to the Corporate Risk Management Process, and responsibility of:

- Chief Compliance Officer
- Chief Risk Officer
- Internal Comptroller

FFRP: A 9M USD Targeted **Mechanism to Support 20 Countries (2024-27)**

Streamlined access to:

- Experienced, hands-on experts
- Proven quantitative tools
- Tailor-made approach: for all stages of regulatory development

End-to-end scope

Projects include tailored support for capacity building, regulatory framework development, and implementation, monitoring, reporting, and verification (MRV) guidelines, and compliance.



Oil & Gas + Coal Mines

FFRP Process



Request

Government* requests support via the CCAC at any time



Assess

Joint needs assessment



Engage

Finalize objectives and scope



Respond

Finalize project timeline and milestones



Implement

Ad-hoc activities, v.gr. Inventories estimation Emissions modelling Goal planning Legal framing Regulation drafting Reporting requirements Enforcement regime

set up



Monitor

Emissions data monitoring and policy progress as an ongoing process

* Eligibility:

ODA-eligible national governments AND

- CCAC Member or
- · Global Methane Pledge Participant

Accelerating support to countries through FFRP

Case study: Reducing methane emissions in Nigeria

- Developed a National Action Plan To Reduce Short-Lived Climate Pollutants (SLCPs) in 2018, identifying measures to reduce methane emissions from the oil and gas sector by 50% by 2030.
- Nigeria set a conditional target to reduce fugitive methane emissions from the oil and gas sector by 60% by 2031, along with quantifications of cobenefits for health and economic development.
- Guidelines were adopted in 2022 by Nigeria's Upstream Petroleum Regulatory Commission.
- CCAC and CATF are now working with Nigeria to implement and enforce these regulations, in addition to providing NDC enhancement support to increase ambition in the 2025 NDC update as well as methane reduction projects in agriculture and waste.
- → 3 Initial Countries, further interest from 10 Countries
- Inventory work and regulation support through the first set of methane studies, building on this work to expand to more countries









International Methane Emissions
Observatory

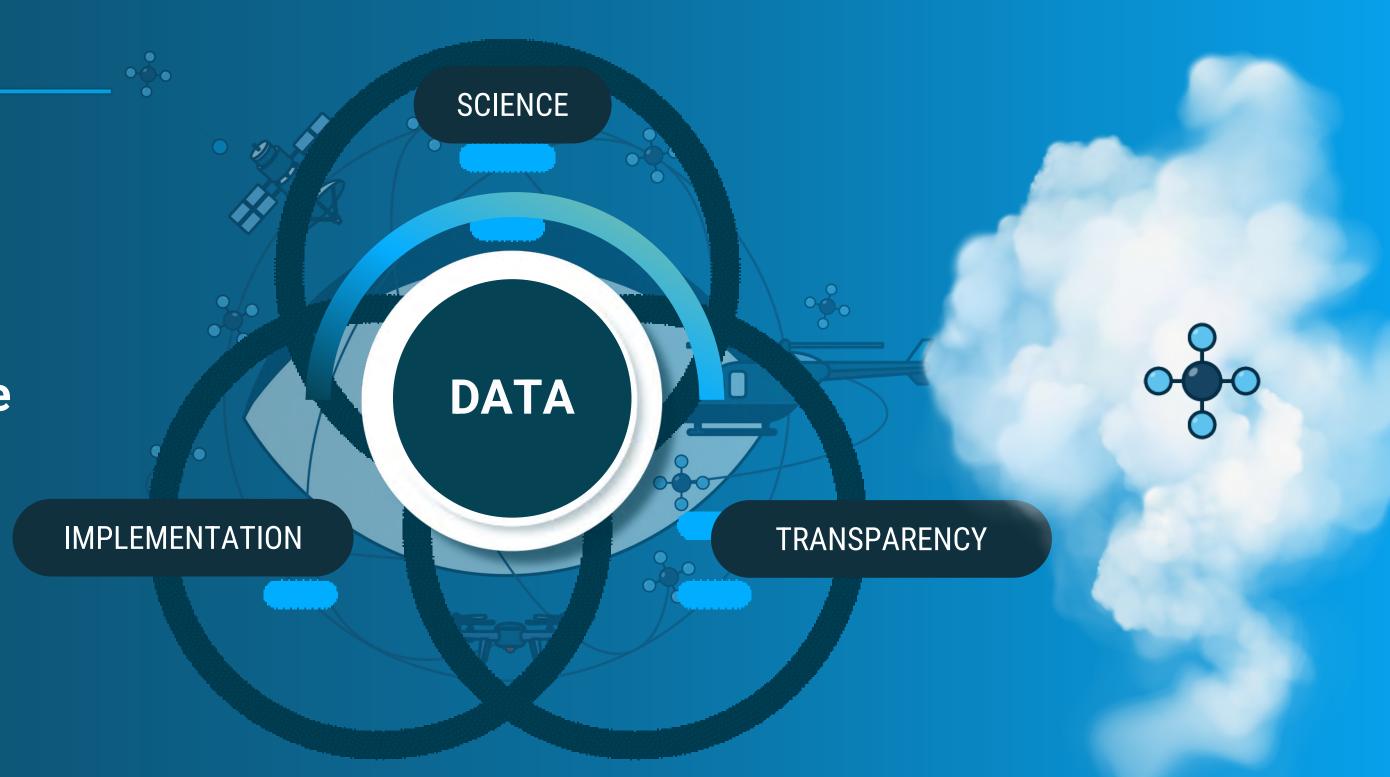
GMI Oil & Gas Subcommittee Meeting March 2025 Giulia Ferrini OGMP 2.0 Manager





UNEP's International Methane Emissions Observatory (IMEO) interconnects better data with targeted action

IMEO exists to provide open, reliable and actionable data to the individuals with the agency to reduce methane emissions.



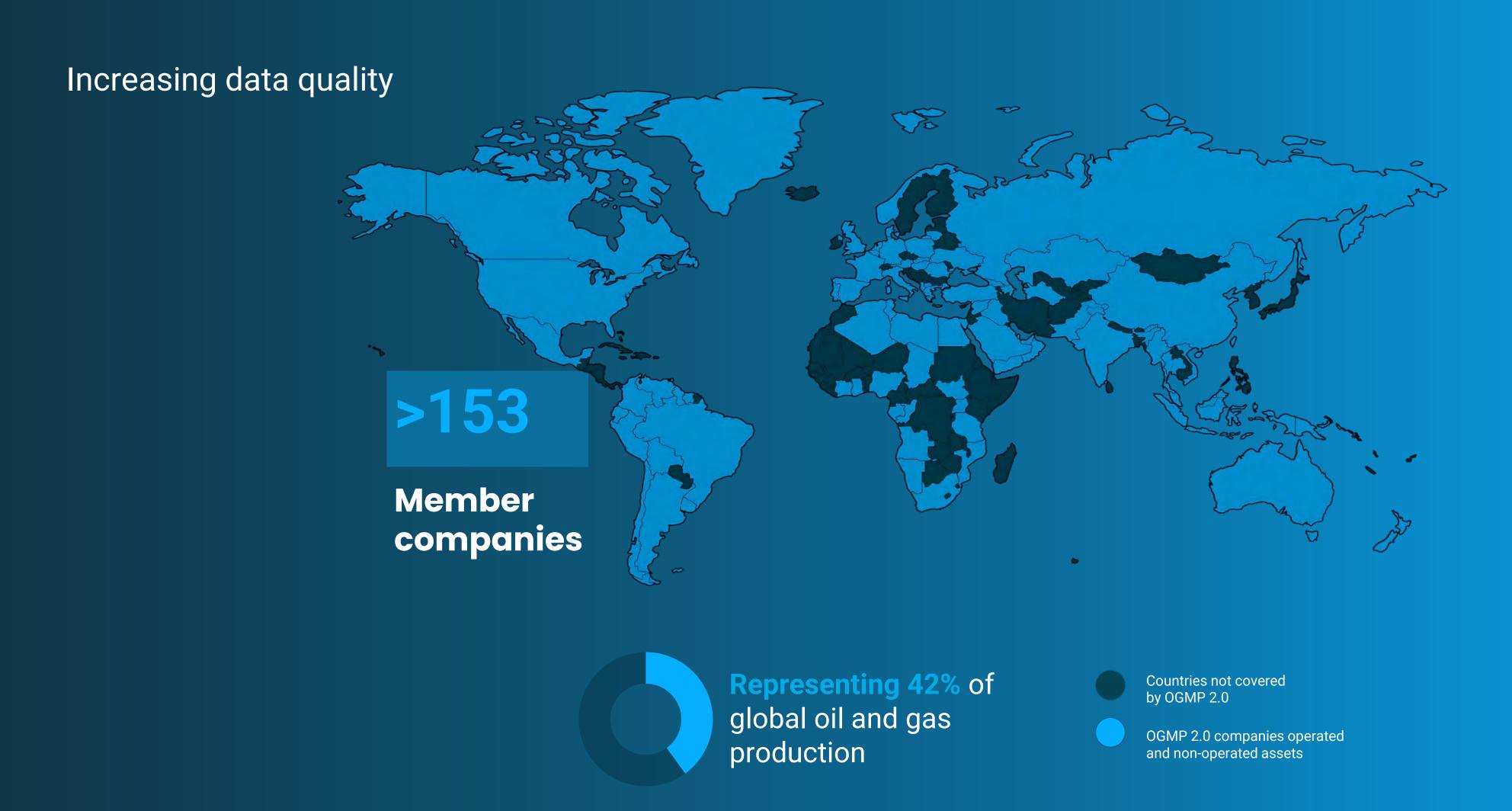
IMEO takes a revolutionary approach to methane data



- Man 1
- OGMP 2.0 companies' assets data
- Science measurements studies
- National inventories
- •Satellite data

- Reconcile inconsistencies and identify gaps
- Global, public, dataset of empirical emissions data
- Annual methane report
- Development of Methane Emissions Index
- MARS

IMEO is driving transparency through growing OGMP 2.0





IMEO Metcoal for Steel

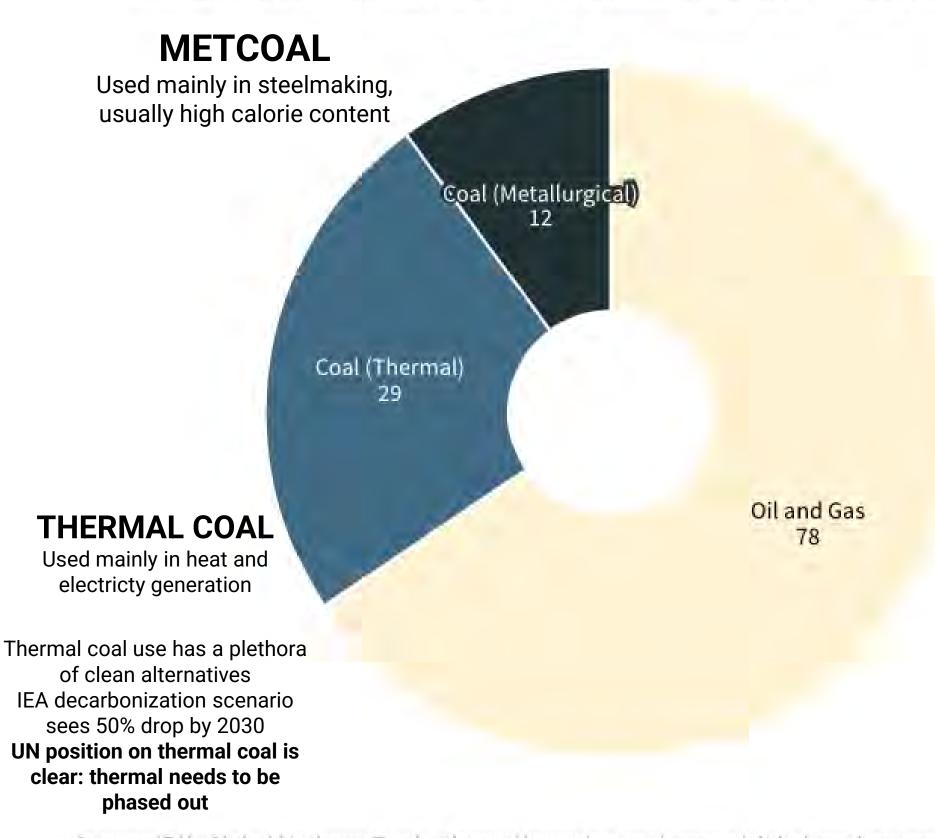
 Methane from metcoal mines represents one quarter to the climate footprint of steel and the majority can be mitigated at less than 1% of the price of steel

IMEO is building transparency to catalyse action through:

- 1. The Steel Methane Project ready to go
- 2. Science studies are being conducted globally (e.g. Poland and Australia)
- 3. IMEO is exploring the creation of a methane emissions dataset for the steel supply chain

Methane Emissions From Fossil Fuels

Methane emissions by fuel type, Global Methane Tracker 2024 (in MT)



Source: IEA's Global Methane Tracker https://www.iea.org/reports/global-methane-tracker-2024#overvio



IMEO is supporting measurement studies around the world to close the knowledge gap on methane emissions

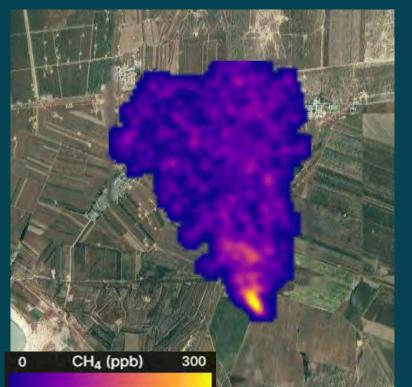


IMEO's Methane Alert and Response System (MARS) uses satellites to provide rapid, COSAT-CW actionable data to stakeholders



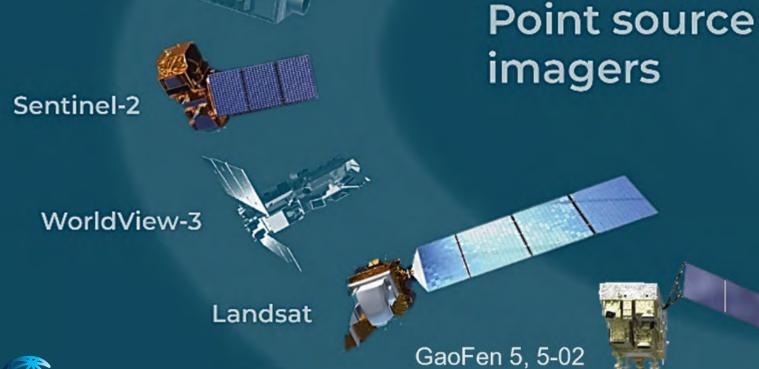
TROPOMI







EMIT detection at an O&G facility, Jilin, China. 11 Oct. 2023 Plume detection through the MARS Plume Viewer





GOES

GOSAT











GHGSat

VIIRS



Deploying hybrid training series to build capacity in countries around the world

Module	Description
1	Overview of methane emissions from the oil and gas sector
2	Methane detection, measurement, and quantification
3	Methane mitigation
4	Advanced upstream methane emissions
5	Regulatory approaches to methane emissions
6	Methane emissions from flaring
7	Methane emissions from Liquefied Natural Gas
8	Satellite technology for methane detection and measurement



52 trainings

In 35 countries





1400

trained personnel

Connecting data to action: Country Examples

Turkmenistan

Nigeria



EU-funded project to assess emissions across all sectors, support MMRV guidance, and build capacity towards mitigation



USD 10M UN Joint
Programme for
Methane
Emissions
Reduction, based
on IMEO data
analysis



Joint EU-funded project with UNDP to lay foundation for NOC to achieve OGMP L5



Eye on Methane Data Platform is making credible data accessible to drive mitigation

Delivering open, reliable and actionable global methane emissions data from satellites, companies and methane science studies—all in one user-friendly public interface.

Designed to empower companies and governments to drive impactful methane mitigation action, while providing transparent, reliable data to civil society and media.

A 6-month co-design process with stakeholders launched at **COP29**.





2024 IMEO Eye on Methane Report Invisible but not unseen



Takes stock of IMEO's progress in harnessing a data revolution that can accelerate methane mitigation.



Annual Report



Company Factsheets



The Oil and Gas Methane Partnership 2.0

UNEP's flagship oil and gas reporting and mitigation programme

Georgie Passalaris Engagement Lead IMEO





OGMP 2.0 The only comprehensive, measurement-based reporting and mitigation framework for methane for the oil and gas industry

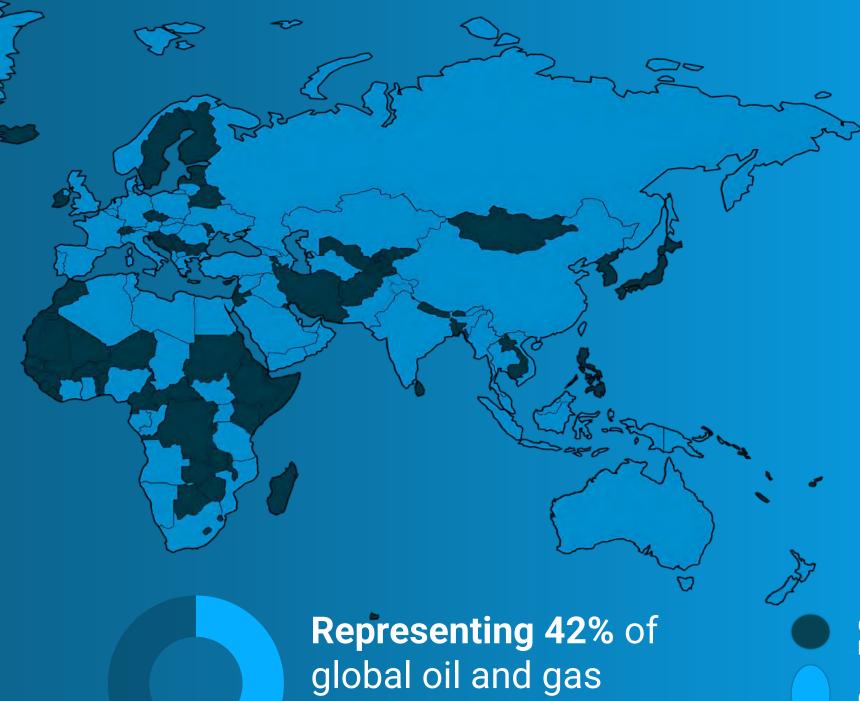
What is OGMP 2.0?

Global coverage and scope

Upstream, midstream and downstream segments

Public, private and national oil companies





production

Countries not covered by OGMP 2.0

OGMP 2.0 companies operated and non-operated assets







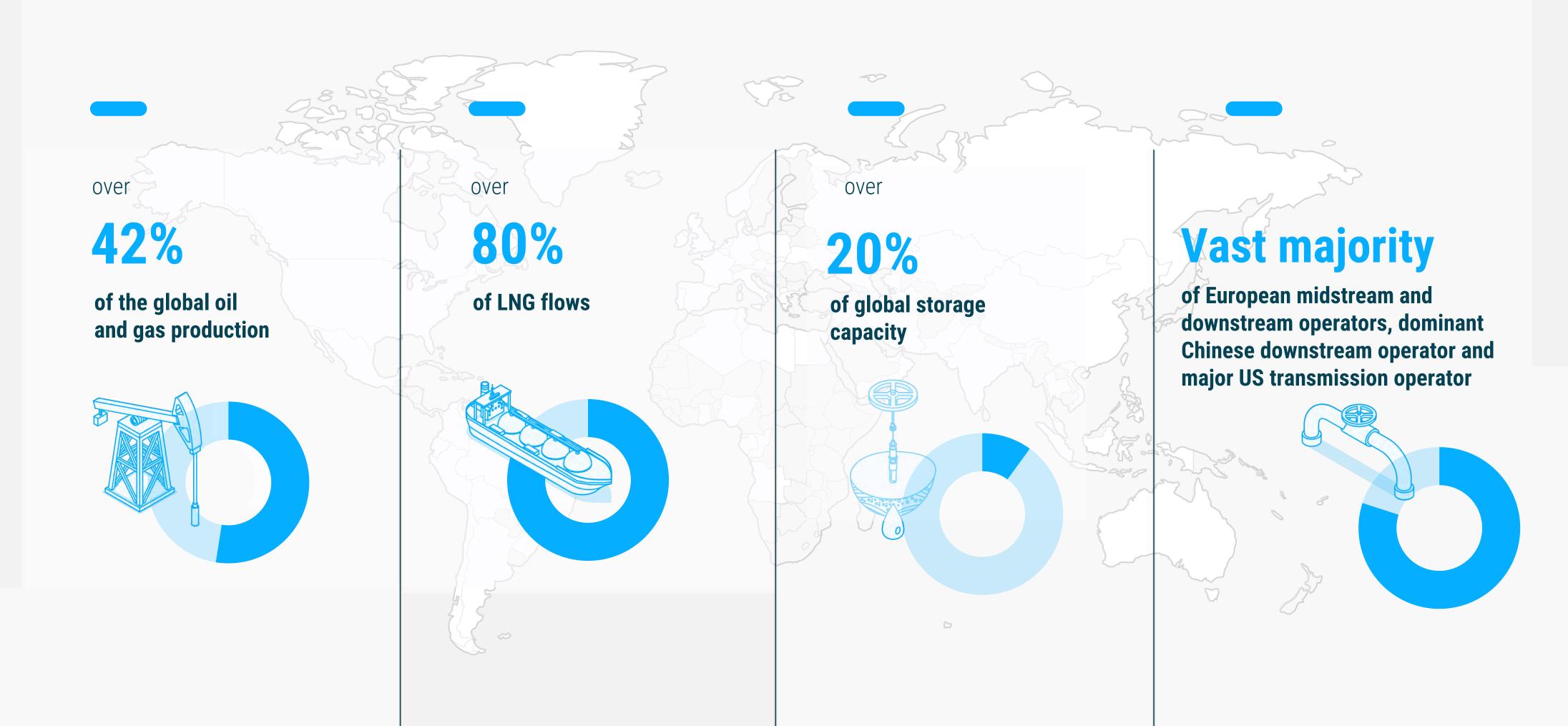








→ OGMP 2.0 members companies represent



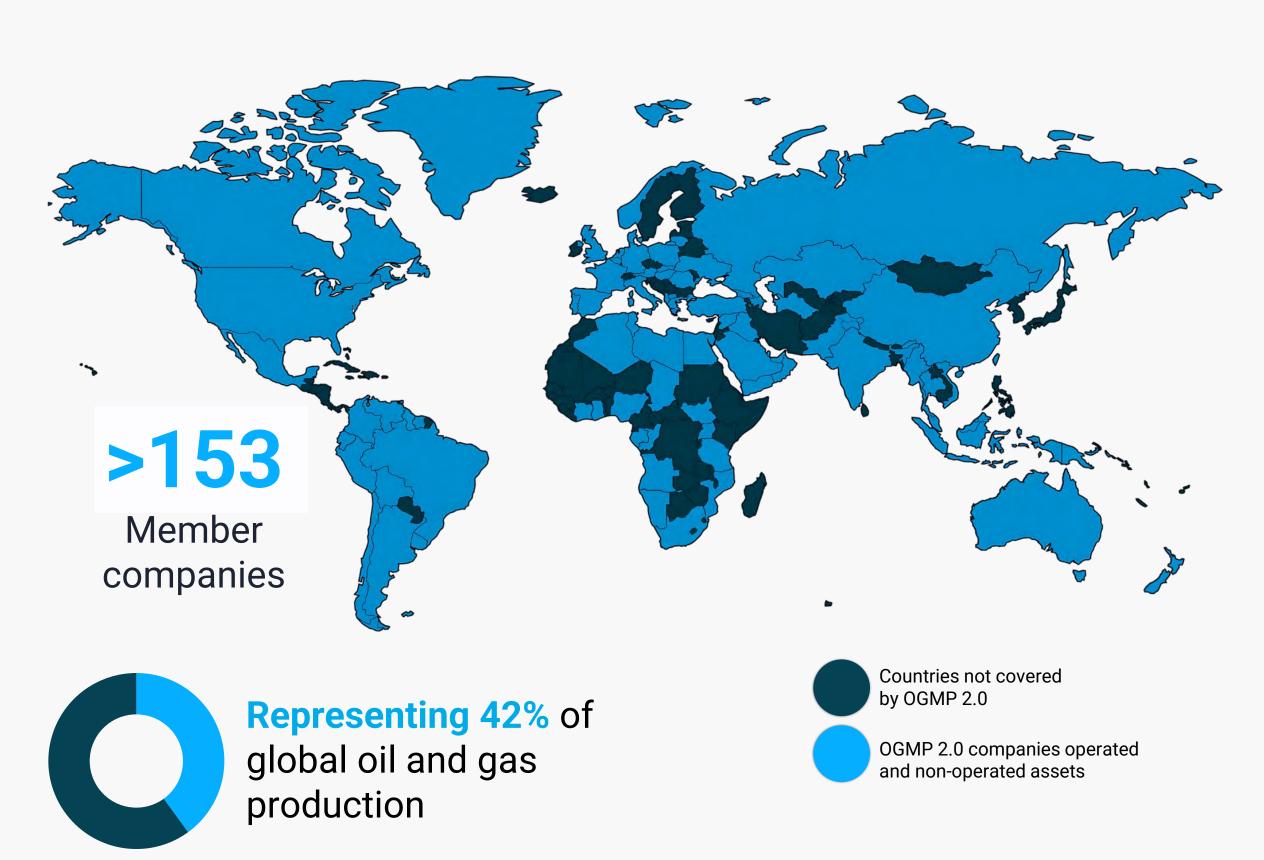




OGMP 2.0 is driving transparency

Increasing data quality







OGMP 2.0 Reporting Levels

Levels

Venture/Asset Reporting • Single, consolidated emissions number • Only applicable

where company

has very limited

information

LEVEL 2

Emissions Category

- Emissions reported based on IOGP and Marcogaz emissions categories
- Based on generic emissions factors

LEVEL 3

Generic Emission Source Level

- Emissions reported by detailed source type
- Based on generic emissions factors

LEVEL 4

Specific Emission Source Level

- Emissions reported by detailed source type using specific emissions and activity factors
- Based on direct measurement or other methodologies

LEVEL 5

Level 4 + Site Level Measurement Reconciliation

- Level 5: Integrating bottom-up source-level reporting (L4) with independent site-level measurements.
- Site-level
 measurements: direct
 measurement
 technologies at a site
 or facility level on a
 representative sample
 of facilities

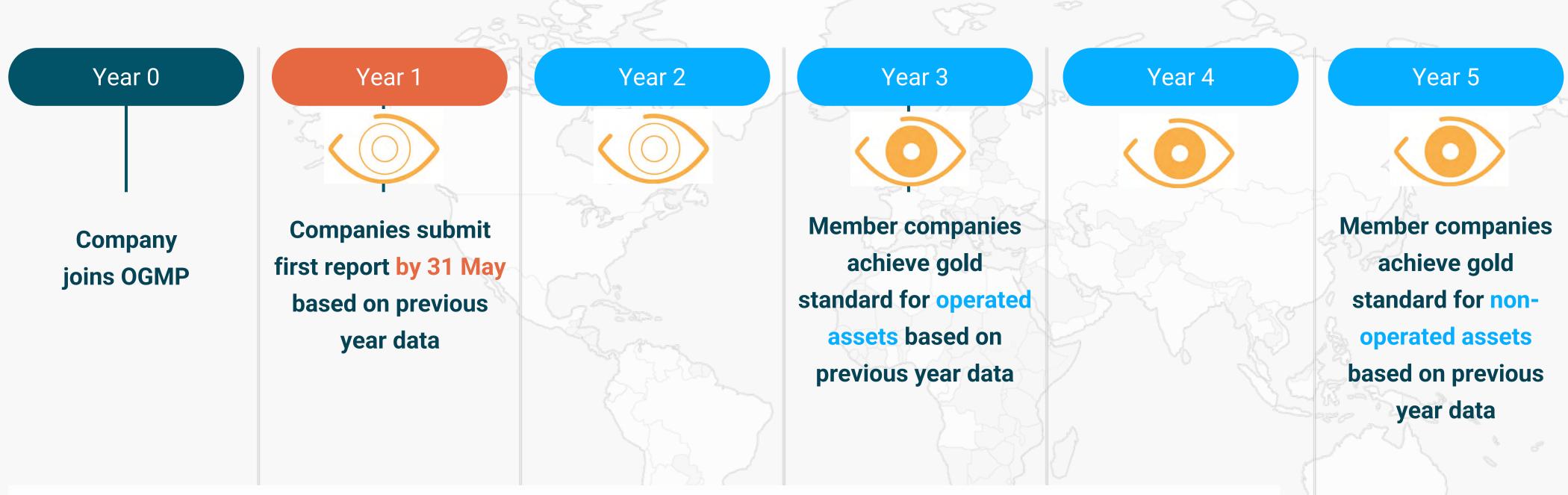


GOLD STANDARD REPORTING

Reporting all material assets at Level 4 and Level 5 within 3 years for operated assets and 5 years for non-operated assets



OGMP 2.0 Reporting Timeline



Companies may achieve Gold Standard Pathway (GSP) prior to years 3 and 5 via:

- Submission of OGMP 2.0-compliant Level 1 (or higher) report for all in-scope assets
- Submission of a granular implementation plan per asset to get to Level 4 and Level 5 for all in-scope assets
- Establishing a methane reduction target: absolute reduction or intensity based



OGMP 2.0: Company Performance Targets



Targets:

Individual performance targets for each company to be reported on and ratcheted up with time

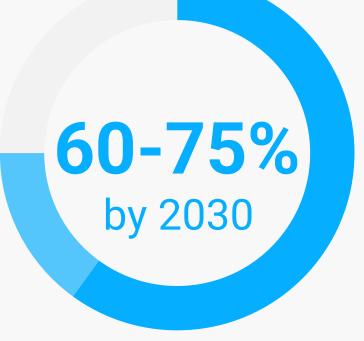
Either intensity or absolute target

Company chooses its own

UNEP Recommended Targets for industry as a whole:

Targets for non-operated assets are desirable

target









OGMP 2.0: Better emissions data for methane mitigation in the oil and gas sector

Comprehensive reporting framework

- Focus on direct measurements, to help companies identify and mitigate largest emissions sources
- Covering all material sources from both operated & non-operated assets across all segments of the value chain

Community of practice

 Platform for peer learning and experience sharing between industry's experts



- OGMP 2.0 as "the best existing vehicle for improving measurement, reporting and verification capability in the energy sector" (EU Methane Strategy, Oct 2020)
- OGMP 2.0 serves as basis for the EU Methane Regulation (May 2024)
- OGMP 2.0 Blueprint for Regulation was shared with ANP - considering OGMP as possible basis for the Brazilian regulation.

OGMP 2.0: Requirements and Data Disclosure

OGMP 2.0 requirements

- Define & disclose a 5 year methane reduction target
- Submit implementation plan on pathway to Gold Standard (guidance available on OGMP website)
- Report annually on methane emissions from operated & non-operated assets

Publicly reported data

- Declared methane reduction targets of companies
- Company total emissions (aggregated by core source and by level (1-5) & distinct operated and non-operated ventures)
 + progress towards targets
- Members can review company fact sheet before publication
- Confidential asset level data and/or country level emissions data will be disclosed only on voluntary basis









OGMP2.0-WIDE FACTSHEET

The charts on the left show total methane emissions reported by OGMP2.0 member companies in 2024 based on 2023 data across all segments and companies. It depicts aggregate share of emissions by reporting level and operatorship as well as total emissions in million tonnes. The dotted pattern indicates that the data reported by companies has missing information (at least one applicable emission source not reported) for those assets.

In these initiative-wide graphs, emissions and reporting levels represent the emissions on a 100% basis for all reported assets. In the individual company factsheets, emissions for non-operated assets are weighed by equity (share as a percentage of the total) that each OGMP2.0 company disclosed for each asset, and the absolute numeric value of emissions in thousand tonnes is shown only for operated assets (on a 100% basis).

For each individual OGMP2.0-member company factsheet:

- For operated assets, graph shows emissions on a 100% basis).
- . For non-operated assets, graph shows:
- emissions, weighted by equity, directly reported by the company, and
- emissions, weighted by equity, reported by other OGMP2.0 members where the company in question has ownership (if any)
- total emissions weighted by equity from these non-operated assets will be disclosed in the future.

Additionally, as this is the first report with companies reporting in year 3 (the timeline to achieve Gold Standard Reporting for operated assets is 3 years), two icons were created to differentiate between Gold Standard Pathway and Gold Standard Reporting. If there is no icon under the current reporting year (highlighted in bold) or prior years, this means that the company did not achieve Gold Standard Pathway or Reporting in that year.

Companies may achieve Gold Standard Pathway from their first year of reporting if they establish a methane reduction target, submit an implementation plan and an annual report at asset level. Companies in year 3 of reporting are only eligible for Gold Standard Reporting.

This year, IMEO granted Gold Standard reporting to companies that attempted Level 5, even if those assets were not ultimately recognized at Level 5, provided the company investigated the potential reasons, shared the learnings and submitted a plan to improve. Such assets were recognized at Level 4.

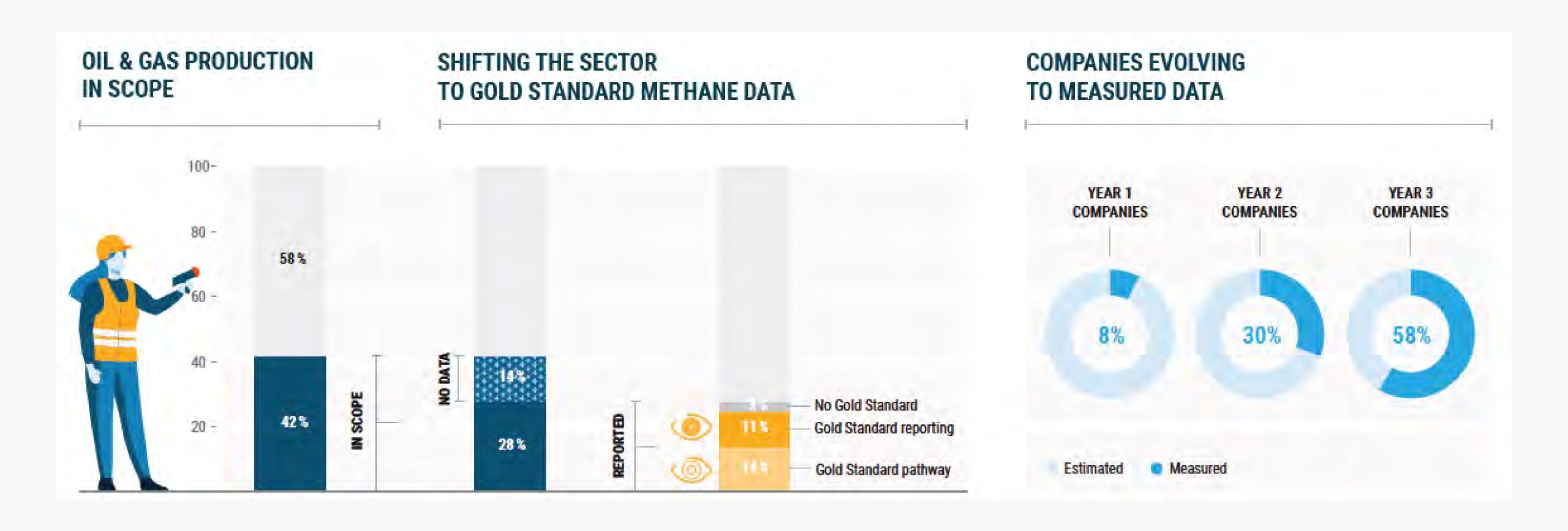
INDEX

DATA QUALITY - Reporting levels 1 to 5, where increasing level corresponds to increased use of direct measurements.





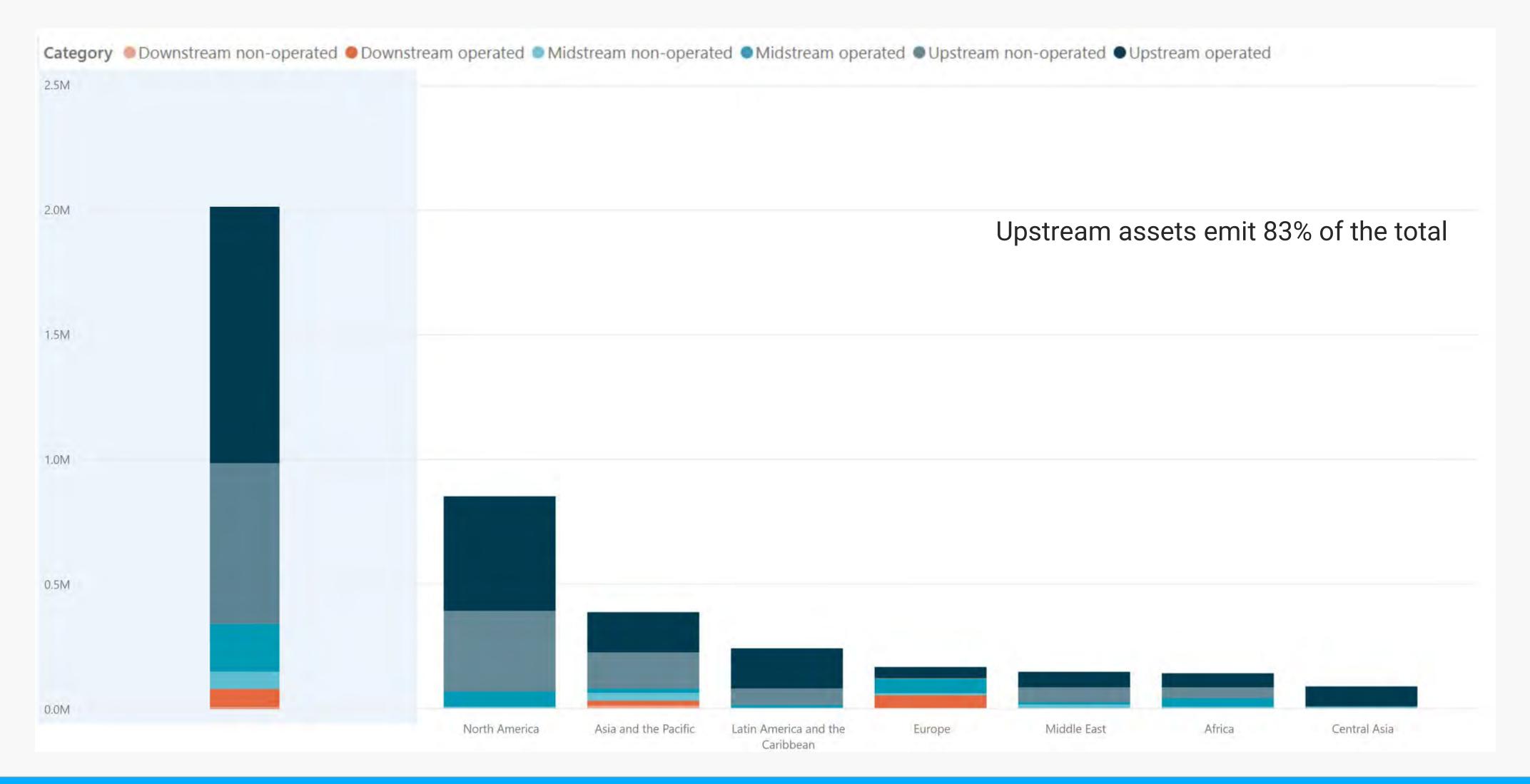
→ OGMP 2.0: The Transition to Measured Data





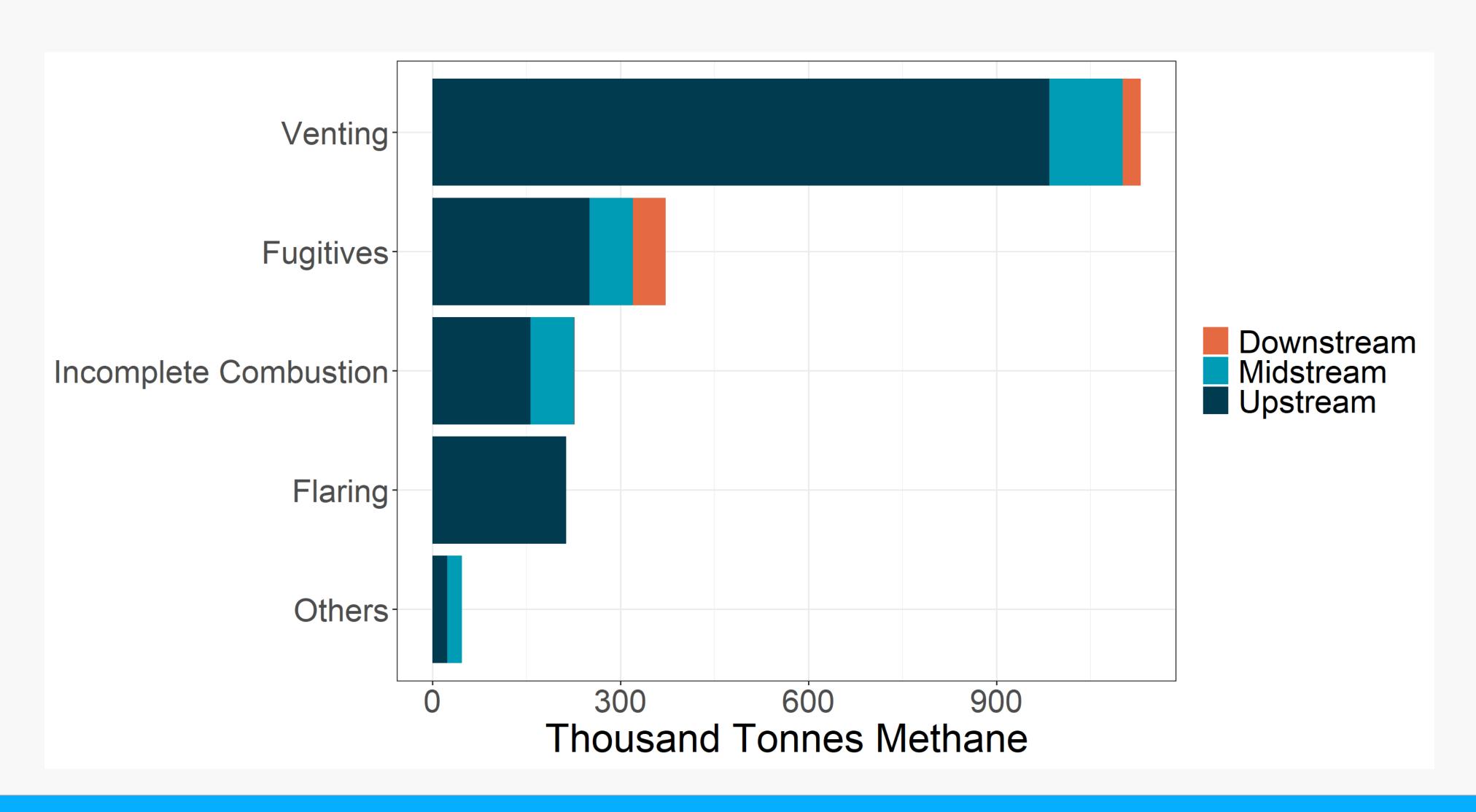
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OGMP 2.0 2024 Report: Emissions by segment and region



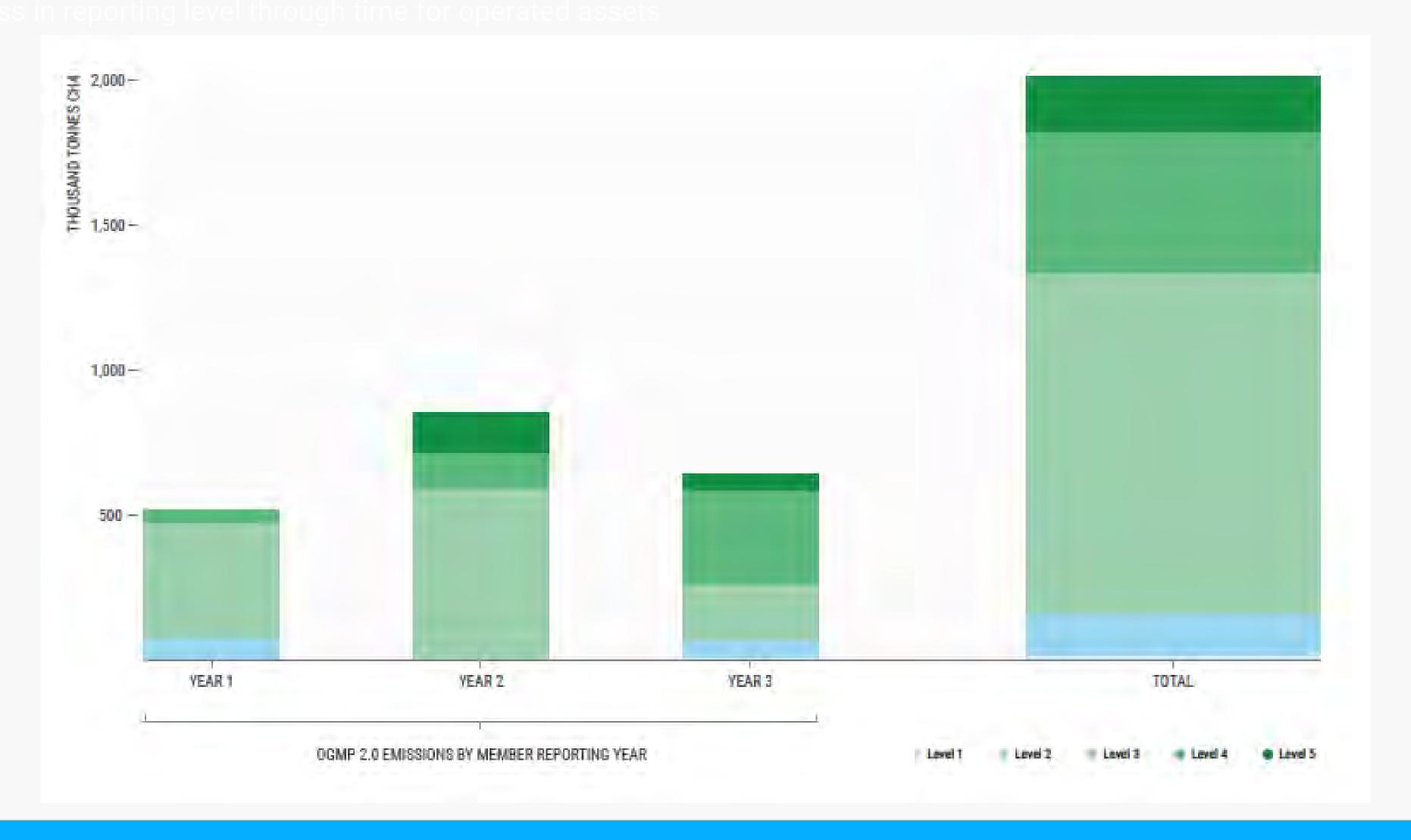


OGMP 2.0 2024 Report Methane emissions categories reported





OGMP 2.0 Reported emissions by OGMP 2.0 levels







OGMP 2.0 Benefits of joining



Effective Mitigation & Credibility & Access to Markets and Funding

- More accurate data enables **effective mitigation**: thanks to OGMP 2.0,
 companies have a better understanding of
 their emissions and can target mitigation
 efforts to the largest sources.
- Support Global & National Climate Efforts under Paris Agreement & Global Methane Pledge.
- Provide confidence to regulators, investor
 s & general public that members manage e
 missions responsibly & progress towards
 announced targets.

- Market access: Future border adjustment taxes will favour low methane gas that should be demonstrated through OGMP 2.0 Gold Standard
- Funding Access: OGMP
 2.0 membership required to access funding from World Bank's Global
 Flaring and Methane
 Reduction Partnership (GFMR)
- Representing industry voice in IMEO's advisory council



Knowledge & Experience Sharing

- Access to the OGMP 2.0
 community of practice:
 knowledge, experience &
 best practice sharing
 platform through annual
 implementation
 conferences & quarterly
 technical workshops
- Priviledged access to

 MARS: Be notified at the
 very beginning of the formal
 notification process to
 allow for swift mitigation on
 the ground

- Teaming up on complex
 topics (e.g., U&R
 Guidance, pilots on L4/L5
 measurement technologies
 & approaches)
- Participating in writing
 OGMP 2.0 rules which might ultimately become industry guidance

















BEZOS
EARTH Canada





11.15 Project Update (Nigeria)

Grace Mbunga, Africa Policy Research Institute

12.00 GMI Business

- 1. GMI Tools and Resources: SMART Plus & LDAR Training
- 2. GMI Subcommittee Action Plan
- 3. Upcoming events and Next Steps

New GMI Oil and Gas Technical Tools for Methane Emissions Measurement, Assessment, and Reporting

GMI Oil and Gas Subcommittee Meeting

March 27, 2025

Geneva, Switzerland

Comparison of Complementary O&G Methane Tools

	SMART Plus tool		CoMAT	MIST
Provider	U.S. EPA and Global Methane Initiative (GMI)		CATF	Carbon Limits
Primary Stakeholder Audience	country (early action)		country	Company
Framework alignment	UNFCCC National GHG Inventory Reporting		Activity data and emission factors from U.S. Greenhouse Gas Inventory	OGMP 2.0
Output	Data aligned with UNFCCC Common Reporting Tables	IPCC Tier 2 emission factors	Customized mitigation plans	Abatement potential and cost
Format	Microsoft Excel and Microsoft Access		Web-based software	Web-based software
How to access	Download from GMI website		Request access from CATF	Request access from Carbon Limits (account required)
Technical support provided?	Yes		Yes	Yes
Can be translated into other languages?	Yes		No	No
Cost	Free		Free	Free

Leak Detection and Repair (LDAR) Training Modules: https://www.globalmethane.org/training/ldartraining.aspx

What it is

- New online training, released January 2025 that:
 - Explains the concept, objectives, systematic approach, challenges and benefits of a non-regulatory leak detection and repair (LDAR) program for managing methane emissions from equipment leaks at oil and natural gas facilities.
 - Provides specific guidance on designing, implementing, and managing an LDAR program.

Who can benefit from this training?

- Company Management
- LDAR Management Teams
- LDAR Surveyors
- Facility Operations and Maintenance Teams
- Environmental Personnel
- Policymakers

How is it organized?

- This course is divided into five self-directed modules, which can be accessed at any time:
 - Module 1: Introduction and Objectives
 - Module 2: Methane Leaks from Oil and Gas Equipment
 - Module 3: Designing and Managing an LDAR Program (under development)
 - Module 4: LDAR Equipment Selection (under development)
 - Module 5: Implementing an LDAR Program (under development)

Simplified Methane Assessment and Reporting Tool (SMART Plus): https://globalmethane.org/smartplus/

What it is

• An innovative, easy-to-use tool that helps improve the accuracy of estimated methane emissions (and other pollutants such as carbon dioxide) from oil & gas (O&G) operations, both at the facility level and at the national level.

Why it matters

- Methane, a potent greenhouse gas and the primary constituent of natural gas, is a valuable fuel resource; its conservation saves money and improves the environment.
 - Improving the accuracy of estimated methane emissions from oil & gas operations, at the facility or national levels, can help oil and gas companies and policy makers identify large sources of methane emissions previously overlooked that could be mitigated.
- National level governments may not understand the scope and scale of methane emissions from O&G
 - Improving the accuracy of emissions estimates could help them understand emissions sources and provide appropriate policies and incentives to mitigate these emissions.
- Countries reporting annual greenhouse gas (GHG) emissions to the United Nations Framework Convention on Climate Change (UNFCCC) can benefit from this easy-to-use peer-reviewed resource to collect and aggregate this data.
- Private sector facilities can benefit from using a systematic approach to estimate more accurate facility-level emissions
 that could identify operational inefficiencies and opportunities to reduce emissions.

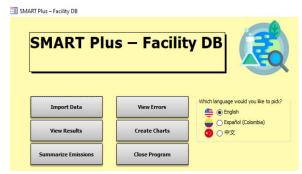
Who should use it

Intended for national governments and company-level stakeholders in developing countries.

SMART Plus - How it works

- SMART Plus Facility Template (v1.0)
 - This Excel-based template provides a format for collecting appropriate data and estimates total facility-level GHG and criteria air contaminant (CAC) emissions using default emission factors and equipment component counts as well as user-provided infrastructure and activity data for a given facility. The template also accepts direct measurement data.
- SMART Plus Database Application (v1.0)
 - This beta SMART Plus Database is a Microsoft Access application that can import multiple SMART Plus Facility templates to summarize emissions estimates across facilities. The Database can calculate IPCC Tier 2 emission factors that can be manually copied into the IPCC Inventory Software for the purposes of reporting national GHG inventories to the UNFCCC for Category 1.B.2 (Oil and Natural Gas).
- SMART Plus IPCC Tier 1/Tier 2 Reporting Template (v1.0)
 - This beta template functions similarly to the IPCC Inventory Software by calculating
 emissions using an IPCC Tier 1/Tier 2 approach for UNFCCC Category 1.B.2 (Oil and
 Natural Gas). The template is designed to be used as a decision support tool that
 allows users to compare pre-populated default IPCC Tier 1 emission with Tier 2
 emission factors. Users can implement this tool to understand how the emission
 factor they select will impact their final oil and gas GHG inventory submission
 via the IPCC Software.













Leading methane action since 2004

GMI Oil & Gas Subcommittee Sprint Action Plan Discussion

27 March 2025

GMI Steering Committee Priorities

Promote GMI's successes to foster information sharing and replication

- Promote GMI 20th Anniversary and Accomplishments via web and social media
- Expand availability of information products such as updated Partner Country pages, Case Study Library, Policymaker Framework, and website

Enhance Engagement across GMI membership and beyond

- Increase Partner Country engagement and collaboration with key strategic partners through bilateral outreach and regional meetings
- Enhance Project Network engagement, including through a new Find an Expert feature
- Host informative and engaging Steering and Subcommittee meetings
- Gather input for future GMI Quarterly Newsletters

Support development of impactful Subcommittee Sprint Action Plans

Support development of Action Plans that address partner goals and needs

Begin planning for the next Global Methane Forum

- Explore options for venues and hosts
- Convene 2026 Global Methane Forum Executive Planning Committee and begin planning meetings

Subcommittee Sprint Action Plan

- In 2025, the Steering Committee discussed several ideas to help ensure that sector-specific work by GMI was strategic, tangible, and impactful
 - Are we spending our time on activities that will ensure we are overcoming the most important sector barriers and challenges?

GMI Subcommittee Sector-Specific Sprint Action Plan (2025-2030) Template

- 1. Mission Statement
- 2. Objectives of the 2025-2030 [Insert Sector] Subcommittee Sprint Action Plan
- 3. Sector Barriers and Challenges
- Strategic Priority Activities of Subcommittee
- 5. Action Plan to Deliver on Priorities

Soliciting GMI Oil and Gas Subcommittee Priorities

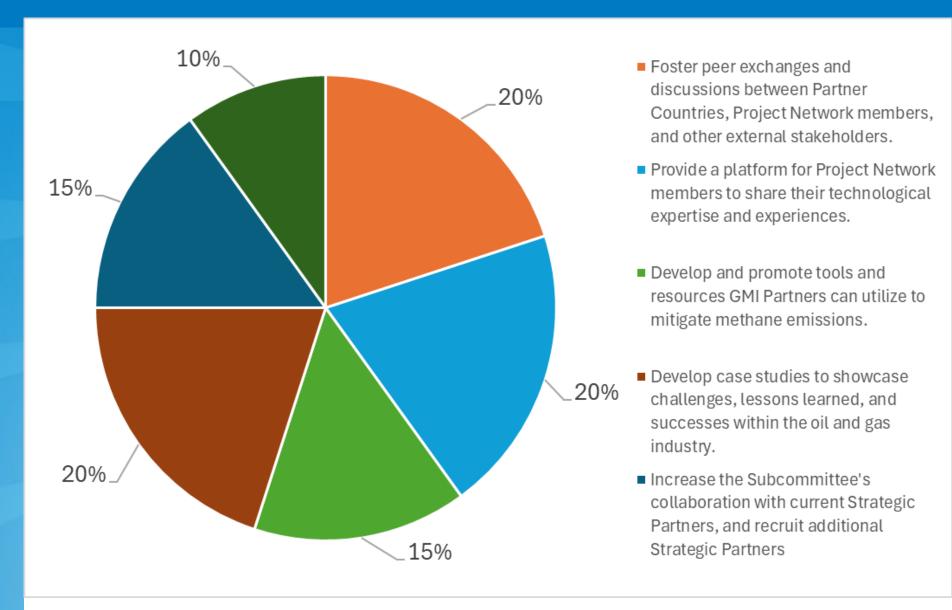
In early 2025, we asked which priorities are most important to your country and should be included in the Oil & Gas Subcommittee Sprint Action Plan.

- Foster peer exchanges and discussions between Partner Countries, Project Network members, and other external stakeholders.
- Provide a platform for Project Network members to share their technological expertise and experiences.
- Increase the Subcommittee's collaboration with current Strategic Partners and recruit additional Strategic Partners.
- Feature Partner Country projects focused on methane mitigation.
- Develop and promote tools and resources GMI Partners can utilize to mitigate methane emissions.
- Develop case studies to showcase challenges, lessons learned, and successes within the oil and gas industry.

We also asked which of the following topic areas/needs are currently the most important to your country

- Understanding Emissions Context
- Engaging Stakeholders
- Establishing an Emissions Baseline
- Setting Goals
- Selecting Strategies and Technologies
- Implement Projects, Policies or Best Practices
- Evaluate, Report, and Adapt

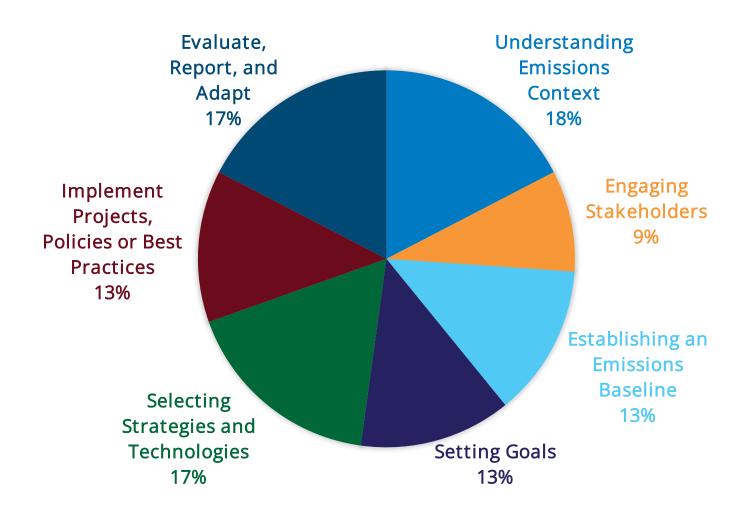
Delegate Feedback: Most Important Priorities to Include in the Sprint Action Plan



Biggest priorities (although it's close)

- Fostering peer exchanges and discussions between Partner Countries
- Providing a platform for Project Network members to share their technological expertise and experiences
- Developing case studies to showcase challenges, lessons learned, and successes within the oil and gas industry

Delegate Feedback: Most Important Topic Areas/Needs in your Country



Biggest need identified (although it's also close)

- Understanding Emissions Context
- Selecting
 Strategies and
 Technologies
- Evaluate, Report, and Adapt

Discussion: Getting to a Sprint Action Plan

- Do we agree that these or a subset based on the feedback are the priorities and topic areas?
- What specific actions and deliverables should we consider to most effectively support the priorities?

PRIORITIES

- Foster peer exchanges and discussions between Partner Countries, Project Network members, and other external stakeholders.
- Provide a platform for Project Network members to share their technological expertise and experiences.
- Increase the Subcommittee's collaboration with current Strategic Partners and recruit additional Strategic Partners.
- Enhance the Oil & Gas Subcommittee webpage to feature Partner Country projects focused on methane mitigation.
- Develop and promote tools and resources GMI Partners can utilize to mitigate methane emissions.
- Develop case studies to showcase challenges, lessons learned, and successes within the oil and gas industry.

TOPIC AREAS/NEEDS

- Understanding Emissions Context
- Engaging Stakeholders
- Establishing an Emissions Baseline
- Setting Goals
- Selecting Strategies and Technologies
- Implement Projects, Policies or Best Practices
- Evaluate, Report, and Adapt

Thank-you for your time today! Continue to Engage with GMI



Submit a Contact Us Request Let us know how we can help you: globalmethane.org/contact-us/



Share Events or Resources Recommend items to publish on the GMI website: globalmethane.org/resources/recommend.aspx



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eepurl.com/ggwT3T

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