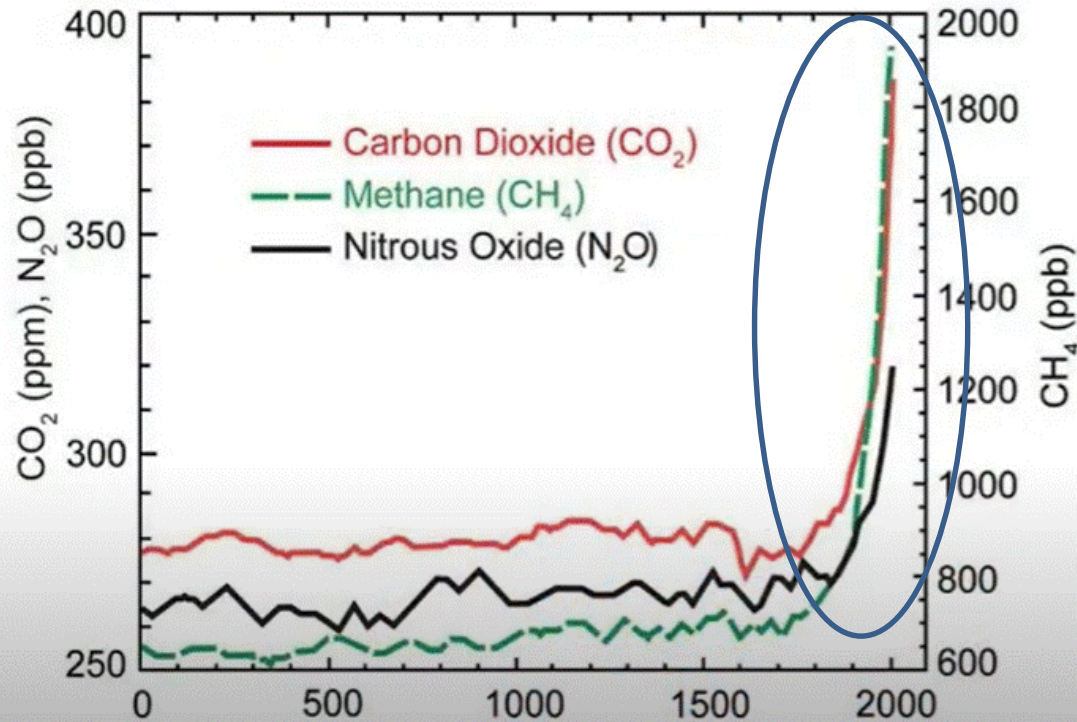


The background of the slide is a dark blue globe with glowing blue energy lines and arcs connecting various points across the continents, symbolizing a global energy network.

METHANE EMISSIONS BY THE ENERGY SECTOR

Karolina Čegir, Senior Gas Expert, Energy Community Secretariat



Mitigation: reducing emissions

Governments agreed

- a long-term goal of keeping the increase in global average temperature to **well below 2°C** above pre-industrial levels;
- to aim to limit the increase to **1.5°C**, since this would significantly reduce risks and the impacts of climate change;
- on the need for **global emissions to peak as soon as possible**, recognising that this will take longer for developing countries;
- to undertake **rapid reductions thereafter** in accordance with the best available science, so as to achieve a balance between emissions and removals in the second half of the century.

GHG	Symbol	Lifetime (years)	GWP ₂₀ (Over 20 years)	GWP ₁₀₀ (Over 100 years)	Total emissions (2018)
Carbon Dioxide	CO ₂	100-1000	1	1	81%
Methane	CH ₄	12	84	28	10%
Nitrous Oxide	N ₂ O	121	264	265	7%
Tetrafluoroethane	HFC-134a	13	3710	1300	2%
Trichlorofluoromethane	CFC-11	45	6900	4660	
Carbon Tetrafluoride	CF ₄	50,000	4880	6630	

In Contracting Parties:
CO₂ 68-78%
CH₄ 13-20%

CO₂ is the biggest GHG, but
CH₄ defines the speed of warming

The need to act in **the next decades**, not in the next century

= Fast action on methane to keep a 1.5°C future within reach

CH₄ contributes to 0,5° C

Participants joining the Pledge agree to take voluntary actions to contribute to a collective effort to reduce global methane emissions at least 30 percent from 2020 levels by 2030, which could eliminate over 0.2°C warming by 2050.

This is a global, not a national reduction target. Participants also commit to moving towards using the highest tier IPCC good practice inventory methodologies, as well as working to continuously improve the accuracy, transparency, consistency, comparability, and completeness of national greenhouse gas inventory reporting under the UNFCCC and Paris Agreement, and to provide greater transparency in key sectors.

Signed by 150 countries, **Albania** among them, together with all Contracting Parties to the Energy Community.

40% by nature (wetlands, permafrost melting)

60% anthropogenic, by human activities



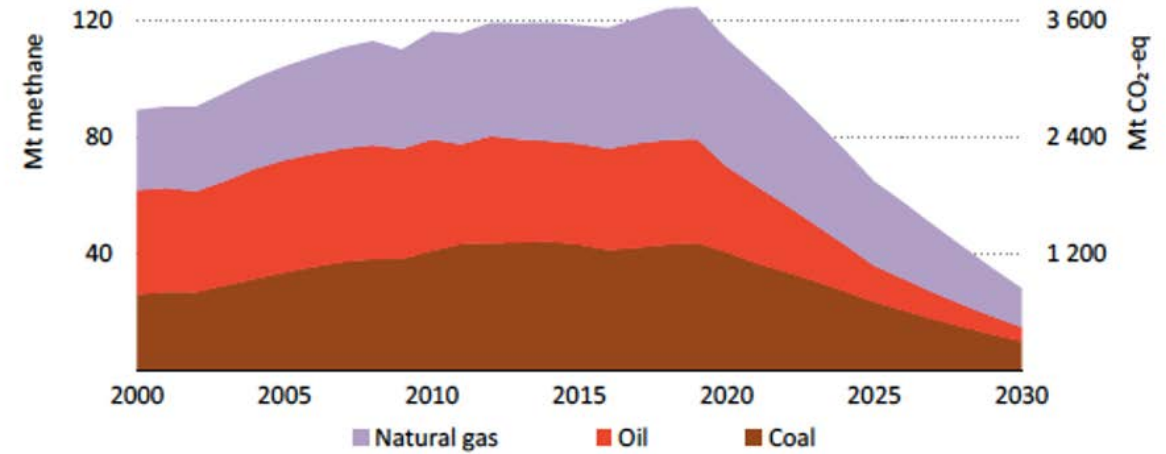
35% fossil fuels – coal, oil, gas

32% Agriculture & food production

8% rice production

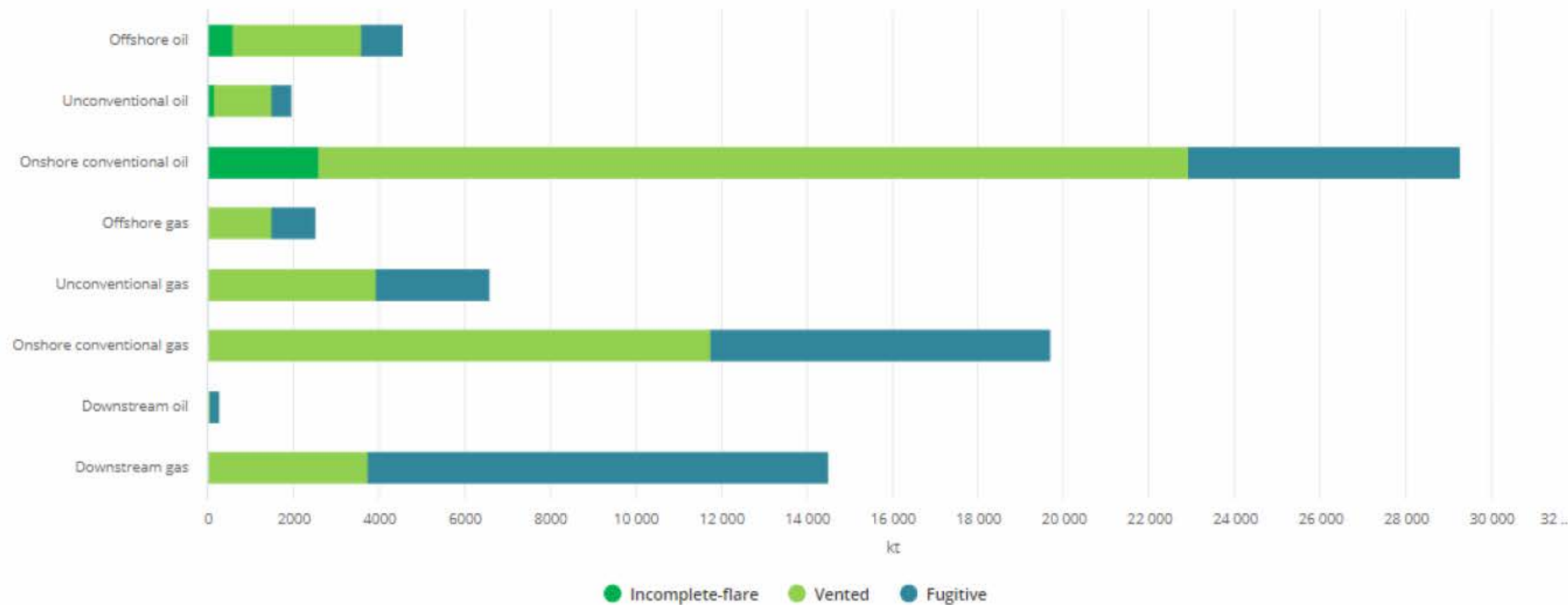
19% Waste

6% biogas industry



Source: IEA

Global oil & gas sector methane emissions: 79 Mt CH₄



Source: IEA, Methane tracker; www.iea.org/weo/methane/database

Development of the EU legislation / part of the Decarbonisation Roadmap for the Energy Community:

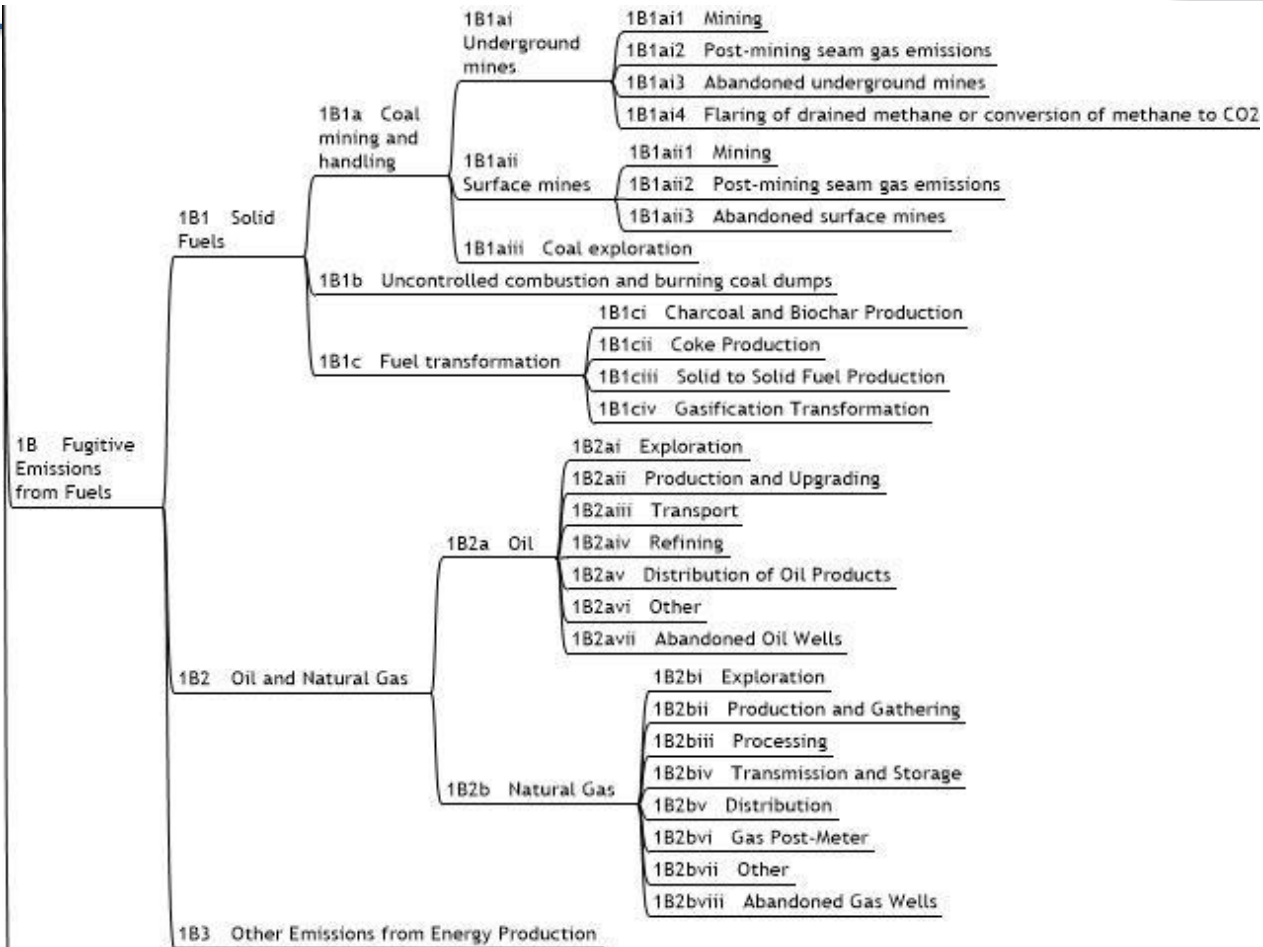
- For the gas industry – mandatory **LDAR** (leak detection and repair)
- For coal, oil, and gas sectors – mandatory **MRV** (monitoring, reporting, verification)
- **For the oil&gas industry – a ban on venting and flaring**

OGMP 2.0 Framework



*Industry voluntary initiatives
aiming to stop regular venting and flaring,
to reach zero emissions*

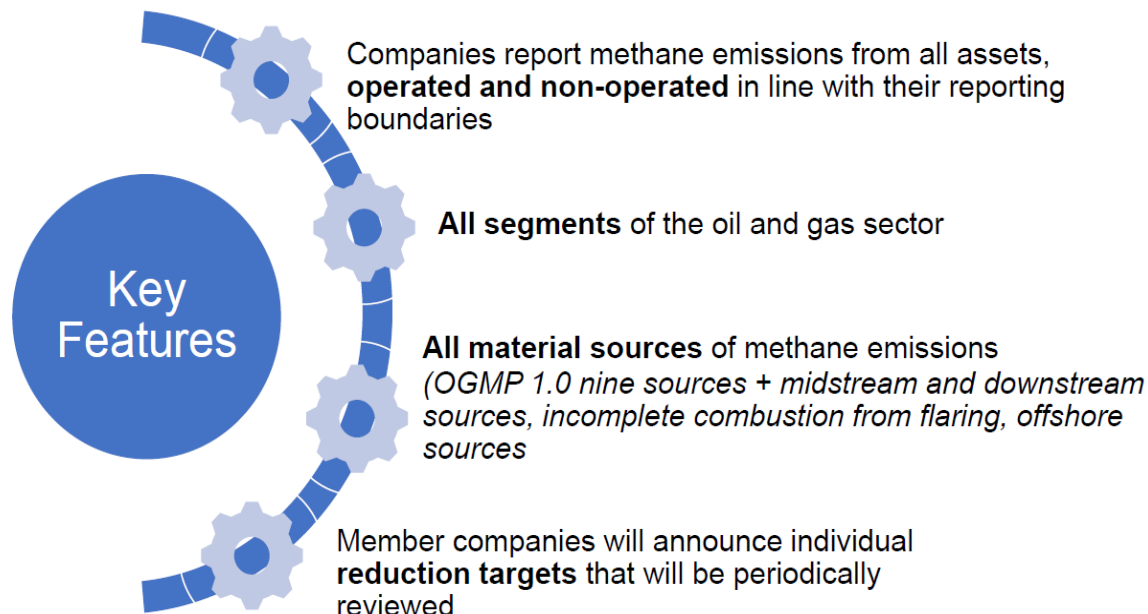
All but one CPs signatories to the Paris Agreement, With obligation to report



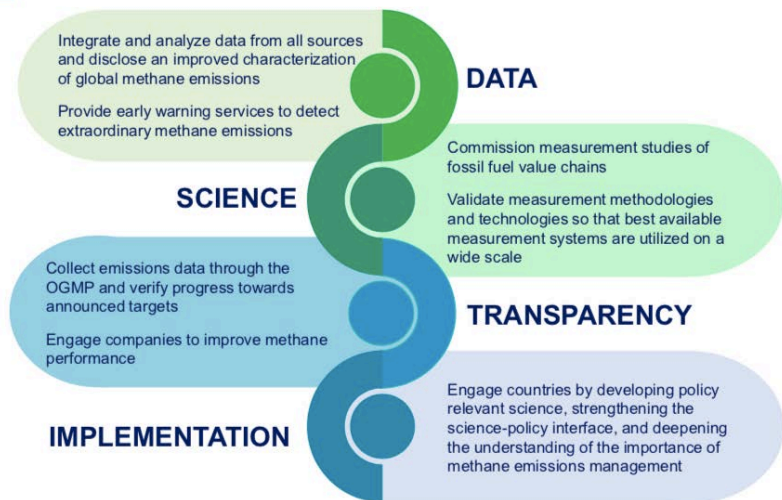
- the Oil and Gas Methane Partnership (OGMP) methodology was created by the Climate and Clean Air Coalition under UNEP in 2014 as a voluntary initiative to help companies reduce methane emissions in the oil and gas sector
- Version 2.0 signed in 2020 with more elements of measurement, reduction targets, deadlines for activities

The “gold standard” of methane emissions reporting

Level 1	Venture/Asset Reporting <ul style="list-style-type: none">• Single, consolidated emissions number• Only applicable where company has very limited information sharing
Level 2	Emissions Category <ul style="list-style-type: none">• Report emissions based on 5 IOGP and 3 Marcogaz emissions categories• Estimates based on emissions factors
Level 3	Generic Emission Source Level <ul style="list-style-type: none">• Emissions reported by detailed source type• Estimates based on generic emissions factors
Level 4	Specific Emission Source Level <ul style="list-style-type: none">• Emissions reported by detailed source type using specific emissions and activity factors• Based on direct measurement or other methodologies (e.g. OGMP TGDs, Marcogaz assessment)
Level 5	Site Level <ul style="list-style-type: none">• Emissions allocated to individual source types• Reporting based on site-level measurements to reconcile source and site level emission estimates



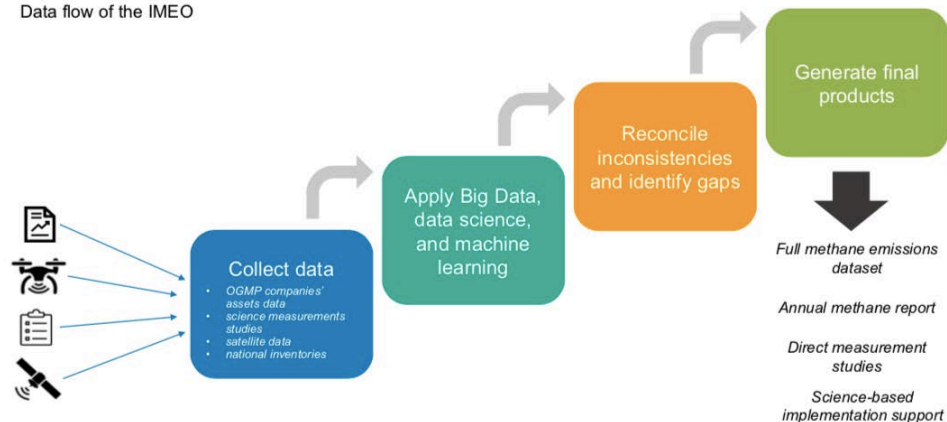
IMEO interconnects activities across the methane ecosystem



How will IMEO answer the methane emissions data problem?



Data flow of the IMEO





38.000 km of the transmission network
= 92% of the total in EnC CPs

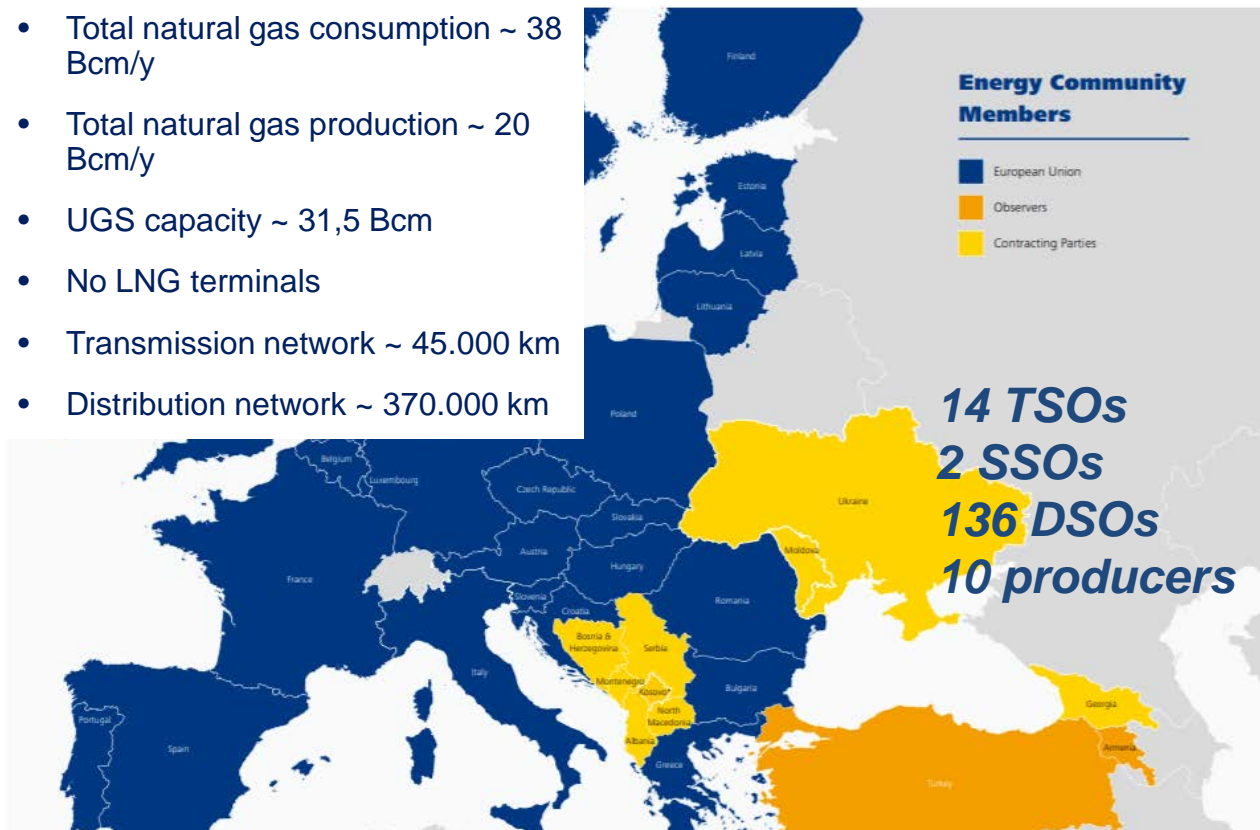
262.000 km of distribution network
= 71% of the total in EnC CPs



Report on methane emissions by gas transmission and distribution system operators in the Energy Community Contracting Parties

Energy Community Secretariat
May 2021

- Total natural gas consumption ~ 38 Bcm/y
- Total natural gas production ~ 20 Bcm/y
- UGS capacity ~ 31,5 Bcm
- No LNG terminals
- Transmission network ~ 45.000 km
- Distribution network ~ 370.000 km



Naftogaz, Moldovagaz, GAMA, TAP signatory to OGMP 2.0

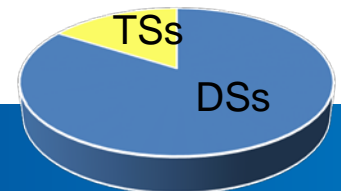
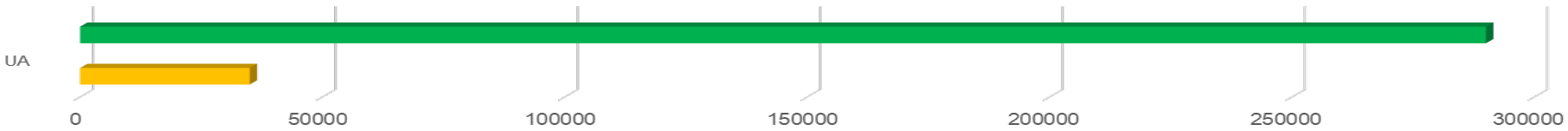
Responses – coverage of the reports

1st report based on 2019 Marcogaz questionnaire (6 TSOs, 33 DSOs)

2nd report based on OGMP 2.0 template (7 TSOs, 35 DSOs, 1 SSO, 1 producer)

= **93%** of the transmission network in EnC CPs

= **73%** of distribution network in EnC CPs



- **Monthly Methane Mondays** ongoing....next one on **22 May 2023**
- Raising knowledge – bilaterally, via webinars
- Continuation of cooperation with GIE, Marcogaz, MGP, IOGP, OGCI....
- Opening horizontal discussions – regulators, ministries responsible for energy, environment
- Inclusion of the oil industry in reporting
- Inclusion of coal industry.....
- Waiting for the EU Regulation on mitigation of methane emissions by the energy sector / preparing for the adoption in the Energy Community
- Helping in the operationalization of the Global Methane Pledge
-



Toolkits
Best Practices Guidelines
.....

<https://methaneguidingprinciples.org/>



User-friendly free tool which leverages the latest research to set up your methane inventory and help prioritize mitigation

<https://mist.carbonlimits.no/>



<https://www.iogp.org/>

ipieca

The global oil and gas association for advancing **environmental** and **social performance** across the **energy transition**

<https://www.ipieca.org/>

Oil and Gas Climate Initiative



AIMING FOR ZERO
Methane Emissions Initiative

The industry has already taken action to reduce methane emissions, by setting targets, developing and deploying technologies and participating in multi-stakeholder initiatives to raise awareness and improve practices. OGCI member companies, for instance, have reduced their methane emissions collectively by more than 30% in the last five years. Promising new technologies for monitoring and mitigation are emerging that make the challenge more solvable.

<https://www.ogci.com/action-and-engagement/aiming-for-zero-methane-emissions-initiative/>





**THANK YOU
FOR YOUR ATTENTION**

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