



Follow-up meeting on methane emissions in the gas sector

28th of June 2021

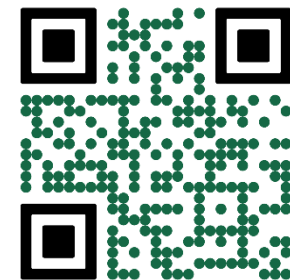
Online event, 10:00 – 12:30
CEST



Moderator



Bogdan SIMION
Data Analytics Advisor GIE



Housekeeping rules



We recommend you join the telco **without video** and with your **microphone muted** unless differently prompted by the Organisers.

Please use the chat section for **questions/comments** or raise the hand option to intervene.



Thank you very much!

AGENDA

Welcome remarks

- Jose TUDELA | MARCOGAZ
- Janez KOPAC | Energy Community
- Francisco DE LA FLOR | GIE

Energy Community ongoing activities on methane emissions

- Karolina CEGIR | Energy Community

GIE & MARCOGAZ ongoing activities on methane emissions

- Ronald KENTER | GIE and MARCOGAZ team

ENVI Draft Report on an EU strategy to reduce methane emissions

- MEP Maria SPYRAKI | European Parliament, ENVI

European Commission forthcoming legislative proposal

- Malcolm McDOWELL | European Commission, DG ENER

United Nations declaration of an International Decade for Methane Management

- Scott FOSTER | UNECE

Overview on the International Methane Emissions Observatory (IMEO)

- Giulia FERRINI | UNEP

Methane emissions data uncertainty

- Ricardo BOLADO | European Commission, JRC

Copernicus Programme & methane emissions

- Cristina ANANASSO | European Commission, DG DEFIS

GERG methane emissions roadmap & ongoing activities

- Alexandra KOSTEREVA | GERG

Next steps, wrap-up and concluding remarks

- Tania MEIXUS | GIE and MARCOGAZ
- Predrag GRUJICIC | Energy Community



Welcome and introduction

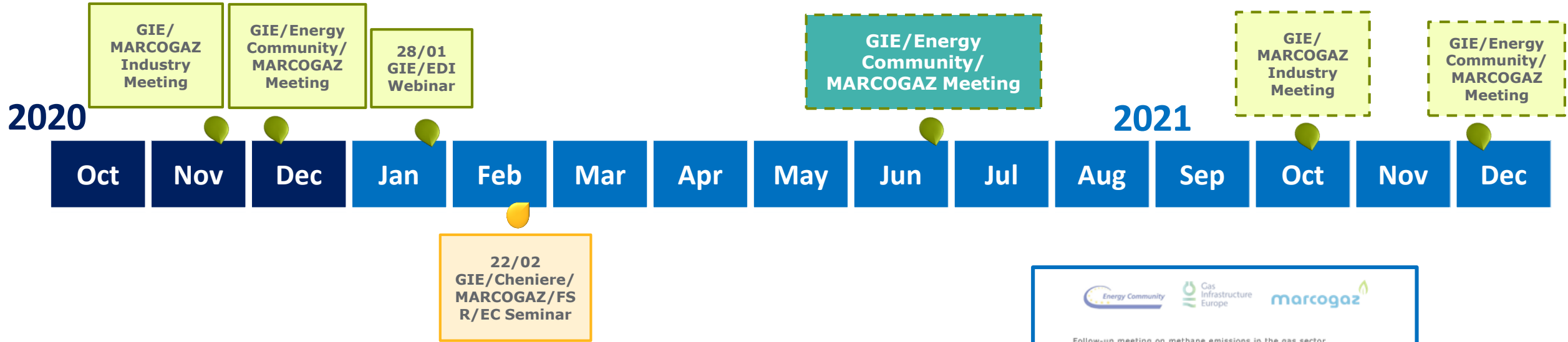
Jose Miguel TUDELA | MARCOGAZ

Janez KOPAC | Energy Community

Francisco DE LA FLOR | GIE



Methane emissions – Main milestones

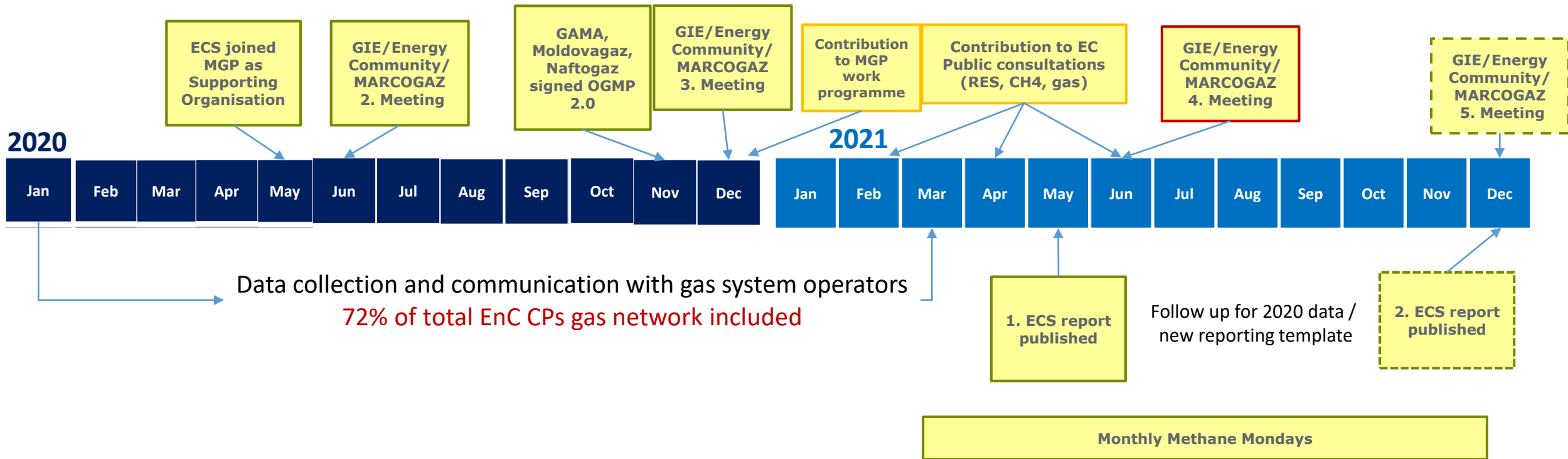


- Gas industry meeting on methane emissions organised by GIE/MARCOGAZ (18th of November of 2020)
- GIE/MARCOGAZ/Energy Community meeting on methane emissions (3rd of December of 2020)
- GIE/Energy Delta Institute webinar on methane emissions (28th of January of 2021)
- Meetings with the industry and Energy Community are foreseen
- Monthly Methane Mondays – organised by Energy Community with the support of GIE and MARCOGAZ
- Multiple meeting with the European Commission, ACER, the Florence School of Regulation



Methane emissions – main milestones

in the Energy Community



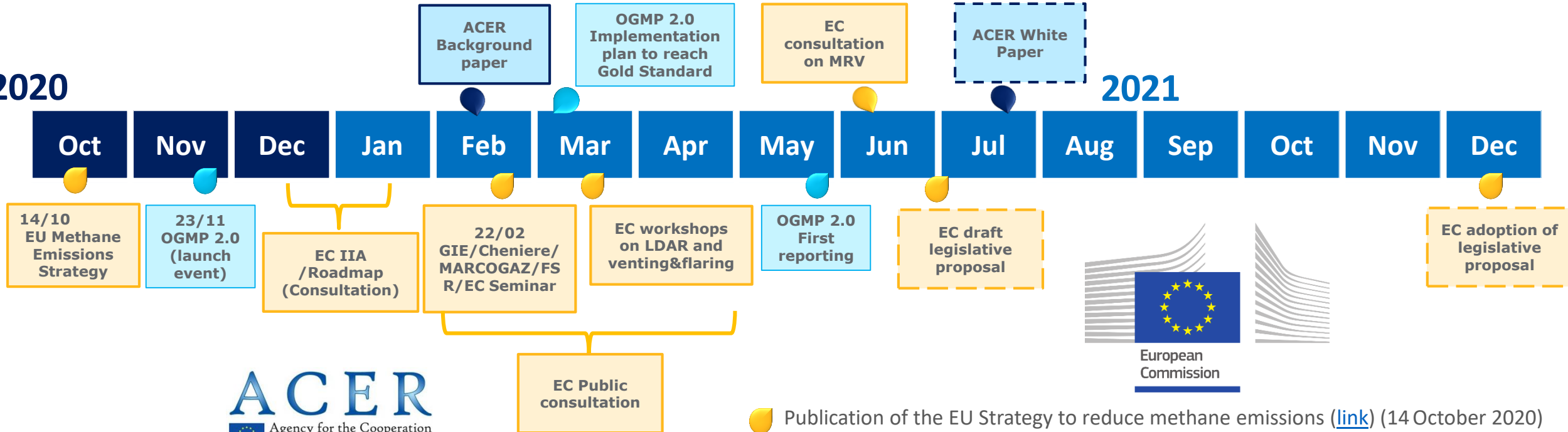
Energy Community on the green path:
NECPs, Clean Energy Package upcoming adaptation...

Methane emissions – Main milestones



2020

2021



- ACER background paper on methane emissions (9th of Feb 2021) ([link](#))
- ACER White Paper on methane emissions (foreseen in July 2021)



- OGMP 2.0 Launch event ([link](#)) (23rd of November of 2020)
- OGMP 2.0 submission of the implementation plan and the first reporting



- Publication of the EU Strategy to reduce methane emissions ([link](#)) (14 October 2020)
- EC consultation - Inception impact assessment / Roadmap ([link](#)) (22 Dec – 26 Jan)
- GIE/MARCOGAZ/Cheniere Seminar supported by EC & FSR ([link](#))
- EC workshops on LDAR and venting&flaring
- EC consultation on the potential content of the methane emissions legislation ([link](#)) (till 1st of May)
- EC consultation on MRV ([link](#))
- EC draft legislative proposal on methane emissions in the energy sector (foreseen in June)
- EC adoption of legislative proposal (foreseen in Q4 2021)

Methane emissions – Main milestones



2020

2021



AGRI Draft Opinion (29/04)

Amendments to Draft Opinions and Draft Report

ITRE Draft Opinion (03/05)

ENVI Draft Report (18/05)

ITRE Adoption of Opinion (July)

ENVI Adoption of Report (September)



European Parliament



Energy Community ongoing activities on methane emissions



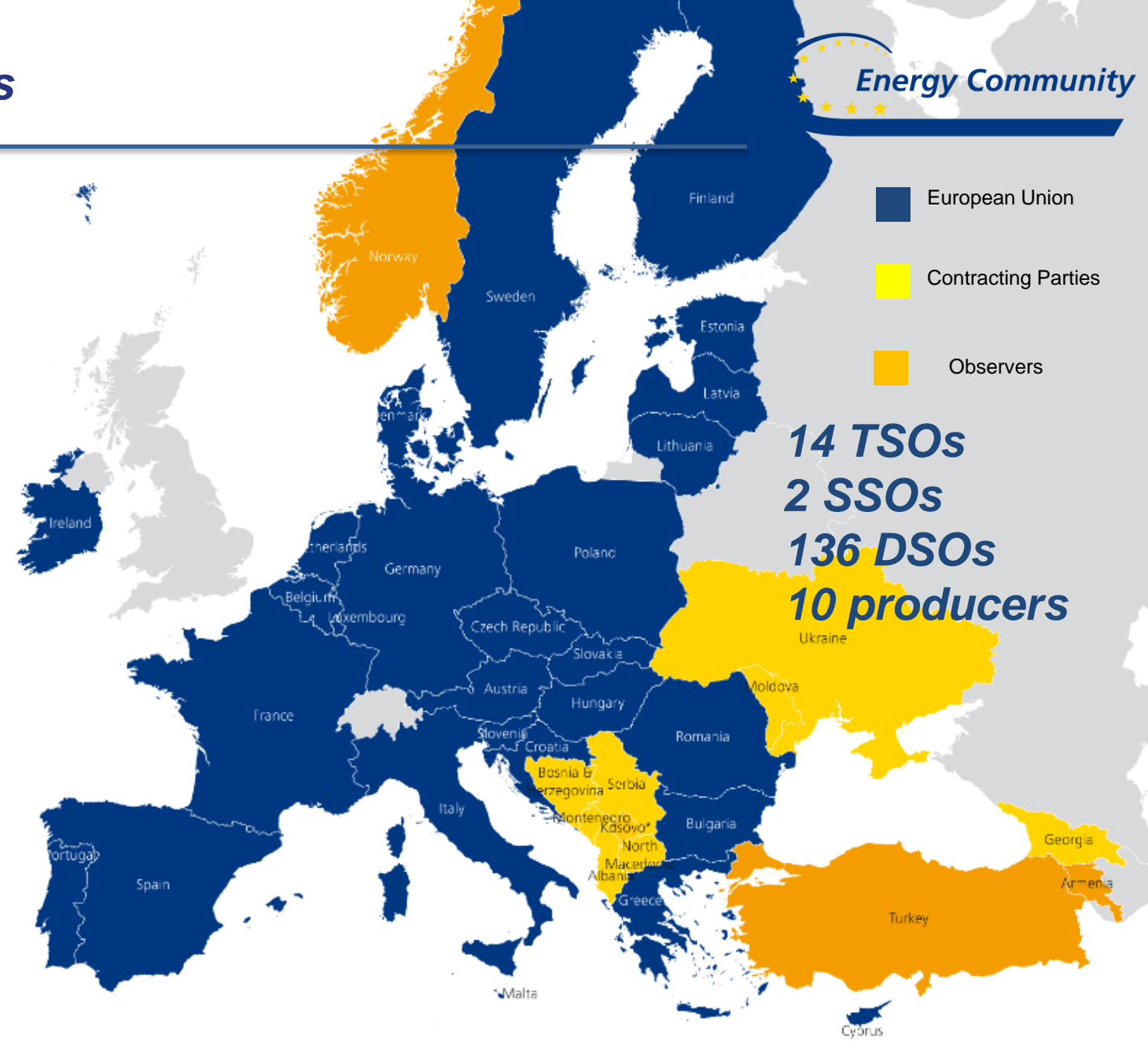
Karolina CEGIR | Energy Community

Gas sector of the Contracting Parties



- 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



➤ Triggers

- GIE & Marcogaz report on methane emissions by the EU gas system operators
- DSOs' focus on gas losses

➤ Purpose

To include EnC CPs gas industry in the EU gas industry trends and actions

➤ Objective

An assessment of methane emissions by the gas system operators in the Contracting Parties, as a ground level for further activities

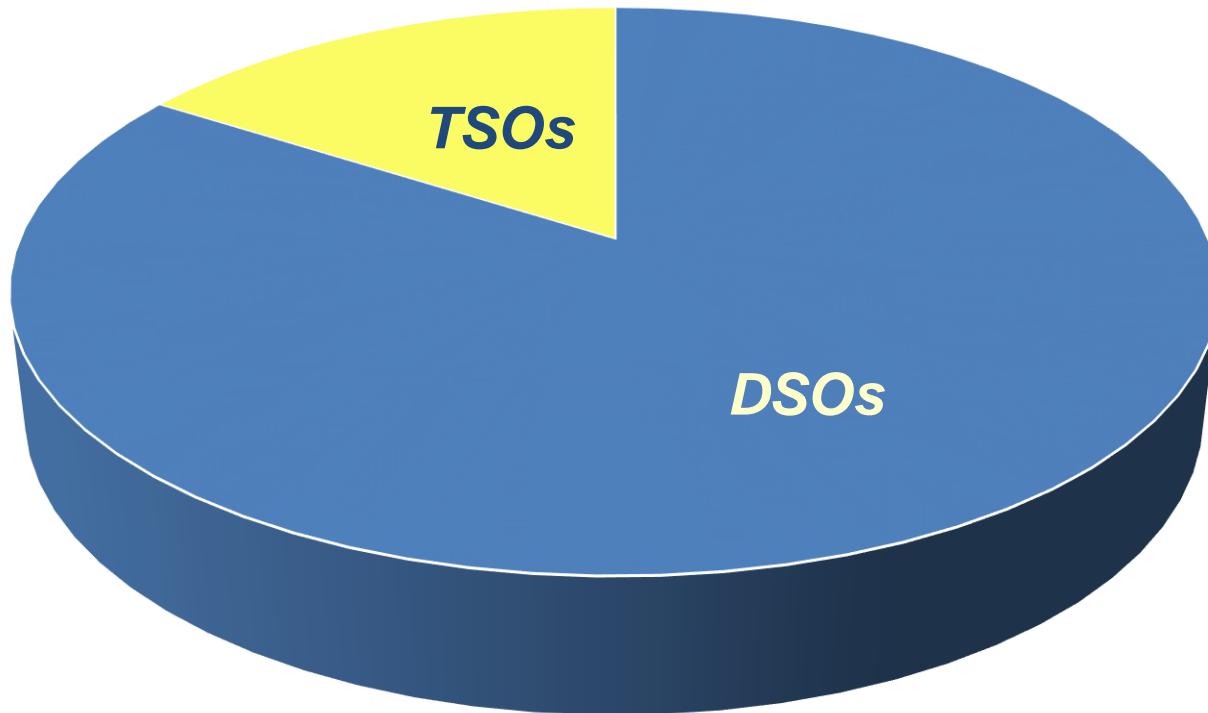
	no of TSOs	no of DSOs	no of SSOs
Albania	2	1	0
Bosnia and Herzegovina	3 (2)	4	0
Georgia	1 (1)	30 (1)	0
Moldova	3 (1)	24 (12)	0
North Macedonia	1 (1)	3	0
Serbia	3	32	1
Ukraine	1 (1)	42 (20)	1 (1)
Total	14	136	2



6 TSOs
33 DSOs
1 SSO

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

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



Leakage coefficients:

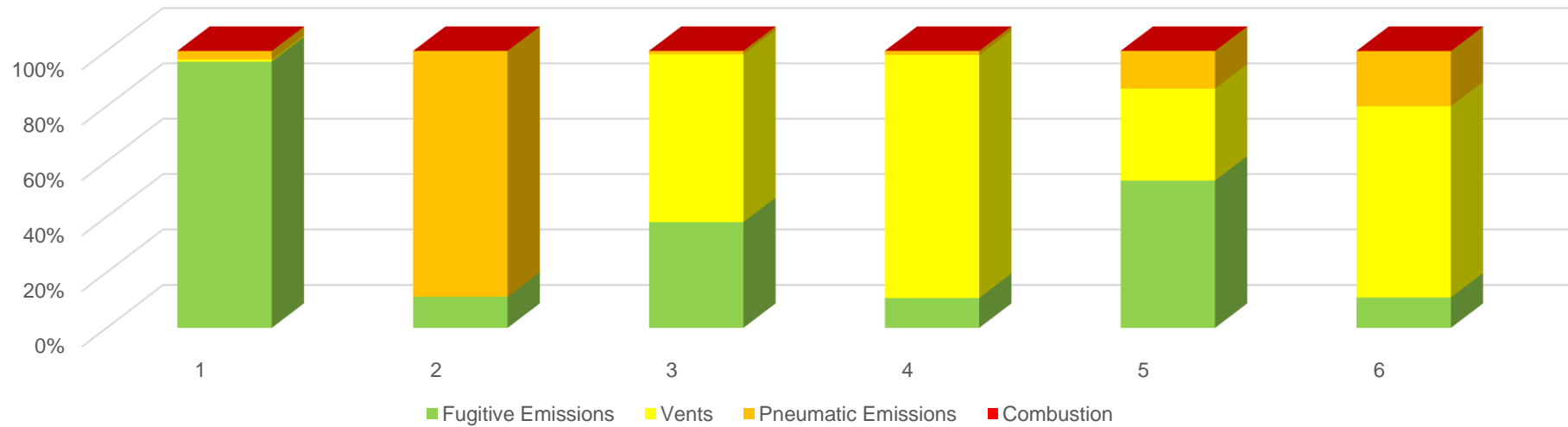
Transmission (0,0001) **0,0003** – **0,0006** (0,0039)

Distribution (0, 0030) **0,01** – **0,02** (0,0705)

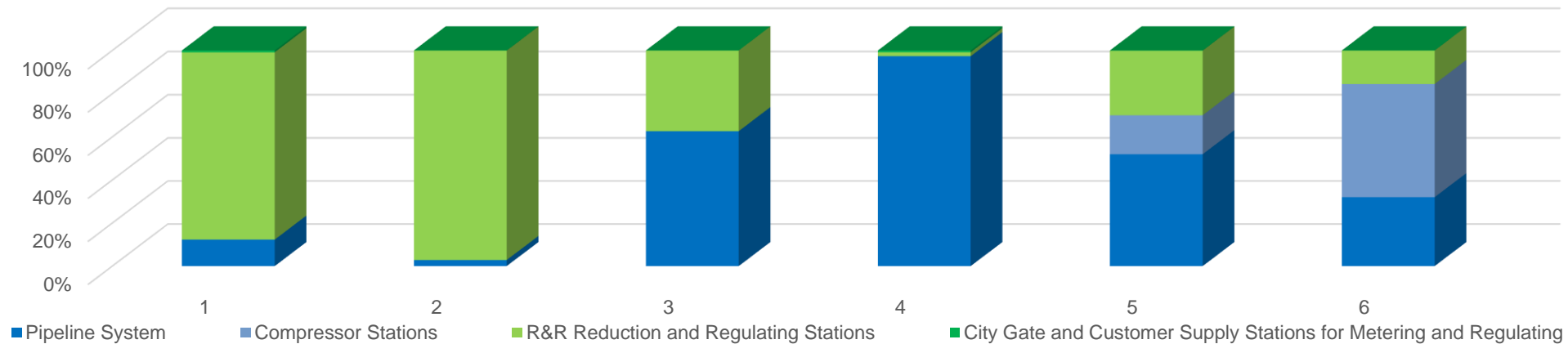
≈ **200 kt CH₄** in 2019

- **Comparison possible with UNFCC NIR**
But only for Ukraine (Annex I country)
- **Comparison with the EU methane emissions**
Similar structure of gas sectors
- **Comparison on the global level**
0,2 Mt / 72 Mt (0,3%)

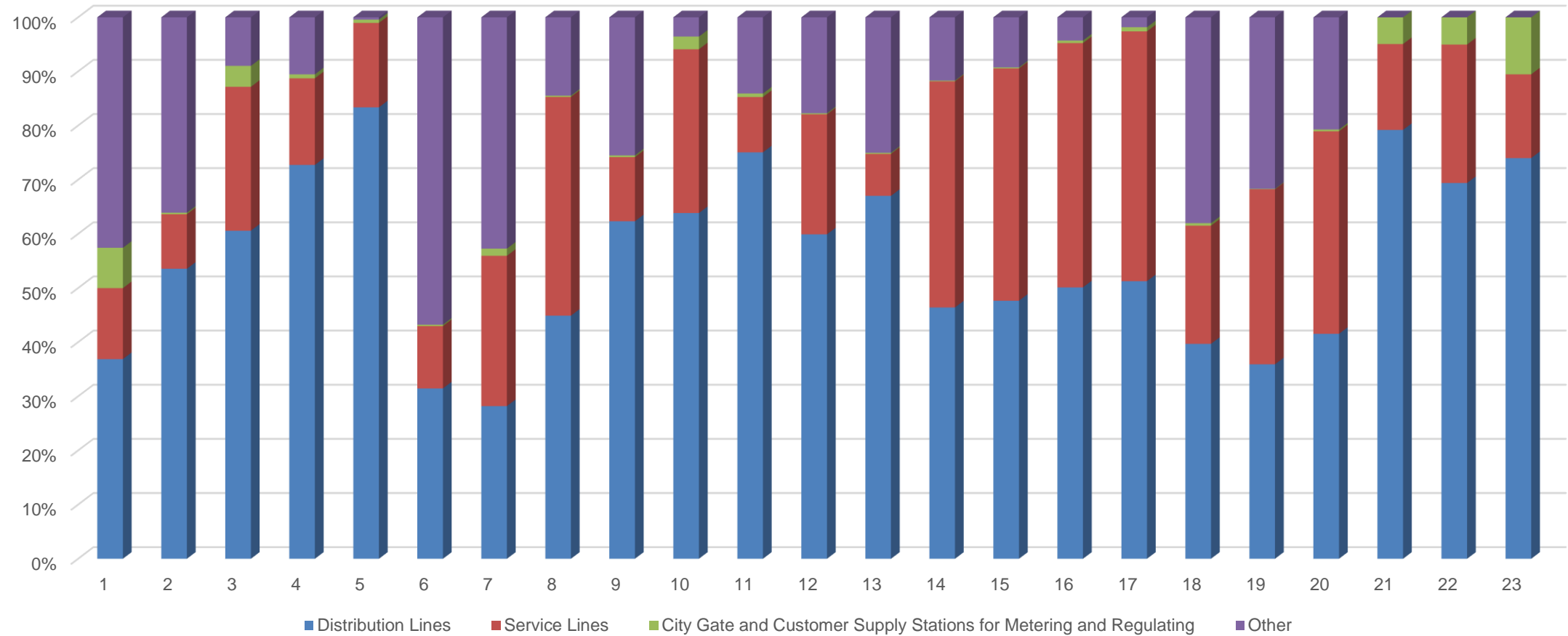
per type of emission



per type of asset



Distribution network in focus

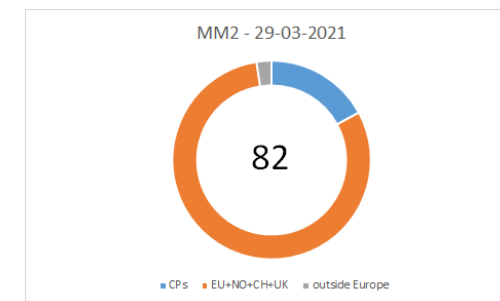
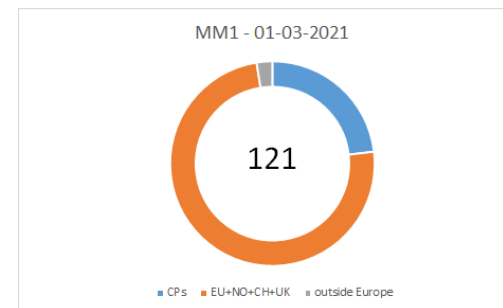


- Plain comparisons are not possible: system composition plays a crucial role
- Companies have very different levels of measurement & recording of methane emissions
- Influence of chosen emission factors and calculation alternatives
- Emissions vs consumed gas / Allocation of fuel gas
- Correlations between reporting on methane emissions and total network losses
(especially in distribution network)

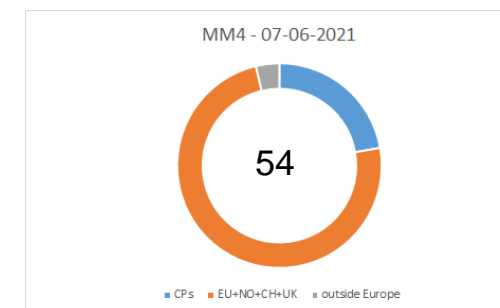
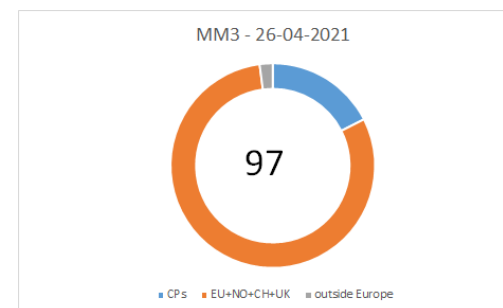
<https://www.energy-community.org/documents/studies.html> Gas, 05/2021

every first Monday in the month (in principle), at 14:30 CEST

- ▶ 1st of March: Quantification and reporting framework of methane emissions (60 min)
- ▶ 29th March: Energy Community report on methane emissions (60 min)
- ▶ 26th April: MARCOGAZ technical recommendations on methane emissions (90 min)
- ▶ 7th of June: MGP Best Practice Guidelines (90 min)
- ▶ 6th of September: MARCOGAZ / GIE Target setting recommendations (60 min)
- ▶ 4th of October: Methane emissions detection, measurement and quantification technologies (90 min)
- ▶ 8th of November: EU Strategy follow up/ EU legislative process (90 min)



■ CPs ■ EU+NO+CH+UK ■ outside Europe



https://www.energy-community.org/events/2021/03/WSGAS_MET1.html

What next in 2021 (and beyond)?

➤ Follow up of the report has started

- Using new reporting template, in line with OGMP 2.0
- Inclusion of missing system operators

➤ Using the report for opening discussions:

- on losses methodologies
- to set up the targets of emissions' decrease

➤ Spreading the scope

gas production, oil and coal industry

To be continued....

➤ Cooperation with relevant initiatives and institutions

GIE, Marcogaz, MGP, OGMP.....

➤ Following legislative developments in the EU

➤ Monthly Methane Mondays

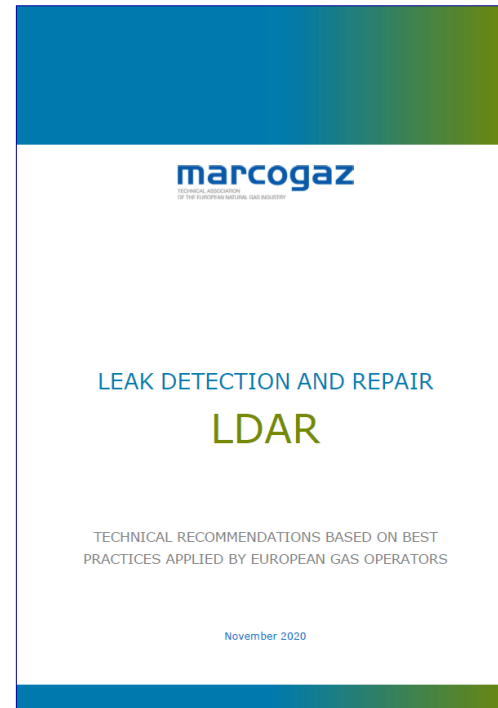
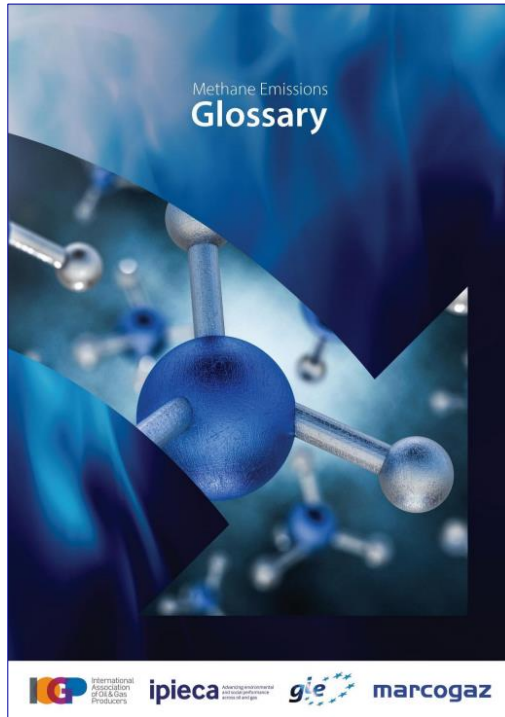


GIE & MARCOGAZ ongoing activities on methane emissions



Ronald KENTER | MARCOGAZ

Recent activities and initiatives



- ✓ Technical recommendations for the gas industry
- ✓ Support the EU legislative process

Ongoing activities and initiatives



Standardisation process



CEN Technical Specification (CEN/TC234/WG14):
Gas infrastructure — Methodology for Assessment of methane emissions quantification for gas transmission, and distribution systems, underground gas storage systems and LNG terminals

Reporting template and Guidelines

No.	System Category	Activity Factors		Emission Factors			Total Emissions							
		Date (First assessment)	Date (Latest assessment)	Min.	Average	Max.	Min.	Average	Max.	Min.	Average	Max.		
1	DSO: Retail													
2	Length of network													
3	DSO: "typical" WUW Ratio													
4	DSO: Loss													
5	DSO: Loss													
6	DSO: Loss													
7	DSO: Loss													
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49	DSO: Loss													
50	DSO: Loss													



Emission factors

Compressor station	Unit	n	Min. EI value	Max. EI value	Standard deviation	CI value	CI value
Fugitive Emissions							
Compressor (leakage, packing, seals)	gPaE/0.6	40.00	0.55	4.20	25.12	0.54	0.55 1.00 0.50



GUIDANCE FOR USING THE MARCOGAS EMISSION FACTOR DATABASE
DSO, TSO, COMPRESSOR STATIONS, LNG RECEIVING TERMINALS AND UGS
ALIGNED WITH THE OGMP REPORTING FRAMEWORK

Future activities and initiatives



To analyse the feasibility of a single target for the gas mid/downstream at EU level. Support from other associations is needed.

Develop MARCOGAZ technical detailed BATs for DSO, TSO, LNG and UGS

MARCOGAZ analysis of the emissions data (year 2020 and 2021) for mid/downstream (based on OGMP reporting template)

Emission factors for mid and downstream

Establishment of correlation factors (concentration vs flow) for gas sector. Coordination with GERG is needed.

Support to the EU legislative process



ENVI Draft Report on an EU strategy to reduce methane emissions



Maria SPYRAKI | Member of the European
Parliament - ENVI



EC forthcoming legislative proposal on methane emissions



Malcolm McDOWELL | European Commission
- DG Energy



United Nations declaration of an International Decade for Methane Management



Scott FOSTER | UNECE

ENERGY



ENERGY



Declaring an

International Decade for Methane Management





25%

of global warming is
caused by methane
emissions.



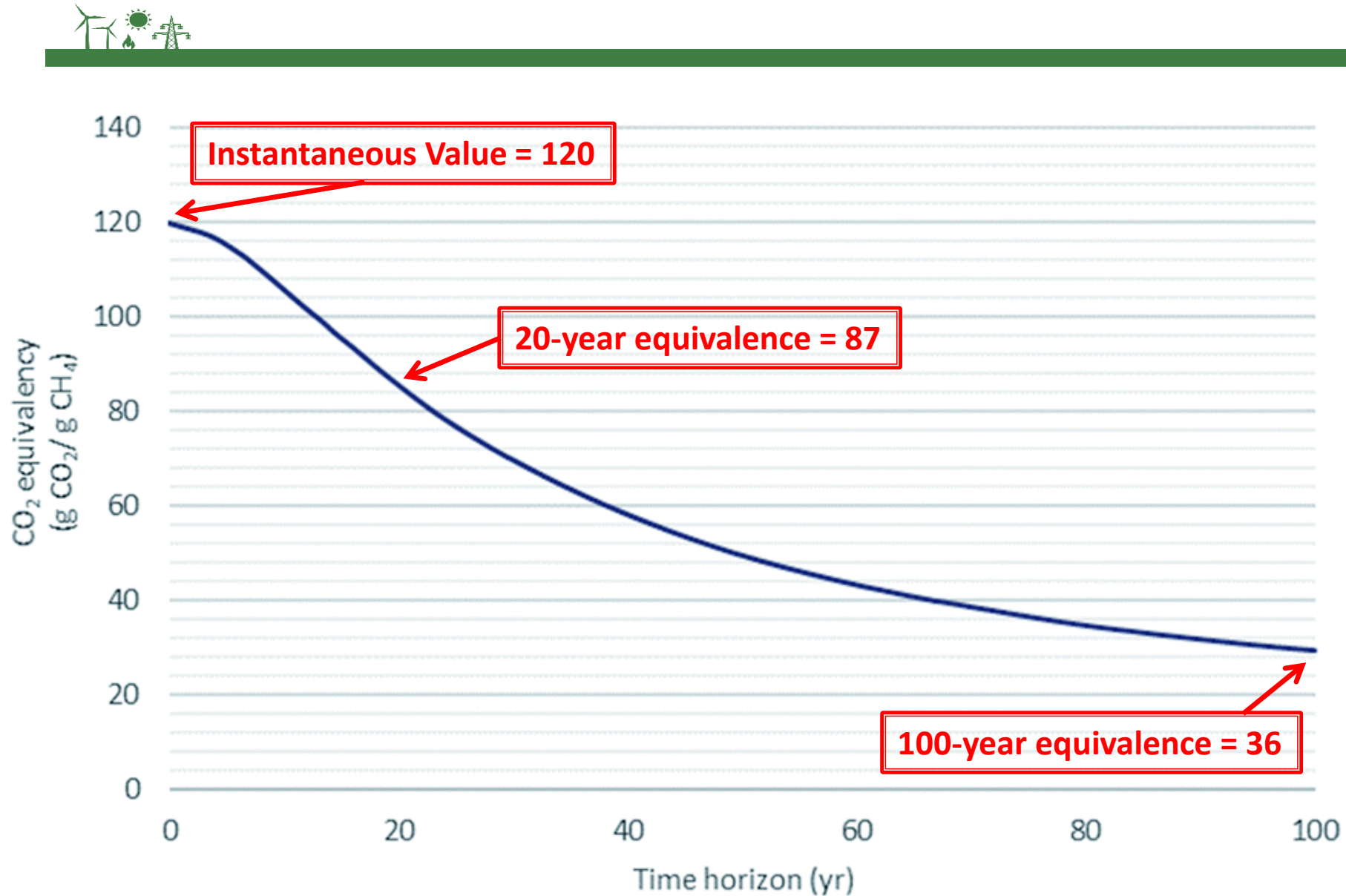
Methane: a significant GHG and precursor to ozone and air pollution
Proper management: substantial near-term climate and economic benefits
Solutions exist

UNECE working with GMI, CCAC, and others to get a GA declaration:
International Decade for Methane Management

Aiming for declaration during the next General Assembly.
Need country support.

Methane's CO₂ Equivalence

ENERGY





Methane: significant GHG emitted from many sectors (agriculture, coal mining, municipal solid waste, municipal wastewater, and oil and gas).

Strong scientific underpinning both on impact on climate and as a precursor to ozone and air pollution (impacts on human health and crop yields)

Growing demand for natural gas → more emissions? But limiting use of natural gas to control emissions would lose a decarbonization option.

Intended Outcomes of an Int'l Decade for Methane Management



ENERGY

- **Increased awareness** across all sectors of the challenge and the solutions
- **Tightened Commitments/Protocols/Convention**
- **Action and Measurable Results:** Reduced methane concentrations in the atmosphere (anthropogenic, all sources)
 - Detailed best practice guidance for all sectors
 - Dissemination, demonstration, and deployment
 - Training, regulation, and outreach
- **Enduring Programmes and Structures** (e.g., Centres of Excellence)

Because these outcomes cannot be achieved in a single year,

Designating an International Decade is recommended



- **UNECE sent recommendation for an International Year declaration to its executive committee that in turn recommended it to the Economic and Social Council (ECOSOC) on June 13, 2019.**
- **ECOSOC “took note”, recognizing the request, but it is for the General Assembly (GA) to act.**
- **Next steps: put a resolution before the GA for action**
 - **When member states push directly with GA, process is easier and faster**
- **Formally the earliest start date appears to be 2023. UNECE believes with concerted effort this could be accelerated:**
 - **It already has been sent to ECOSOC**
 - **An active coalition of the willing can move things forward more quickly**

Anticipated Partners (notional) for an Int'l Decade for Methane Management


ENERGY
Organisations

- UNEP
- WMO
- IEA
- IEA CCC
- FAO
- IMO
- UNECE

**Agencies/
Coalitions**

- CCAC
- GMI
- IPIECA
- DG ENER
- GMA
- World Bank
- EBRD
- Other
financials

**Member
States**

- Canada
- Mexico
- United States
- Russia
- CCAC and GMI
state partners
- Other (?)

**Companies/
Associations**

- GIE
- OGCI
- IGU
- IOGP
- OPEC

NGOs

- EDF
- WEF

Possible Activities for an Int'l Decade for Methane Management (1)



ENERGY

1. **UNECE's Committee on Sustainable Energy: sessions dedicated to methane**
2. **In collaboration with UNEP through the Global Methane Alliance, work with member states to add methane emission reductions to NDCs**
3. **Develop or negotiate best practice guidance, standards, protocols or, if appropriate, a convention on methane**
4. **Int'l Forum on Energy for Sustainable Development featuring a methane track**
5. **CCAC published a global methane assessment and interactive tool (map) in 2021.**
6. **Workshops/Seminars/Webinars covering all emitting sectors**
7. **Development of case studies – application of concrete actions**
8. **Bi-Annual Global Methane Forum**



9. Sponsored research
10. Scientific meetings in coordination with World Meteorological Organization (WMO), Climate & Clean Air Coalition (CCAC), environmental groups (e.g., EDF), etc.
11. Hold methane meetings in collaboration with int'l organisations
12. EU conference on methane in collaboration with DG ENER
13. UN Conference on Methane (UN Headquarters, New York)
14. Meetings on Methane in coordination with global climate meetings (e.g., COP)
15. Coal Mine Methane Conference in China (ICE-CMM in China)
16. Dissemination/deployment activities in other sectors

ENERGY



ENERGY



We need your support!

Thank you!





Overview on the International Methane Emissions Observatory (IMEO)



Giulia FERRINI | Programme Management Officer in UNEP

June 28th 2021

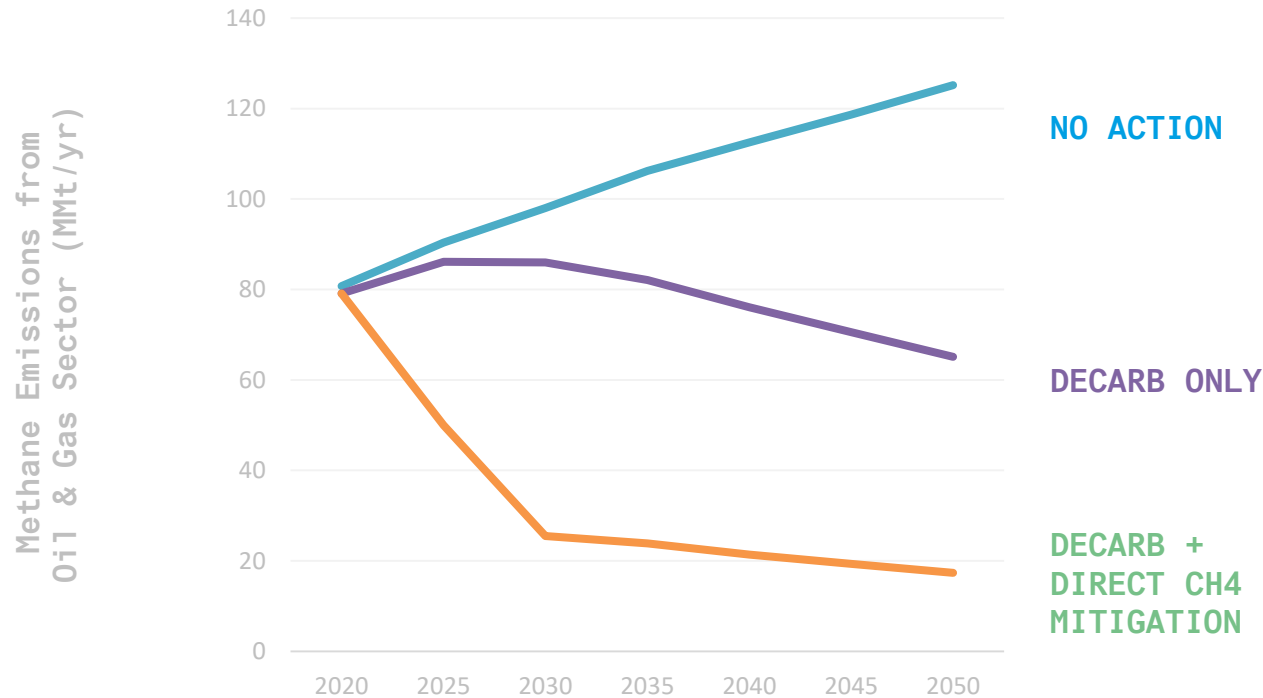
Overview on the International Methane Emissions Observatory (IMEO)

Giulia Ferrini



Better data is needed to achieve the greatest climate benefits from methane mitigation

Emissions Mitigation From Action on Oil and Gas Methane



Source: Ocko et al., (2021). *Acting rapidly to deploy readily available methane mitigation measures by sector can immediately slow global warming.*

Data needed for action at scale

Level of data

- Emissions at source and site-level
- Emissions in every segment of the value chain

Accuracy of data

- internationally recognized repository of transparent and independently verified emissions data

Action enabled by better data:

- Targeted emissions reduction plans
- Identification of super-emitters
- Set and track ambitious methane reduction targets

OGMP 2.0: The “gold standard” of methane reporting



Companies report methane emissions from all assets, **operated and non-operated** across all segments of the oil and gas sector

Member companies will announce individual **reduction targets** that will be periodically reviewed

Achieving gold standard requires **direct measurement** at a source- and site-level

Member companies, reporting on **over 30%** of global oil and gas production, have signed MOUs with UNEP

OGMP Timeline

The Oil & Gas Methane Partnership was launched at the UN Secretary General's Climate Summit in New York in September 2014



OGMP 2.0 launched on 23 November 2020



The Oil and Gas Methane Partnership is the best existing mechanism for improving methane data from the oil and gas industry

Level 1

Venture/Asset Reporting

- Single, consolidated emissions number
- Only applicable where company has very limited information sharing

Level 2

Emissions Category

- Report emissions based on 5 IOGP emissions categories
- Estimates based on emissions factors

Level 3

Generic Emission Source Level

- Emissions reported by detailed source type
- Estimates 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 (e.g. OGMP TGDs, Marcogaz assessment)

Level 5

Site Level

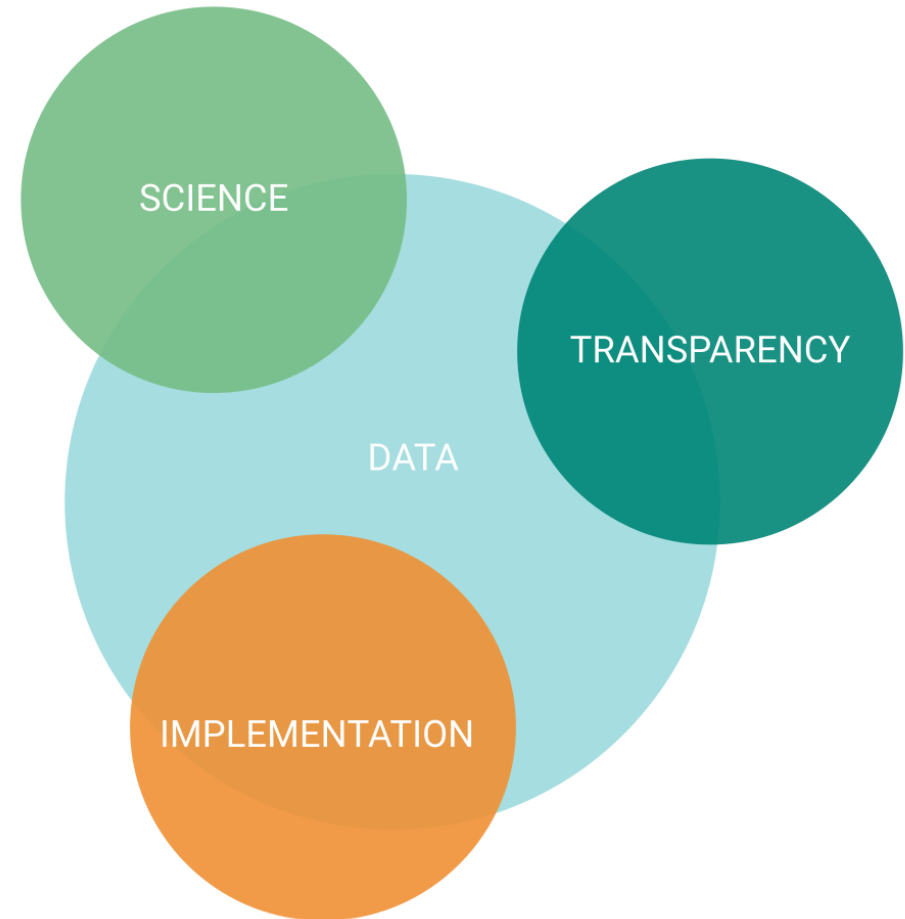
- Emissions allocated to individual source types
- Reporting based on site-level measurements to reconcile source and site level emission estimates

**Gold standard is achieved when all assets with material emissions and where there are no demonstrable impediments report at level 4 and demonstrate efforts to move to level 5.*

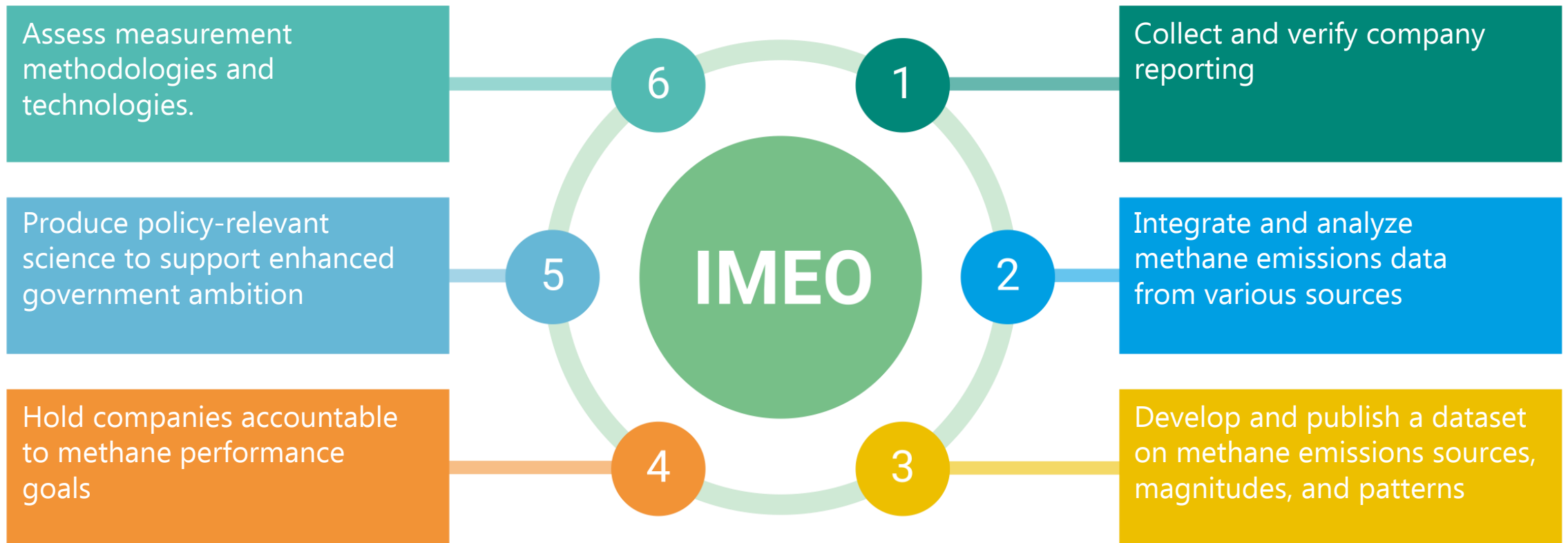
The International Methane Emissions Observatory will revolutionize the global methane emissions approach

Each element is necessary, but not sufficient to drive change

IMEO interconnects activities across the methane ecosystem

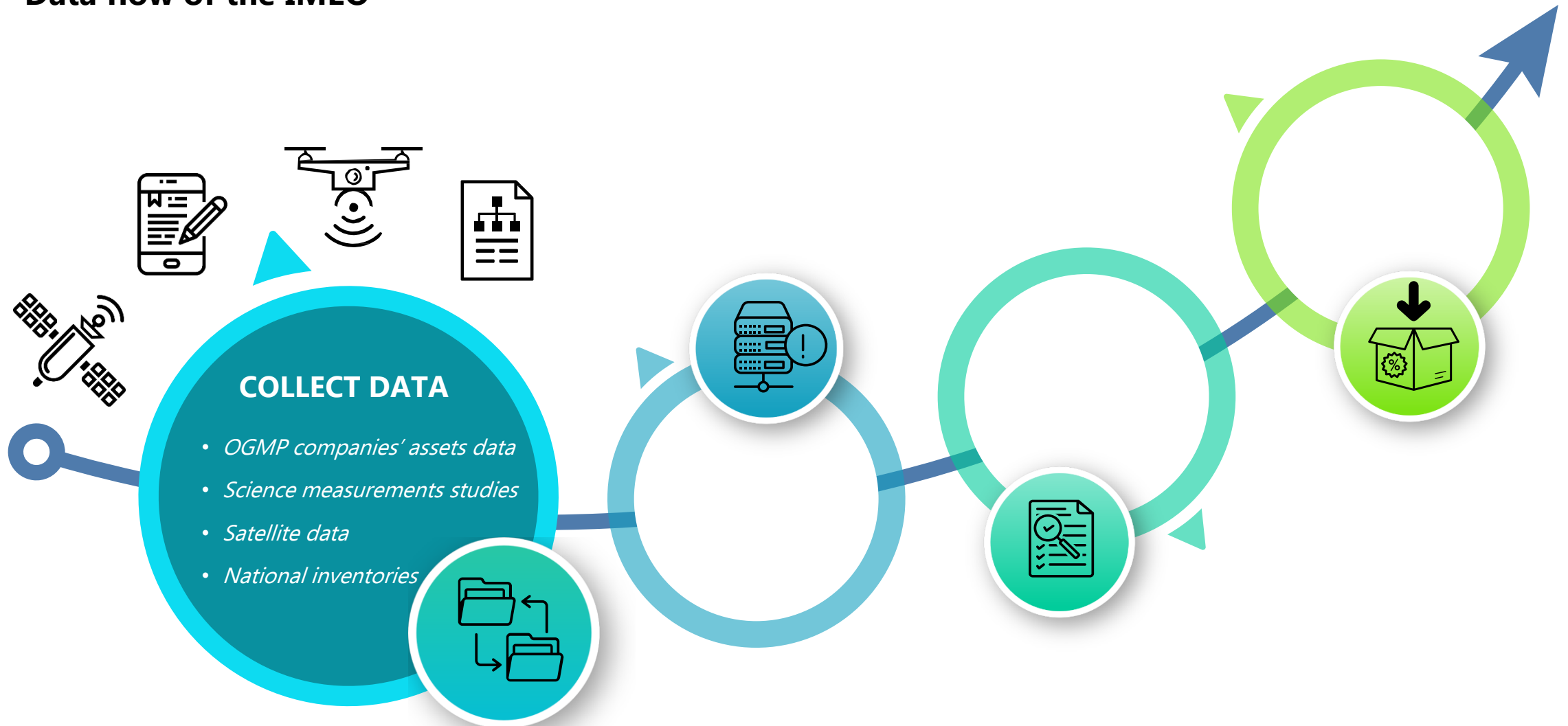


An International Methane Emissions Observatory will provide consistency among multiple methane programs



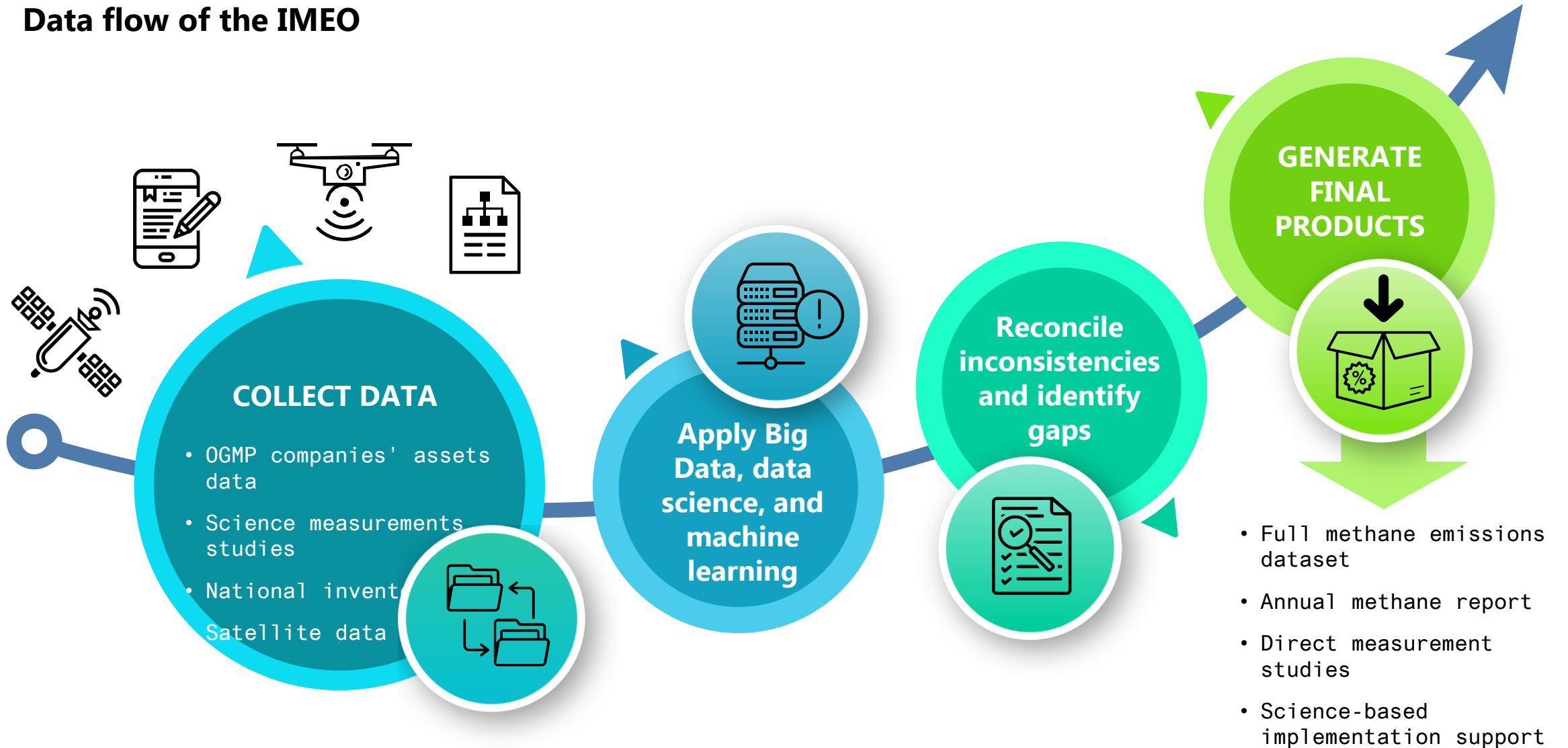
How will IMEO answer the methane emissions data problem?

Data flow of the IMEO



How will IMEO answer the methane emissions data problem?

Data flow of the IMEO



IMEO Governance

Guided by an Executive Board (EB) formed by Government representatives

Advisory Committees will advise the EB and provide it with recommendations

- It will be inclusive and transparent.
- The number of places will not be limited.

Advisory Committees:

- **IGOs** – including the IEA, development banks, UN agencies such as World Meteorological Organization and UN Economic Commission for Europe)
- **Civil society** – NGOs, Universities, and Research Institutions
- **Industry representatives** – OGMP company members only

June 28th 2021

Thank you

Giulia Ferrini

giulia.ferrini@un.org





Methane emissions data uncertainty



Ricardo BOLADO | EC - JRC



Copernicus Programme and methane emissions



Cristina ANANASSO | EC – DG DEFIS



The EU Copernicus programme

Focus on methane
emission
monitoring

Cristina Ananasso
DG Defence Industry and Space
European Commission

Space



Copernicus EU



Copernicus EU



Copernicus EU



www.copernicus.eu





Copernicus

Why Copernicus ?

The Union Earth Observation and monitoring programme

Increase general knowledge on the state of the Planet



Protect people and assets



Improve environmental policy effectiveness

Monitor the environment



Facilitate adaptation to climate change

Foster downstream applications in a number of fields



Help managing emergency and security related situations



Copernicus

COPERNICUS ARCHITECTURE

FULL, FREE AND OPEN DATA



Sentinels

6 services use Earth Observation data to deliver...



...added-value products



Contributing missions





Copernicus timeline... an other perspective

From research to operations

GMES: R&D funded activities under FP7

Preparatory actions

GIO: Initial Operations

Dedicated satellites
Copernicus operational programme
Operational services

Space Programme for Europe

2008

2011

2014

2020+



€1.3Bn

€4.3Bn

€5.4Bn

FP6

FP7

H2020

HORIZON EUROPE

ESA contributes with additional 25-30 %



Copernicus

The current evolution of space in Europe

IN SUPPORT OF



GREEN

DIGITAL

RESILIENT



TRANSITION

#vdLcommission



Political Priorities for the European Commission 2019-2024

1. A European Green Deal
2. An economy that works for people
3. A Europe fit for the digital age
4. Protecting our European way of life
5. A stronger Europe in the world
6. A new push for European democracy





COPERNICUS ARCHITECTURE

FULL, FREE AND OPEN DATA



6 services use Earth Observation data to deliver...



Sentinels



Contributing missions

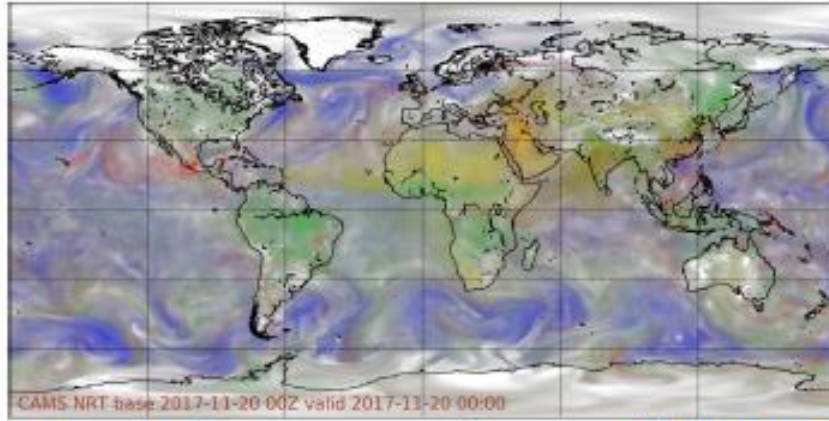


...added-value products



Atmosphere
Monitoring

Copernicus Atmosphere Monitoring Service

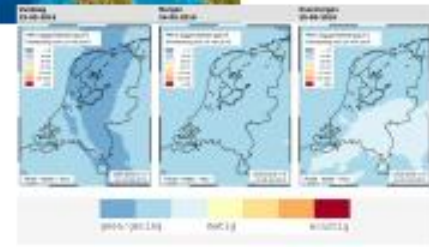


Copernicus



DEVELOPED BY
ECMWF

Transforming satellite
observations into user-
driven services.



DEVELOPED BY
ECMWF

Copernicus
Europe's eyes on Earth

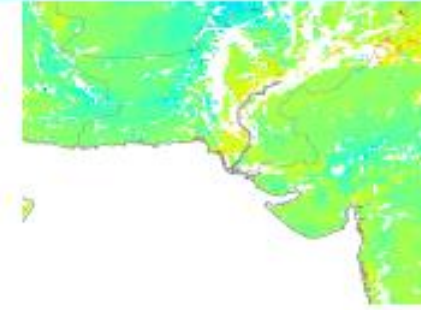
European
Commission



CH₄ emission: CAMS available products (1/2)

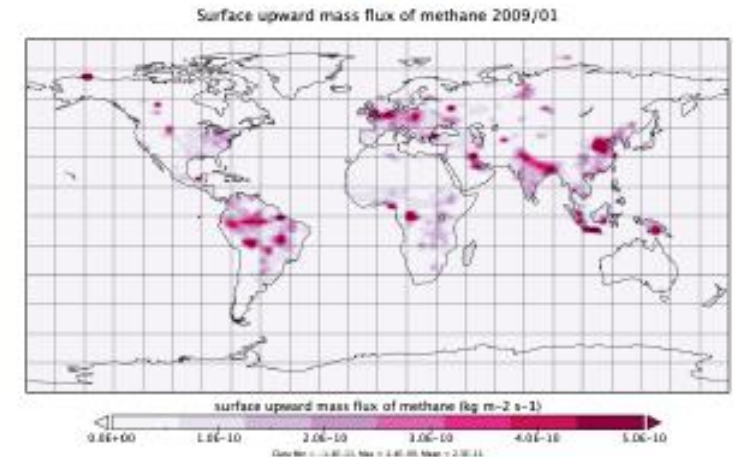
High-resolution satellite observations of CH₄

- Sentinel-5P TropOMI CH₄ product (worldwide)
- Unprecedented pixel size (5 km x 3.5 km)
- Biases (due to clouds, surface temperature, surface reflectance...) depend upon location, season



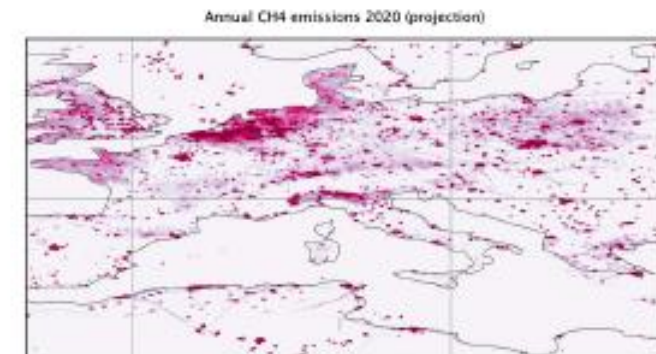
CAMS “top-down” emissions of CH₄

- Monthly averages from January 2009 to December 2019
- Based on surface and satellite (GOSAT, Japan) remote-sensing
- Coarse horizontal resolution 3° x 2°
- Optimisation of separate components: wildfires, wetlands, rice and the rest (other)



CAMS “bottom-up” CH₄ emissions:

- Annual averages (2003-2020) with monthly factors
- Worldwide, 10 km horizontal resolution
- 12 different human activity sectors: agriculture, shipping, industry...

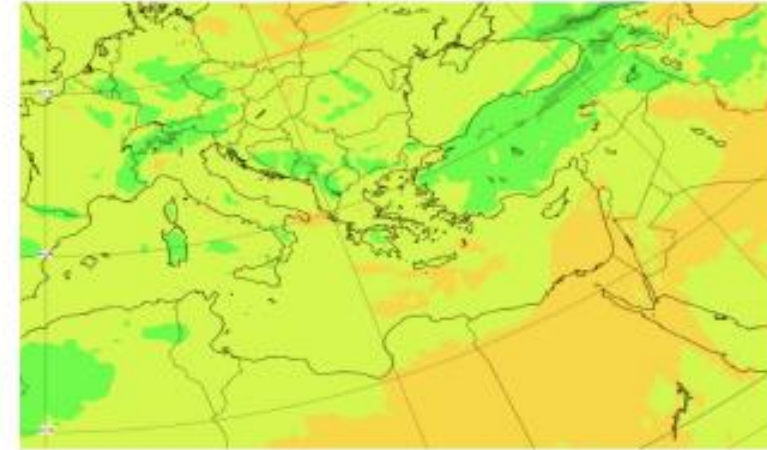




CAMS worldwide CH₄ forecasts:

- What are the expected concentrations of methane in the world over the next five days?
Depends on emissions and weather.

Total column of methane [ppbv] (provided by CAMS, the Copernicus Atmosphere Monitoring Service)
Sunday 28 Feb, 00 UTC T+60 Valid: Tuesday 2 Mar, 12 UTC



CAMS CH₄ “anomalies” monitoring

- Do model “expected” CH₄ concentrations and incoming Sentinel-5P observations differ?
- Are there potential anomalies?



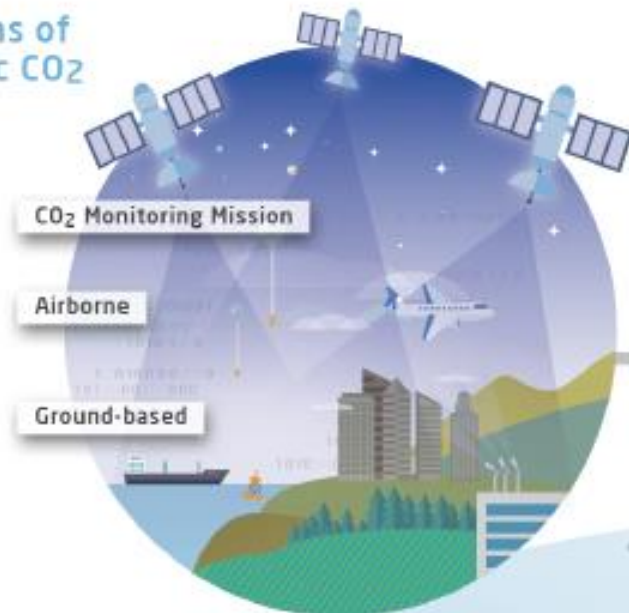


Copernicus has ambitious plans for the next years

Atmosphere Monitoring

A new service element for monitoring **human CO2 emissions** will be part of the evolution of Copernicus, with a dedicated space infrastructure CO2 mission and with increased capacities in monitoring also CH4.

Observations of atmospheric CO2



What we already know



Integration and modelling

Using computer models of the atmosphere, the data are combined to provide timely emission estimates, with the detail required to support mitigation actions from local to global scale.



CLEAN ENERGY FOR ALL EUROPEANS



Brussels, 14.10.2020
COM(2020) 663 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS
on the EU strategy to reduce methane emissions

EU Methane Strategy: Cross-sectoral actions



Improve
measurement,
reporting and
verification (**MRV**)
as well as leak
detection and
repair (**LDAR**)



Review EU
climate and
environmental
legislation



Establish an
International
Methane
Emissions
Observatory
(IMEO)
utilising EU
satellite data



EN EN
Targeted support
for **biogas** from
organic **waste** and
residues



European
Commission



GERG methane emissions roadmap and ongoing activities



Alexandra KOSTEREVA | GERG



GERG

THE EUROPEAN GAS
RESEARCH GROUP

The European Gas Research Group Methane Emissions Research Actions

Joining Forces for a Sustainable Energy Future

Who are GERG?

Our members



Friends of GERG



- **Collaborative R&D group for gas** with strong industry focus since 1961.
- Over 30 members from 12 countries - all active in technology.
- Research Priorities linked to European Gas Industry Strategic requirements and the energy transition.
- Working closely with the EU, CEN, and partner associations in Brussels and internationally.



EC-funded Projects

DEO • CONRAD • DIGBUILD • VOGUE • MICROMAP • PRESENSE • LABNET • GIGA • COMBO • NATURALHY • ORFEUS • INTEG-RISK • GASQUAL • LNG DENSITOMETER • ELEGANCY • THyGA • Biomethane Barriers (CEN) • H2PNR (CEN)

GERG Strategic Priorities



Methane Emissions



Hydrogen



Biomethane

Our objective:

Develop **R&D actions** to improve understanding and quantifying of methane emissions from the mid- and downstream sectors to better target reductions.

Addressing Research Priorities: GERG Working Groups



Methane Emissions



Biomethane



Hydrogen

Brainstorming phase

Gathering of insights from
GERG industry
professionals and experts.

I. Definition of research topics

Scoping of research
knowledge gaps and
evaluation of criticality.

I. Production of the roadmap

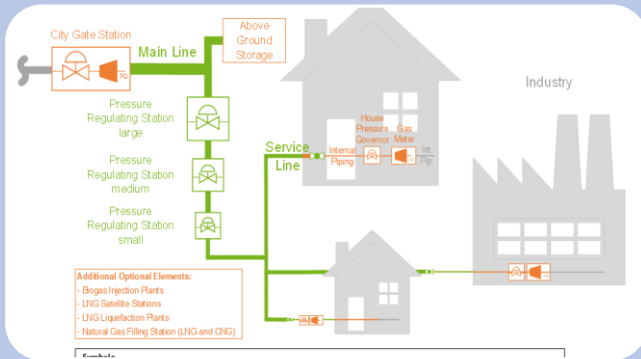
Summary of results and
recommendations for the
most prominent research
topics.

I. Project creation in the GERG Programme Committees:

Distribution and Utilisation
Transmission and Storage
LNG

Roadmaps coordinated with other associations: PRCI, EPRG, APGA, Future Fuels CRC, NYSEARCH, Hydrogen Europe, etc.

GERG's recent record on methane emissions R&D



MEEM (Methane Emission Estimation Method)

- Development of a pan-European method for estimating methane emissions of the gas distribution grid.

Quantifying underground leakages from (gas) pipelines

- Follow up and validation of the MEEM method.
- Set of measurements of **underground leakages** to be used in a methane emission evaluation method.

Measurement of gas emissions from the transmission system

- Selection of easy to use and reliable **tools for detection and measurement of methane emissions.**
- Evaluation of metrological parameters and usefulness for field applications.

Challenges and way forward

Main challenges

- Monitoring, reporting and verification:
 - Evaluation of the uncertainties of measurement technologies
 - Establish EU representative leak size distributions – their interpretation accounting for uncertainties allows better emission estimates
 - Modelling and experimental work to improve emission factors databases
 - Improved sensors (e.g. the High Flow Sampler)
 - Reconciliation between Top-down and Bottom-up measurement techniques

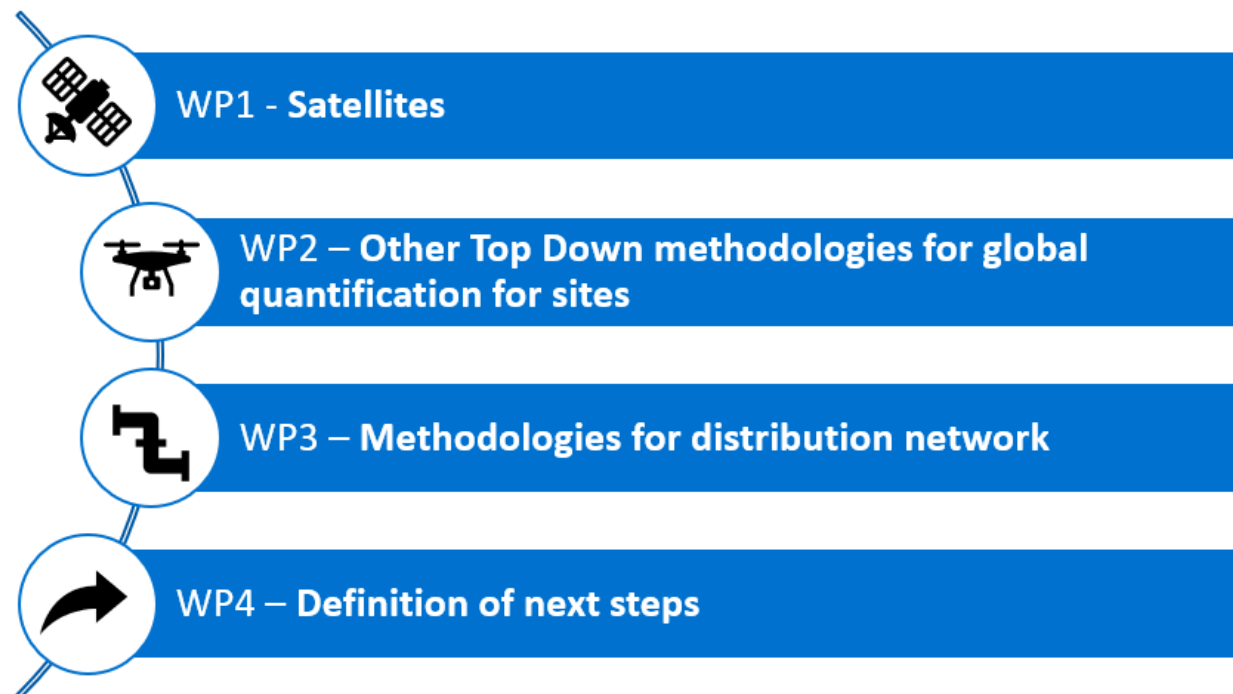
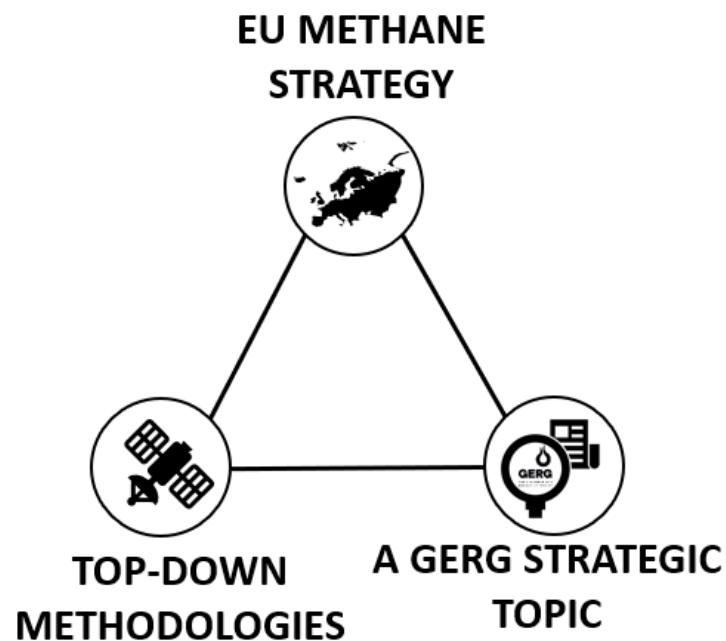
- Mitigation
 - Repair technologies need to be improved in terms of speed and reliability
 - Optimisation of the mitigation action, to improve effectiveness of reduction measures

Comparison of Top-Down methods: an industry-wide project

Comparison of Top-Down methods

Phase I

Main objective : Provide a state of the art analysis of different methodologies for Methane Emissions quantification



Phase II.A: GERG 'Top-Down Challenge'

Phase II.A: GERG 'Top-Down Challenge' Development of controlled leak tests and guidelines for future test in sites

Structure of the project

GERG 'TOP-DOWN CHALLENGE'

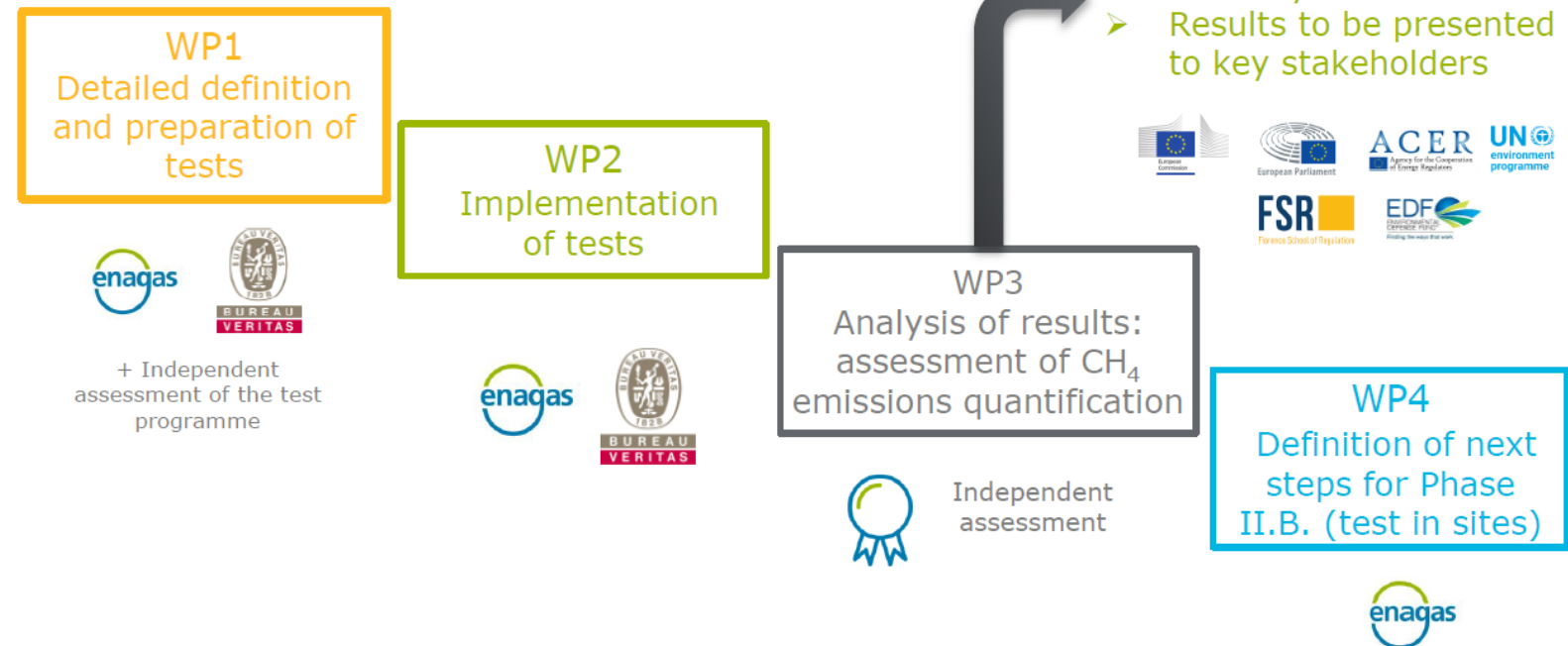
Blind above-ground **controlled release tests** to analyze the **accuracy and repeatability** of 6/7 site level technologies to **quantify methane emissions**

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Violeta Bescos Roy, vbescos@enagas.es



Success through cooperation



Creation of research projects to fill the knowledge gaps. GERG is committed to foster the industry initiatives.



Collaboration with other entities (Marcogaz, GIE, PRCI, ENTSOG, NYSEARCH, Universities...). Ensure transparency and peer review.



Dialogue with the Institutions; initiatives such as the Methane Guiding Principles, where GERG is an associated member.

Thank you for your attention!



GERG

THE EUROPEAN GAS
RESEARCH GROUP



Next steps, wrap-up and concluding remarks

Tania MEIXUS | GIE / MARCOGAZ

Predrag GRUJICIC | Energy Community



<https://www.gie.eu/event/gie-annual-conference-2021/>

GIE Annual Conference 2021

12 & 13 OCTOBER @LUCERNE

BACK TOGETHER 


Gas Infrastructure Europe




erdgas
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Erdgas
Zentralschweiz AG


gaz
nat


GVM
Gasverbund Mittelland AG


SWISSGAS 



Back together!

This year, the **GIE Annual Conference** will take place from **Tuesday 12th to Wednesday 13th of October**.

And we expect you all in Lucerne, Switzerland!

COOPERATION



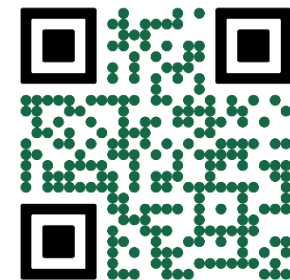
We hope to meet you again
in Vienna before the end of
the year



Moderator



Bogdan SIMION
Data Analytics Advisor GIE





THANK YOU

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