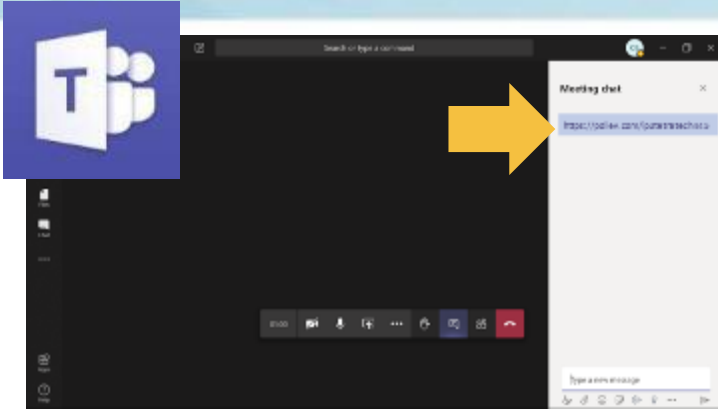


GMI Oil & Gas Subcommittee Virtual Meeting

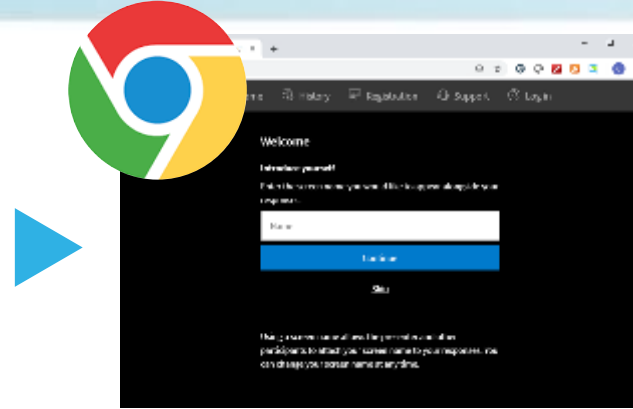
28 October 2020



Poll - Instructions



Click the web link provided in the “Chat” pane.



Respond yes or no to notification settings. Enter a username or remain anonymous.



Answer the question and then navigate back to Teams. The URL will also be displayed at the top of each poll.

Help!

Need Help?

If you need help, please send an email to asg@globalmethane.org

- You may need to disconnect from VPN
- You will have the option to delete and resubmit your response

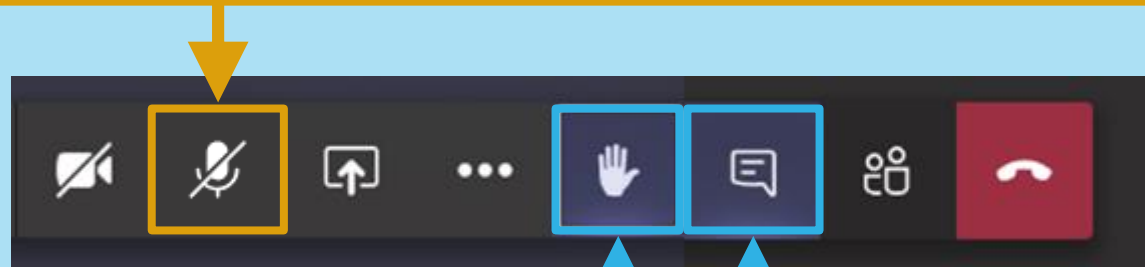
Where are you calling from?



Housekeeping – Tips for using Teams

Mute your microphone.

- Everyone should set the microphone to mute unless actively speaking.
- If participating by phone, press *6 to mute your phone.



If available, use the “Raise your hand” button to be called upon to speak.

Or, enter questions using the “Chat” pane. Type “Raise My Hand” to be called upon to speak.

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Agenda

- **Welcome**
 - James Diamond, GMI O&G Subcommittee Co-Chair, Environment and Climate Change Canada (ECCC)
- **Overview of GMI & Update on Activities**
 - Monica Shimamura, Director, GMI Secretariat
- **Recognizing Global Leaders in Methane Mitigation**
 - Denise Mulholland, U.S. Environmental Protection Agency
- **Discussion: Goals for 2021 and Beyond**
 - All
- **Immediate Opportunities to Engage**
 - James Diamond
- **Wrap up and Next Steps**

- Review of 2020 Priorities
- Setting the Stage for Discussion - Industry Trends and Opportunities
- Subcommittee Objectives and Activities for 2021 and Beyond
- Role of Oil & Gas Subcommittee within new GMI charter

Overview of GMI & Update on Activities

Monica Shimamura
Director, Secretariat
28 October 2020

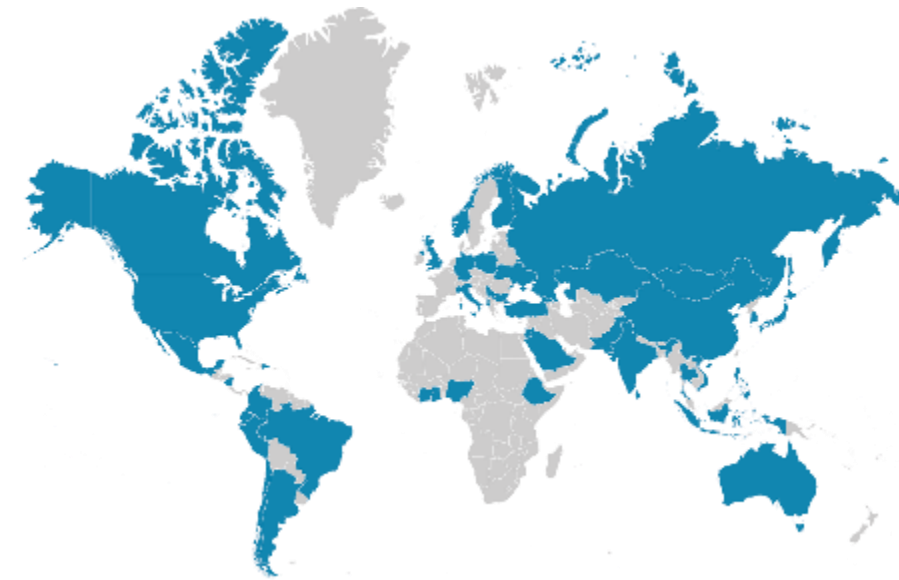


Global Methane Initiative (GMI)



GMI is an international public-private partnership focused on reducing barriers to the recovery and use of methane as a clean energy source.

- 45 Partner Countries
- 700+ Project Network members
- Strategic alliances with international organizations focused on methane recovery and use



GMI Partner Countries represent approximately 75% of the world's man-made methane emissions.



UNECE



**International
Energy Agency**



GMI Organization



- Interested governments may request to join GMI at any time
 - Partner Countries are encouraged to develop action planning documents to identify the overall vision for their participation
 - Partner Countries may appoint up to two representatives to the Steering Committee
 - Partner Countries may appoint technical experts to the technical subcommittees
- Project Network members represent industry, the research community, financial institutions, state/local governments, and other experts
 - Share technical expertise, experience, and financial resources
 - Encouraged to attend subcommittee meetings and other activities supported by GMI and its strategic partners

Recovering and Using Methane in Sectors Targeted by GMI

Estimated Global Man-made Methane Emissions by Source¹



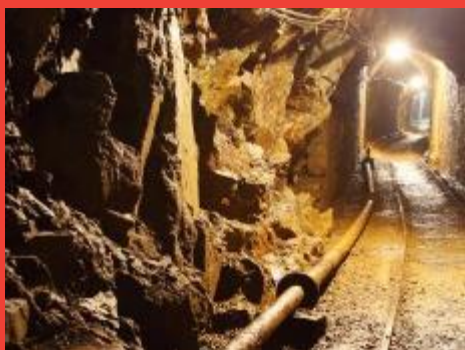
Oil & Gas Sector

Methane emissions from oil and natural gas systems result from both normal operations and system disruptions. These emissions can be cost-effectively reduced by upgrading technologies or equipment, and by improving operations.



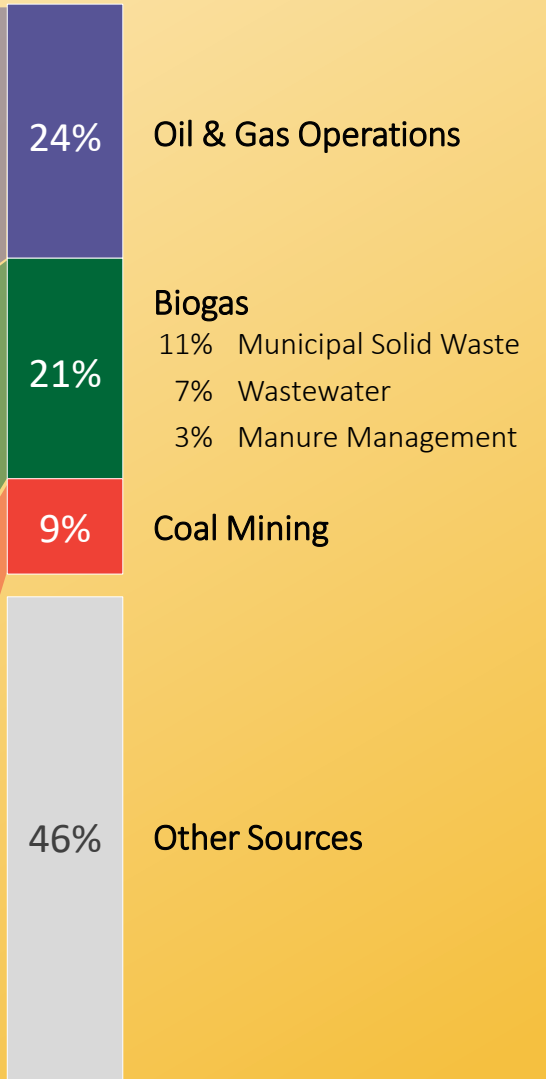
Biogas Sector

Biogas produced from the anaerobic digestion of organic material or emitted directly from landfills can be treated to create pipeline-quality natural gas, used as a cooking fuel, used to generate electricity, and captured on-site to provide heat and power.



Coal Mines Sector

Removing fugitive methane gas from underground coal mines and using it in profitable and practical ways can improve worker safety, enhance mine productivity, increase revenues, and reduce greenhouse gas emissions.



¹ U.S. EPA, *Global Anthropogenic Emissions of Non-CO₂ Greenhouse Gases: 1990–2030*

Secretariat News and Highlights

2020



has been another
very busy year

Pivoting to Virtual Meetings



- ✓ International participation
- ✓ Can “see” each other!
- ✓ Interactive discussions
- ✓ Instant polls

- Executive Task Force – 5 virtual meetings
- Oil & Gas Subcommittee – 2 webinars and 1 virtual meeting
- Coal Subcommittee – 1 virtual meeting
- Biogas Subcommittee – 1 virtual meeting and 1 technical panel
- Steering Committee – 1 virtual meeting

GMI continues to engage with stakeholders to share information and identify and promote methane mitigation opportunities.

Expanding Direct Communications and Social Media



GMI Mailing List

2,028 members

▲ 77% growth
in 2020

748 GMI mailing list subscribers
follow oil and gas



LinkedIn

333 followers

▲ 117% growth
in 2020



Twitter

700 followers

▲ 3.6% growth
in 2020



Facebook

488 followers

▲ 3.8 % growth
in 2020

So far, in 2020:

71 messages distributed to GMI mailing list subscribers

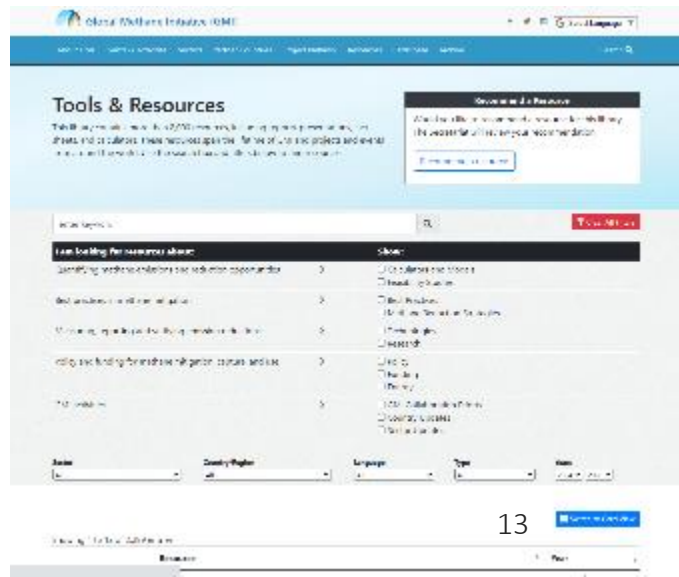
69 messages posted through social media

	Open Rate	Click Rate
GMI	44.5%	11.7%
Industry Avg	27.7%	3.8%

▲ Growth in 2020, based on changes since November 2019

Expanding globalmethane.org to Improve Information Sharing

- Better navigation and organization
- More direct outreach to stakeholders
- Easier access to tools and resources
- Faster load times



Executive Task Force Background



Considering the Future of GMI

- The GMI Steering Committee was scheduled to meet in person in March 2020 during the Global Methane Forum in Geneva, Switzerland
- In response to the postponement, the Secretariat took a virtual approach to facilitate discussion and decision-making regarding the future of GMI, among other issues
- GMI's charter expires in April 2021

Goals of the Executive Task Force

- Engage a broader cross-section of the GMI community beyond Steering Committee members
- Gather information and make recommendations to the Steering Committee

The Steering Committee will discuss the recommendations in December 2020.



Task Force Discussion Topics:

- GMI's Strategic Partners: How to Complement and Leverage Action
- The Global Methane Challenge
- Proposal for United Nations International Year or Decade of Methane Management
- Future of GMI
- Re-Charter of GMI



ETF Members represented:

14 Countries

41 Members

Key Takeaways



Support for extending GMI charter by 10 years to 2031; harmonizes GMI with:

- The Paris Agreement
- Re-chartering of CCAC through 2031
- United Nations (UN) Decade of Methane Management

- Formalize relationships with additional partners; for example, the World Bank, IEA, and UNEP, among others
- Extend the Global Methane Challenge as part of the re-chartered GMI; explore opportunities to make it an awards-type of program
- Support UN Decade of Methane Management
- Become a "hub for all things methane"

Thank you!

Monica Shimamura
shimamura.monica@epa.gov

Recognizing Global Leaders in Methane Mitigation

Denise Mulholland
U.S. Environmental Protection Agency
28 October 2020



Global Methane Challenge

Global Methane CHALLENGE

Global Methane CHALLENGE

Global Methane Initiative

Global Methane Challenge Submission Form

Step 1 Step 2 Step 3 Step 4 Step 5

Tell us your story!
The submission form is organized into 5 steps to make it easy to complete. Once you have finished Step 1, you may exit the form and return later to finish your submission. Let's get started.

Step 1: Tell us about your organization.

Organization Name: _____

Location (Country):

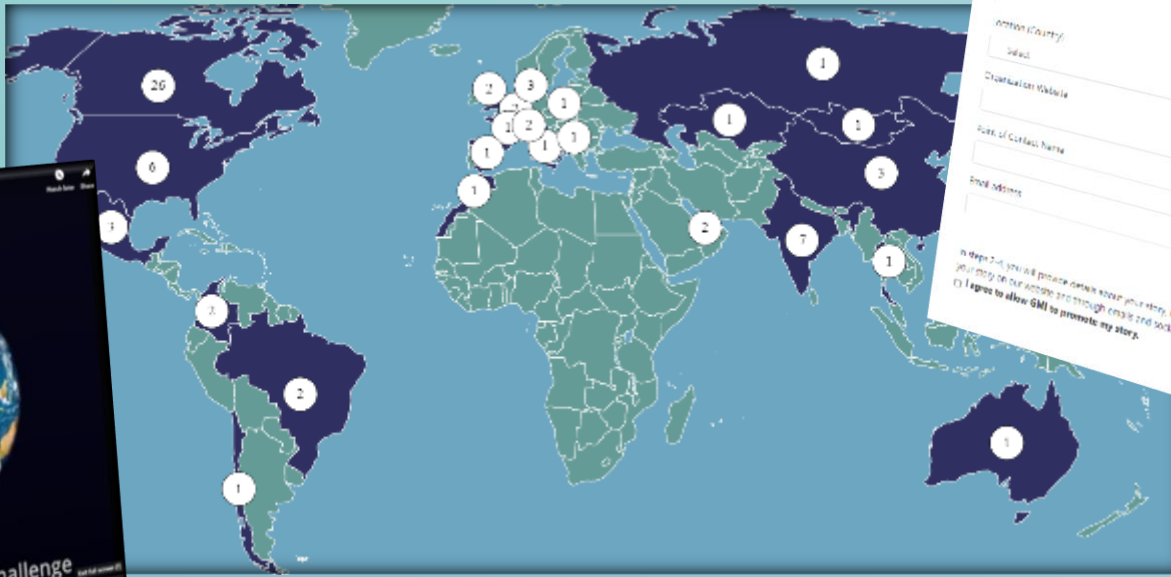
Organization Website: _____

State of Contact Name: _____

Email Address: _____

Phone Number: _____

In Step 2, you will provide details about your story, including relevant website links, photos, graphics, and videos. GMI will use this information to promote your story on our website and through email and social media.
I agree to allow GMI to promote my story.

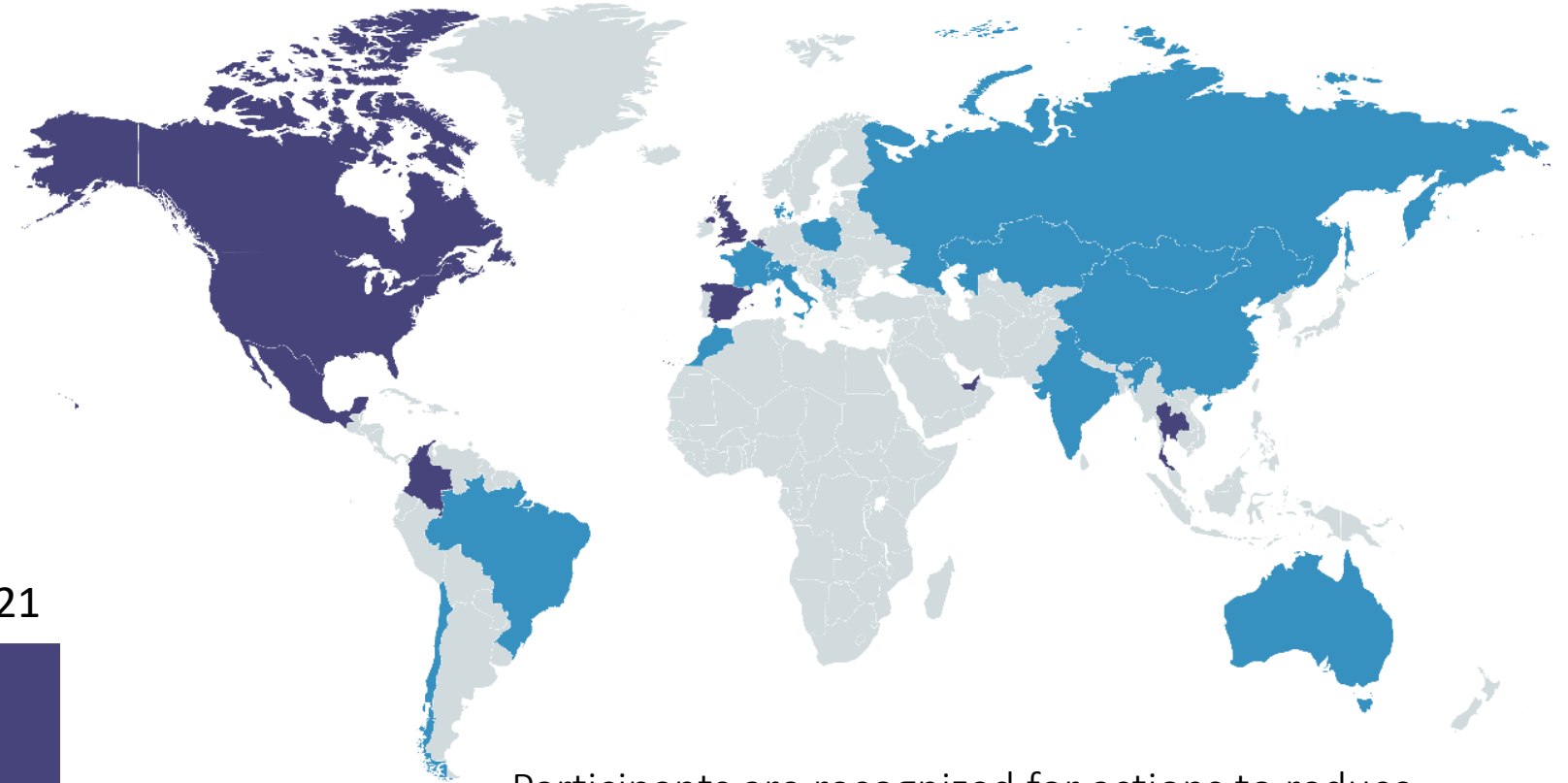


Here are just a few of the amazing projects from around the world that embrace the goal of the Global Methane Challenge

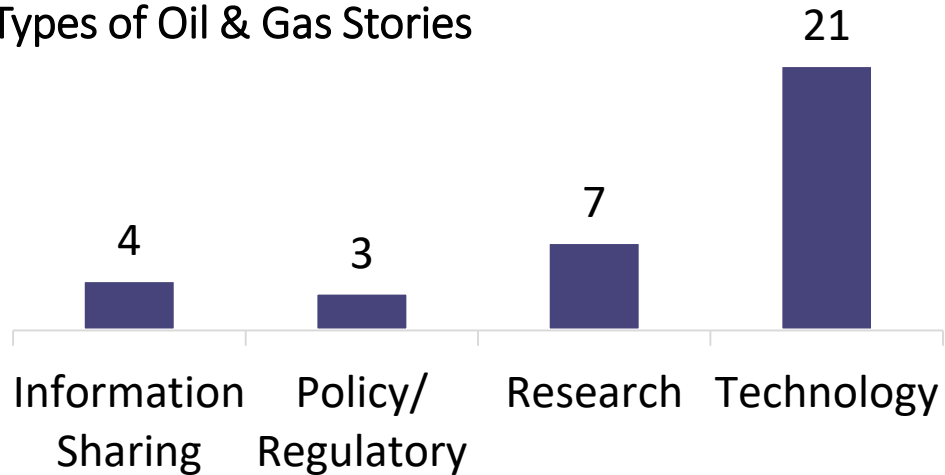
The full list is available at www.globalmethane.org/challenge

Oil and Gas Sector Stories

Sector	Countries	Stories
Oil & Gas	9	35
Biogas	14	32
Coal	6	8
Multiple	5	5
Total	24	80



Types of Oil & Gas Stories



Participants are recognized for actions to reduce methane emissions and their stories are published online, promoted in social media, and featured in GMI outreach.

Oil & Gas Sector Participants



- Arctic Council's Expert Group on Black Carbon and Methane
- Asset Integrity Engineering (United Arab Emirates)
- Blair Air System (Canada)
- Bluefield Technologies (Canada)
- Bluesource Methane (Canada)
- Bridger Photonics (Multiple Countries)
- Cap-Op Energy (Canada)
- Climate and Clean Air Coalition (CCAC)
- Domestic Methane Partnership Programs (USA)
- Ecopetrol (Colombia)
- Enagás (Spain)
- Environment and Climate Change Canada (ECCC)
- GHGSat Inc. (Canada)
- GIE and MARCOGAZ (Belgium)
- Global Methane Alliance (GMA) (UNEP/CCAC)
- Government of Mexico
- HAUG Sauer Kompressoren AG (Switzerland)
- Ingevity Corporation (USA)
- International Energy Agency
- LCO Technologies Canada (Canada)
- LiDAR Services International Inc. (Canada)
- Metropolitan Utilities District (USA)
- MinEnergia and Universidad Nacional de Colombia (Colombia)
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Petroleum Technology Alliance Canada
- Process Ecology Inc. (Canada)
- PTT Public Company Limited (Thailand)
- QLM (United Kingdom)
- Qnergy (USA)
- Questor Technology (Canada)
- Saskatchewan Research Council (SRC) (Canada)
- Sirius Instrumentation & Controls (Canada)
- Southwest Research Institute (USA)
- St. Francis Xavier University (Canada)
- The Low Carbon Economy Fund (Canada)
- The Sniffers (Belgium)
- UNEP: Oil and Gas Methane Partnership (OGMP)
- United Nations Environmental Programme (UNEP)
- Westgen Technologies (Canada)

Recognizing Global Leaders in Methane Mitigation

Recognition Video



View at
globalmethane.org/challenge

- Video was prepared for a recognition ceremony at the 2020 Global Methane Forum
- Features:
 - Overview of the Challenge by Helen Ryan, GMI Steering Committee Co-Chair
 - Importance of Collaborative Efforts to Mitigate Methane by Scott Foster, UNECE
 - Highlights of many submissions
 - List of all Challenge participants



Goals for 2021 and Beyond

James Diamond
GMI O&G Subcommittee Co-Chair
28 October 2020



Review of 2020 Priorities

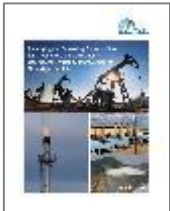
- Conduct GMI Oil & Gas Subcommittee Meeting at the Global Methane Forum 2020 and in conjunction with UNECE's Group of Experts on Gas
- Build relationships with Strategic Alliance partners to improve outreach and capacity building
 - Promote tools, resources, and webinars provided by other organizations
- Update and enhance Subcommittee Action Plan
- Conduct webinars to keep subcommittee members informed and engaged
 - 23 June 2020
 - 23 September 2020
 - Additional webinar to be conducted in the next few months

2020 Support for Technical Resources to Enhance Capacity Building

- Provided input to oil and gas methane management studies and products
- Collaborated with other agencies (UNECE) and developed technical resources



Best Practice Guidance for Methane Management in the Oil and Gas Sector



Identifying and Evaluating Opportunities for Greenhouse Gas Mitigation & Operational Efficiency Improvement at Oil and Gas Facilities

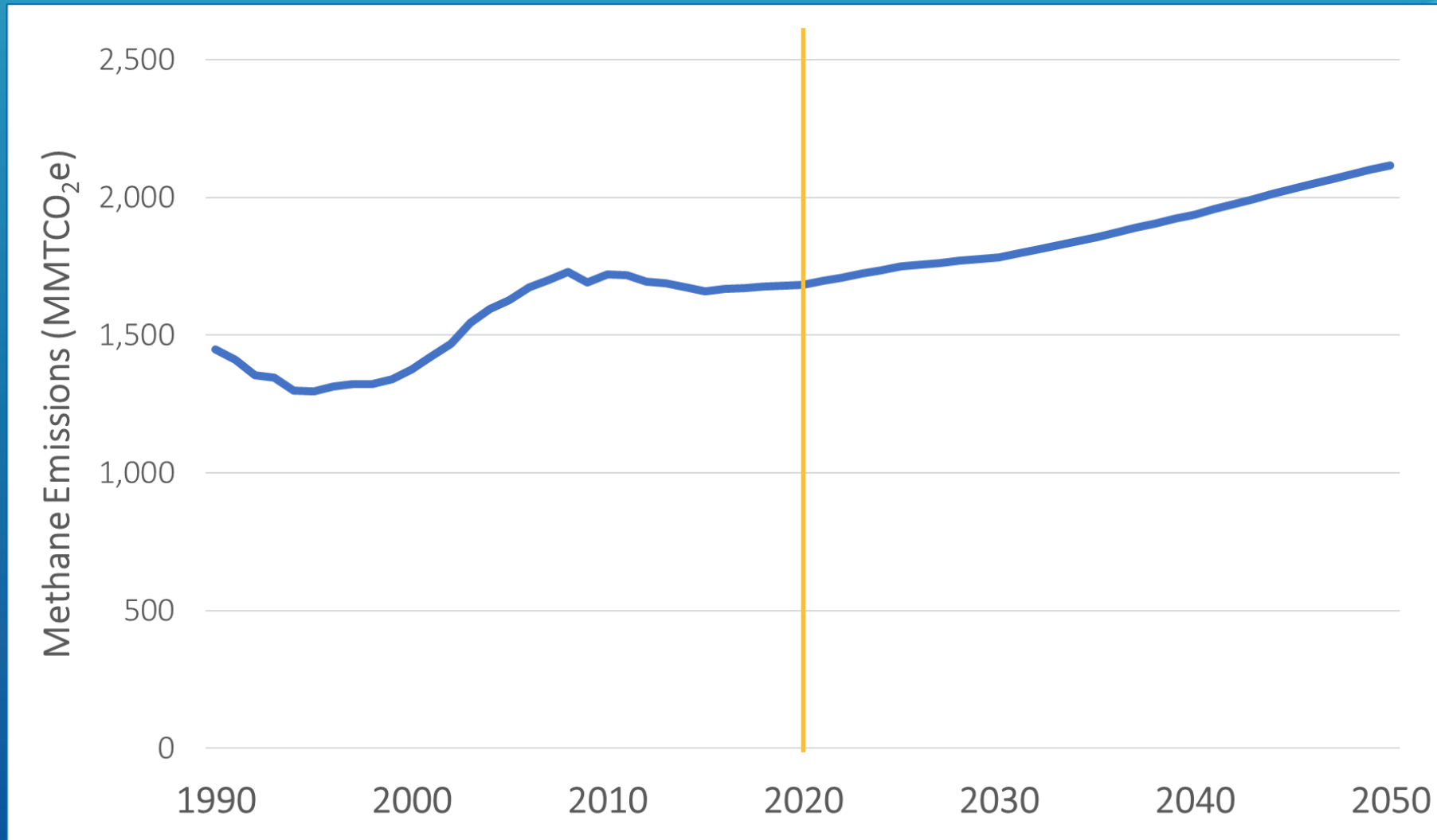
- Initiated development of training resources
 - Leak Detection and Repair Program (LDAR)
 - Identification and Development of Methane Mitigation Projects

Setting the stage for discussion

Industry Trends and Opportunities



Global Oil & Gas Methane Emissions and Projections (1990-2050)



Data based on U.S. EPA report, *Global Non-CO₂ Greenhouse Gas Emission Projections & Mitigation Potential: 2015-2050*

What Organizations Are Doing in the Oil & Gas Sector

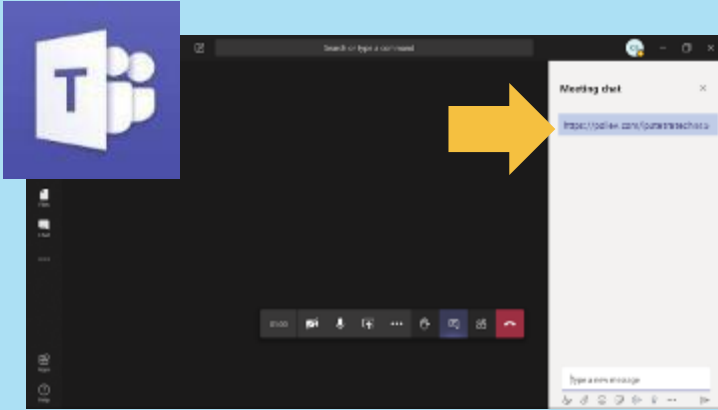
	Core Activities	GMI	OGMP 2.0*	GMA	UNECE	World Bank	IEA	OGCI	EDF	CATF
Policy	Develop emissions reductions targets and policy	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Promote sustainable development goals to meet political commitments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Advocate for public policy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Information	Identify best practices for methane emissions reductions and use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Distribute tools, data, and resources about methane mitigation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Collect, compile, and publish emissions data	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Capacity Building and Training	Build capacity to implement methane policies and projects	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Develop tools and analysis to advance decision-making and action	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Advance private sector involvement in methane projects	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Provide training for Oil & Gas stakeholders	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Facilitate connections among policy makers, communities, and industry	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Research and Technology	Conduct methane science and site feasibility studies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
	Conduct innovative technology demonstrations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Finance methane projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Support and share results of research and technology innovation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

*The OGMP 2.0 framework is currently under review and will be implemented soon.

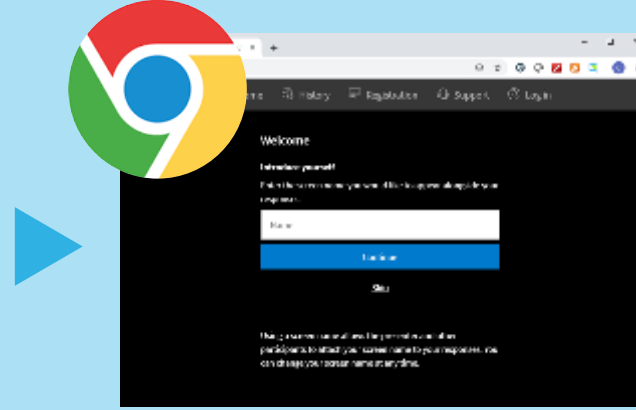
Subcommittee Objectives and Activities for 2021 and Beyond

Potential Objectives for GMI's Oil & Gas Subcommittee	Core Activities	GMI
Policy Provide direct engagement, assistance and training to help countries develop and implement effective methane mitigation policies	Develop emissions reductions targets and policy	<input type="checkbox"/>
	Promote sustainable development goals to meet political commitments	<input type="checkbox"/>
	Advocate for public policy	<input type="checkbox"/>
Information Provide stakeholders with easy access to available best practices, tools, and information by promoting resources through the GMI website, social media, and direct communications	Identify best practices for methane emissions reductions and use	<input checked="" type="checkbox"/>
	Distribute tools, data, and resources about methane mitigation	<input checked="" type="checkbox"/>
	Collect, compile, and publish emissions data	<input type="checkbox"/>
Capacity Building and Training Provide targeted training and outreach to build relationships and increase the capacity of countries to support methane abatement, recovery and use projects in the oil & gas sector	Build capacity to implement methane policies and projects	<input checked="" type="checkbox"/>
	Develop tools and analysis to advance decision-making and action	<input checked="" type="checkbox"/>
	Advance private sector involvement in methane projects	<input checked="" type="checkbox"/>
	Provide training for Oil & Gas stakeholders	<input checked="" type="checkbox"/>
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Research and Technology Provide access to research, analysis and tools to help stakeholders advance methane projects in the oil & gas sector	Conduct methane science and site feasibility studies	<input type="checkbox"/>
	Conduct innovative technology demonstrations	<input type="checkbox"/>
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	Support and share results of research and technology innovation	<input checked="" type="checkbox"/>

Poll - Instructions



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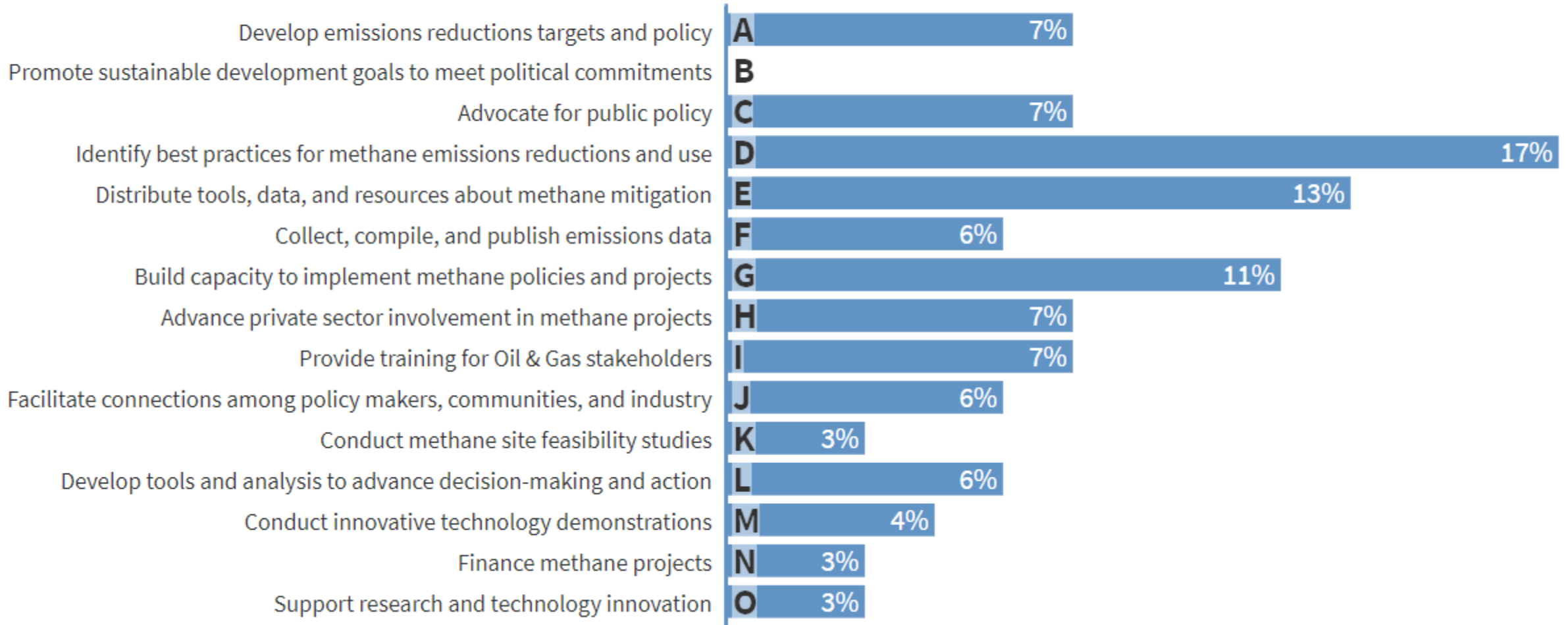
Help!

Need Help?

If you need help, please send an email to asg@globalmethane.org

- You may need to disconnect from VPN
- You will have the option to delete and resubmit your response

Pick three activities that we should prioritize.



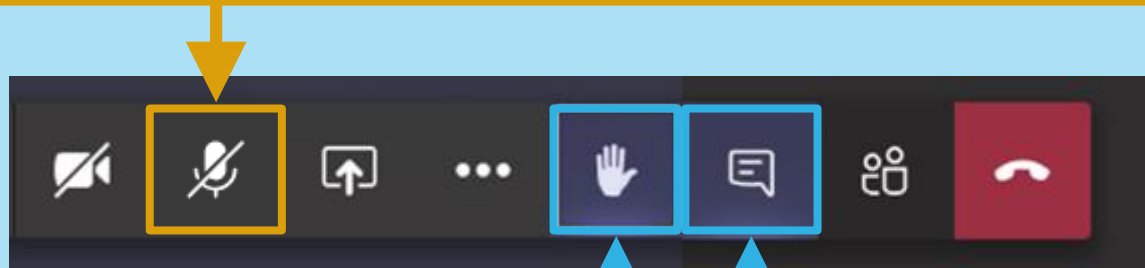
What Other Activities Should the O&G Subcommittee Consider?

Response
Appreciate important regional differences (not everybody is confronted with big leaks) and therefore also develop tactics for O&G players that are further on the maturity level.
Sharing the strategies that oil and gas companies who have committed to net zero methane emissions are taking
Prioritize development of technologies for emissions detection, quantification, reporting and mitigation. Cumulative small leaks add up to a lot, but a greater and earlier impact can be made by focusing on the big emissions first.
Linking Innovative tools and Research to decision making. For example: use of atmospheric observations to detect leakages and emission hotspots
Develop country specific emission factors
Carbon pricing

Discussion

Mute your microphone.

- Everyone should set the microphone to mute unless actively speaking.
- If participating by phone, press *6 to mute your phone.



If available, use the “Raise your hand” button to be called upon to speak.

Or, enter questions using the “Chat” pane. Type “Raise My Hand” to be called upon to speak.

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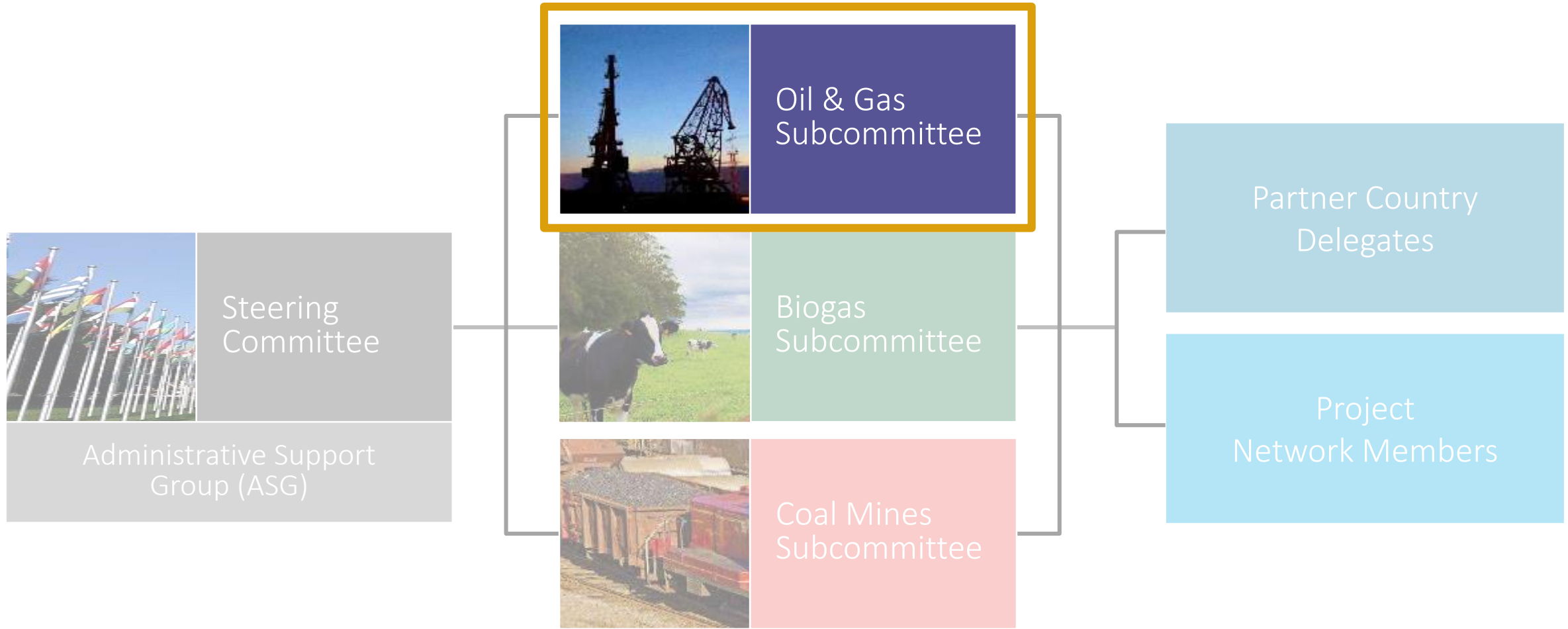
DISCUSSION

Objectives and Activities for 2021 and Beyond

Subcommittee Objectives and Activities for 2021 and Beyond

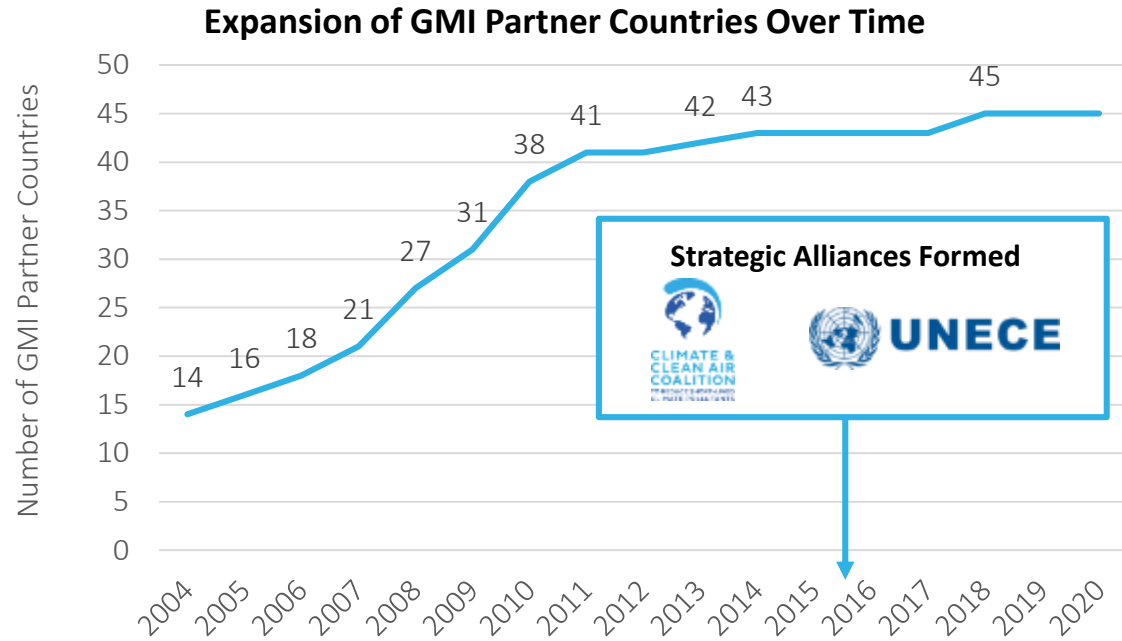
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	Provide training for Oil & Gas stakeholders	<input checked="" type="checkbox"/>
	Facilitate connections among policy makers, communities, and industry	<input checked="" type="checkbox"/>
Research and Technology Provide access to research, analysis and tools to help stakeholders advance methane projects in the oil & gas sector	Conduct methane science and site feasibility studies	<input type="checkbox"/>
	Conduct innovative technology demonstrations	<input type="checkbox"/>
	Finance methane projects	<input type="checkbox"/>
	Support and share results of research and technology innovation	<input checked="" type="checkbox"/>

Role of the GMI O&G Subcommittee within the New GMI Charter



Summary of Past 16 Years

GMI Re-chartering Options



- Historically, GMI has been re-chartered in 5-year increments (with occasional 1-year extensions while the partnership was being re-chartered)

5 Years through 2026

10 Years Through 2031

10-year vision through 2030

EU Methane Strategy through 2030

Decade for Methane Management



What should the Steering Committee consider when making the decision to re-charter the GMI?

Response
Expanding collaboration with other international efforts for methane mitigation
Keep the mandate as flexible as possible with a broad scope to accommodate changing policy and technological advances
Monetization of Mitigated Methane
Alignment with CRIN
Inter-Regional Initiatives, Engage with Governments actively, Technology Innovation
Understanding the role of GMI in the context of other international activity
Consider changing GMI's Terms of Reference to allow private sector representatives to be appointed to Subcommittees
Develop/promote best practices for mitigation measures, particularly for MRV, specifically targeted to Covid-19 recovery
Partner with other organizations to deliver more GMI events; co-brand to leverage resources

Immediate Opportunities to Engage



Oil & Gas
Subcommittee

Express interest in filling Oil & Gas
Subcommittee Co-Chair position



Provide
feedback on
topics of
planned
Webinar Series
and other
future topics

Identify case studies for
planned GMI report:



*The Investment Decision Process
for Greenhouse Gas (Methane)
Mitigation Projects/Opportunities/
Options*

CALENDAR						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
Share resources, events, and news to be promoted by GMI						
22	23	24	25	26	27	28
29	30					



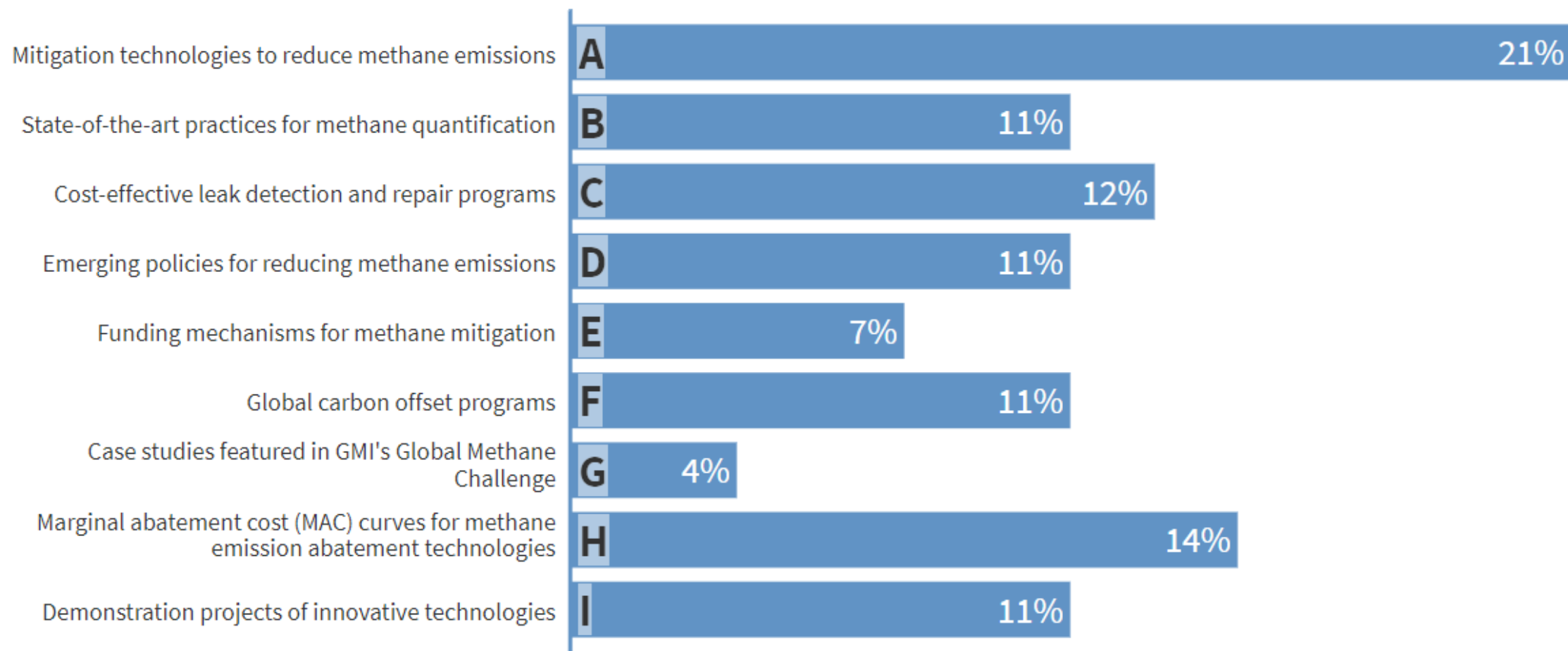
**Global
Methane Initiative**
Project Network Member

Join the GMI Project Network



Follow GMI on social media

Select three webinar topics that interest you the most.



Wrap Up and Next Steps

- Secretariat will prepare a meeting summary and action items based on today's discussion
- A recording of today's Subcommittee meeting and this presentation will be posted on the GMI website soon
- Updates about today's discussion and feedback will be shared with the GMI Steering Committee in December
- Stay tuned for news and updates about:
 - Oil & Gas Subcommittee webinars
 - Other oil & gas activities and events promoted by GMI
 - 2021 Oil & Gas Action Plan

Reminder

We welcome your feedback!
We encourage you to share suggestions by email to asg@globalmethane.org.

Thank you for participating today



“See you” at the next webinar!