

UNECE TASKFORCE ON METHANE EMISSION REDUCTION

Volha Roshchanka

05/16/2023

WELCOME

UNECE Taskforce on Methane Emission Mitigation

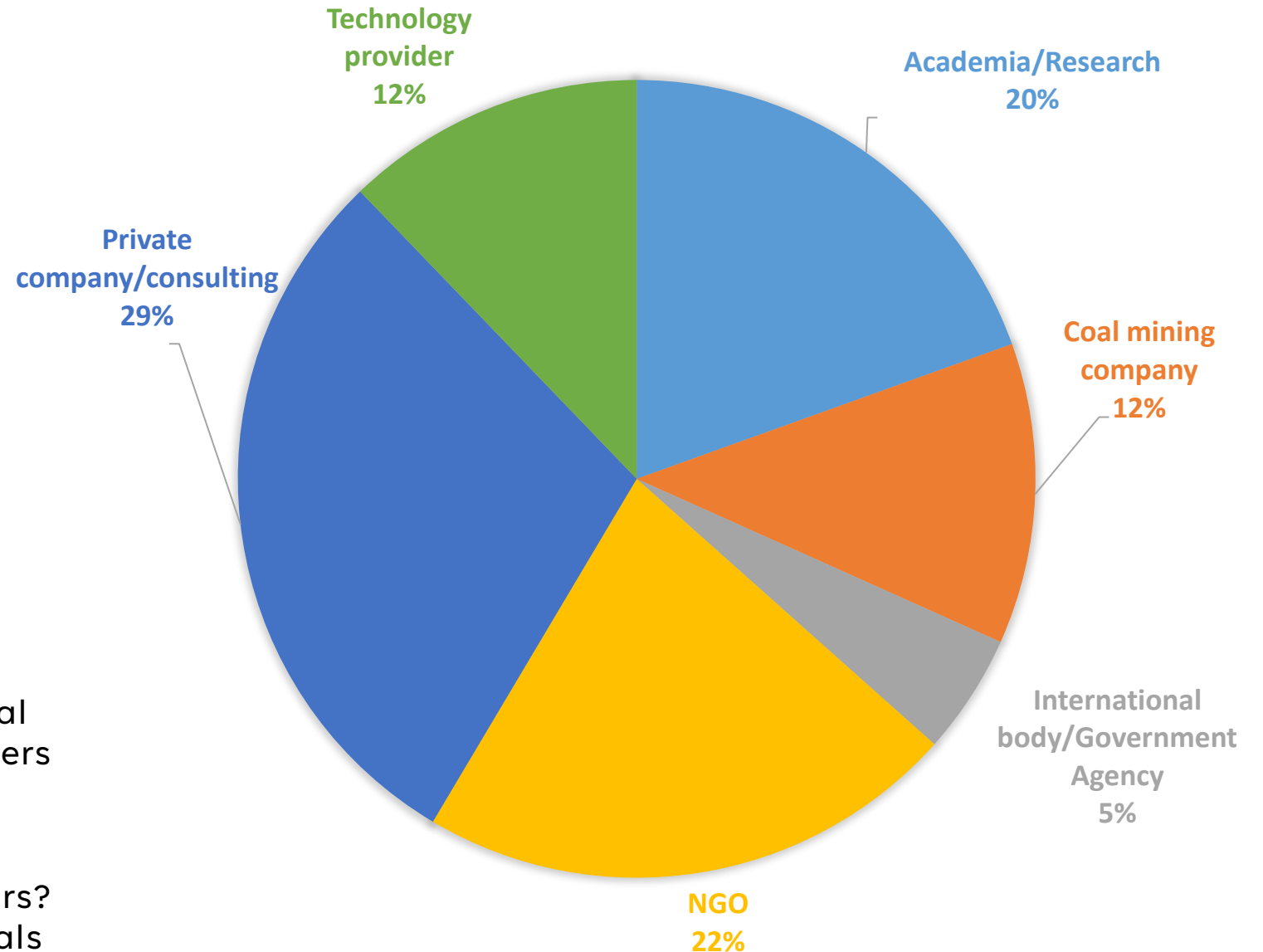
50 Group of Expert members signed up to the TF

TF members were asked to complete a form

42 TF members responded

Who are we?

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- Last meeting in Geneva: a proposal was voiced to attract more members from coal mining companies
 - Should we also attract more members from among policymakers? If so, how do we tailor our materials to this audience?



MEETINGS

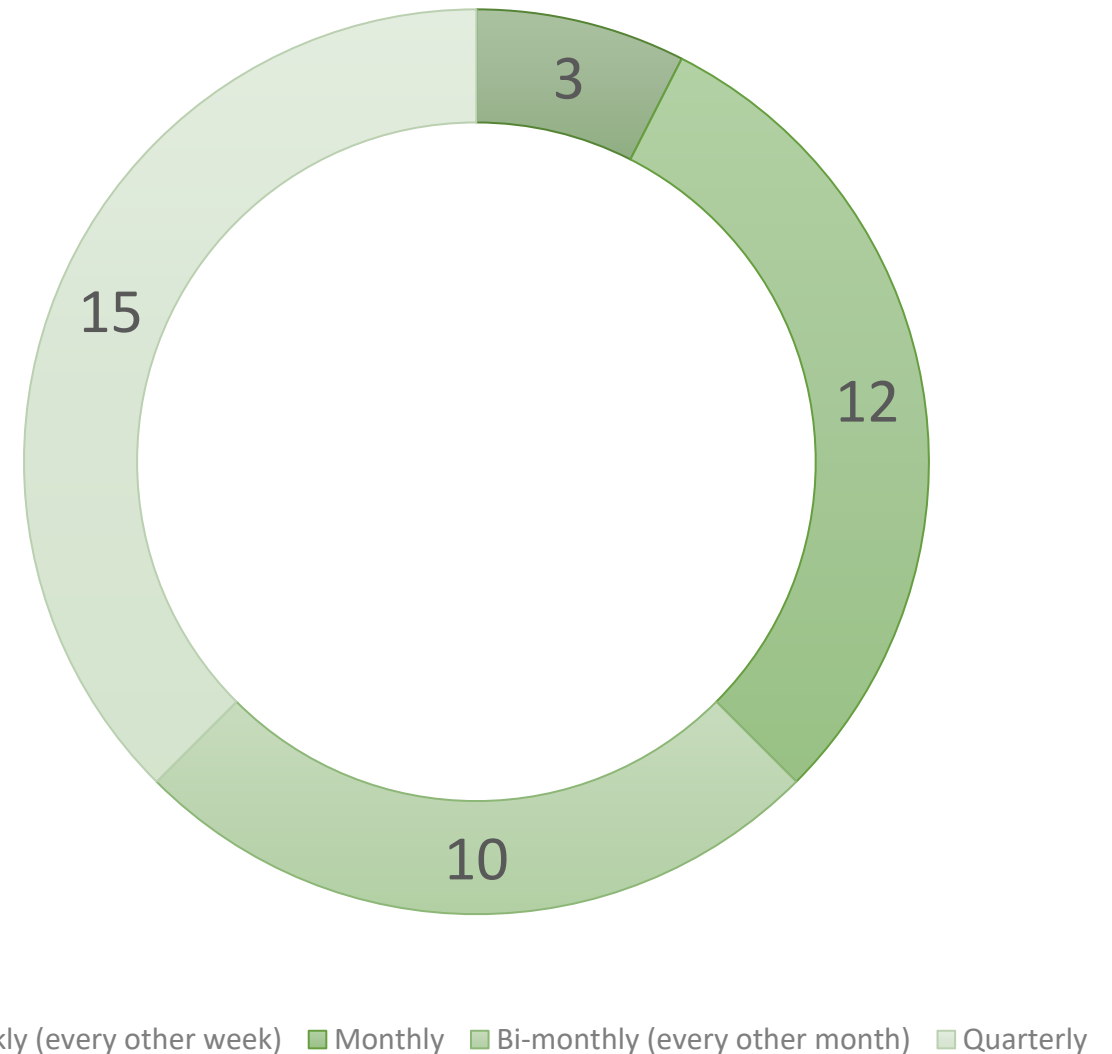
40 members had an opinion on how to meet

The most requested frequency was quarterly, followed by monthly.

Considering a large number of people wanted to meet bi-monthly, a good compromise would be meet **bi-monthly**.

We can adjust the frequency in the future.

-
- Proposal for the next meeting to take place in **July**
 - Look out for doodle poll soon from Michal!



DECISIONS

The TF members were asked how they would like to make decisions:

- Consensus
- Majority/Vote
- Whoever has the time/resources

Responses were scored based on ranking

The group has a preference for voting but leaning towards consensus

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- Noting to allow more time for discussion
 - Incorporate Teams polls into meeting to accommodate voting

Decisionmaking Preference



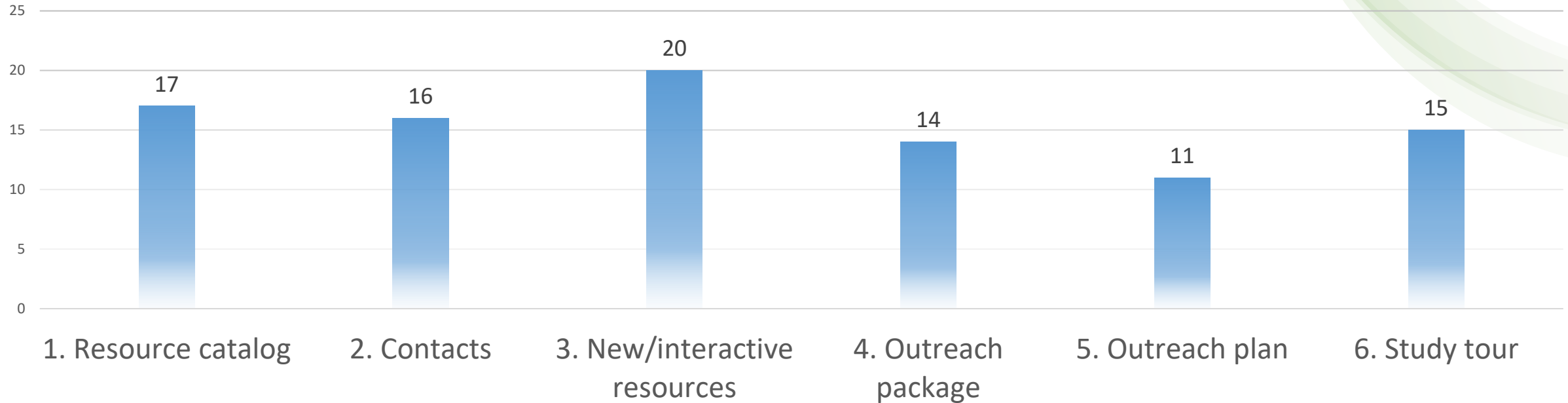
1ST ACTIVITY IDEA

OUTREACH TO KEY
STAKEHOLDERS
(POLICYMAKERS,
MINING COMPANIES)
TO SHARE BASIC
RESOURCES AND
CONCEPTS

Sub-activities proposed:

1. Developing a comprehensive **catalogue** of resources (e.g., excel spreadsheet) available through UNECE/GMI/Ember and others, sortable by purpose, audience, level of expertise required
2. Developing a list of **stakeholder contacts**
3. Developing **new, short, visual/interactive resources** (for non-technical audience), e.g., comparative information on costs of various mitigation projects, gaps for wide scale implementation of VAM projects
4. Compiling an **outreach package** for taskforce members
5. Creating an **outreach plan** with responsibilities assigned to members to contact identified stakeholders, focusing on engaging coal mines
6. A **study tour** for policymakers working on coal mining

1ST IDEA: VOLUNTEERS



- **Everyone** is invited to contribute to the resource catalog and contact list (coal companies and policymakers)
 - Templates are posted by UNECE on the SharePoint site. Please let Michal know if you don't have access
- A lot of interest in developing new interactive resources
- Interest in organizing a study tour, particularly among coal mining companies

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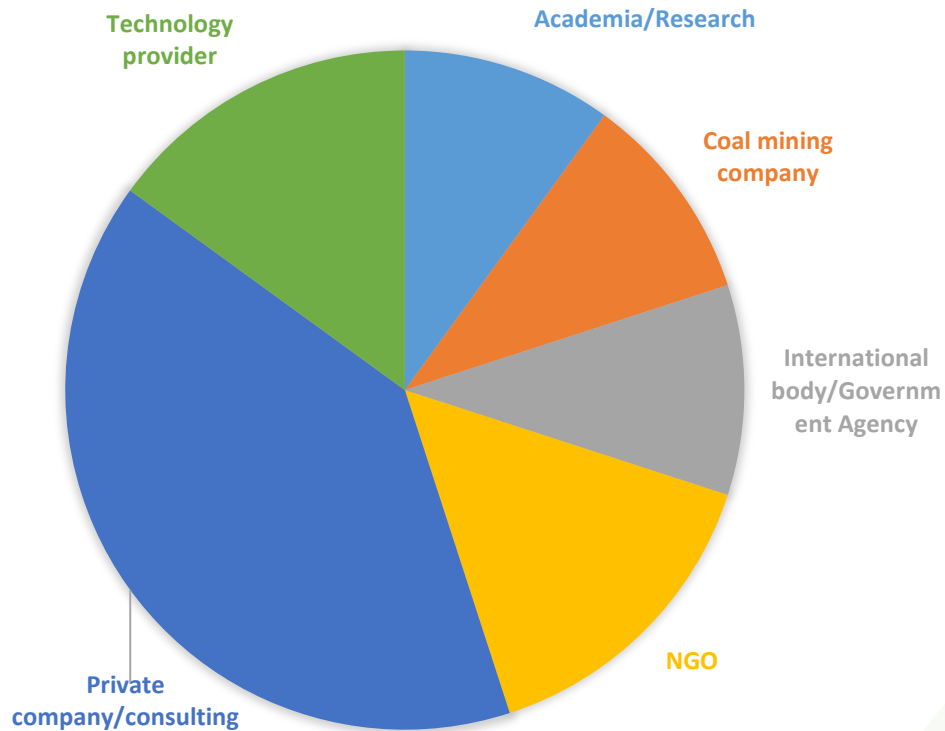
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F9 Intermetiate/Some technical knowledge is required

	A	B	C	D	E	F	G
	Author/Owner/ Developer	Resource Name Name	Type of Resource	Primary Audience	Secondary Audience	Technical Knowledge Required	Resource Purpose
1	UNECE / GMI	Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines	Best practice guidance/description	Coal mining companies	Policy advisers: technical experts	Advanced/In-depth technical discussion/Longer document	To provide decision-makers with a solid base of understanding from which to direct policy and commercial decisions
2	UNECE / GMI	Best Practice Guidance for Effective Methane Drainage and Use in Coal Mines (The second edition) (December 2014)	Best practice guidance/description	Coal mining companies	Policy advisers: technical experts	Advanced/In-depth technical discussion/Longer document	To provide decision-makers with a solid base of understanding from which to direct policy and commercial decisions
3	CMOP/ EPA	Coal Mine Methane (CMM) Recovery Opportunities Map	Database of project development opportunities	Project developers	Policy advisers: technical experts	Advanced/In-depth technical discussion/Longer document	To inform of current projects and potential opportunities to develop coal mine methane (CMM) recovery and utilization projects at active U.S. coal mines
4	CMOP / EPA	CMM Cash Flow Model	Financial/economic assessment of projects	Coal mining companies	Project developers	Advanced/In-depth technical discussion/Longer document	To evaluate the potential economic viability of projects
5	CMOP / EPA	Coal Mine Methane Recovery at Active and Abandoned U.S. Coal Current Projects and Potential Opportunities (March 2020)	Methane project database	Project developers	Policymakers: national or regional	Intermetiate/Some technical knowledge is required	To profile selected gassy underground mines that have implemented CMM projects or might be suitable for project development
6	Global Methane Initiative	Global Methane Initiative International Coal Mine Methane Projects Database	Methane project database	Policymakers: national or regional	Project developers	Intermetiate/Some technical knowledge is required	To provide the comprehensive repository of data and information on all CMM recovery and use projects in operation and development around the world
7	Global Methane Initiative	Coal Mine Methane Country Profiles	Resource assessment and opportunity analysis	Project developers	Policy advisers: technical experts	Intermediate/ Policymakers'	To scope out opportunities across the world for coalmine methane (CMM) recovery projects serving

TO-DO: NEW RESOURCES

WHO?



- Alina Mroz (Project Developer)
- Bartłomiej Bezak (Polish Mining Group PGG S.A.)
- C. Özgen Karacan (US Geological Survey)
- Carles Debart (GHGSat)
- Carsten Walddörfer (Dürr Systems AG)
- Clark Talkington (ARI)
- David Creedy (Sindicatum Sustainable Resources)
- Eleanor Whittle (Ember)
- Gift Richard Maloya (The Initiative for Climate Action and Development)
- Grzegorz Plonka (Polish Mining Group PGG S.A.)
- Melanie Lynn Mackay (Trillium Geoscience Ltd.)
- Meredydd Evans (Pacific Northwest National Lab)
- Michal Hetmanski (Instrat)
- Neil Butler (Peak Carbon Capital)
- Peter Cain (Mining Engineering Consultant)
- Phillip Evans (Johnson Matthey PLC)
- Richard Mattus (RM Business Consulting AB)
- Sergio Mauricio Cabral Olivares (Preemptive Pollution Initiatives)
- Sunjay (BHU, Varanasi India)
- Tomás Bredariol (International Energy Agency)



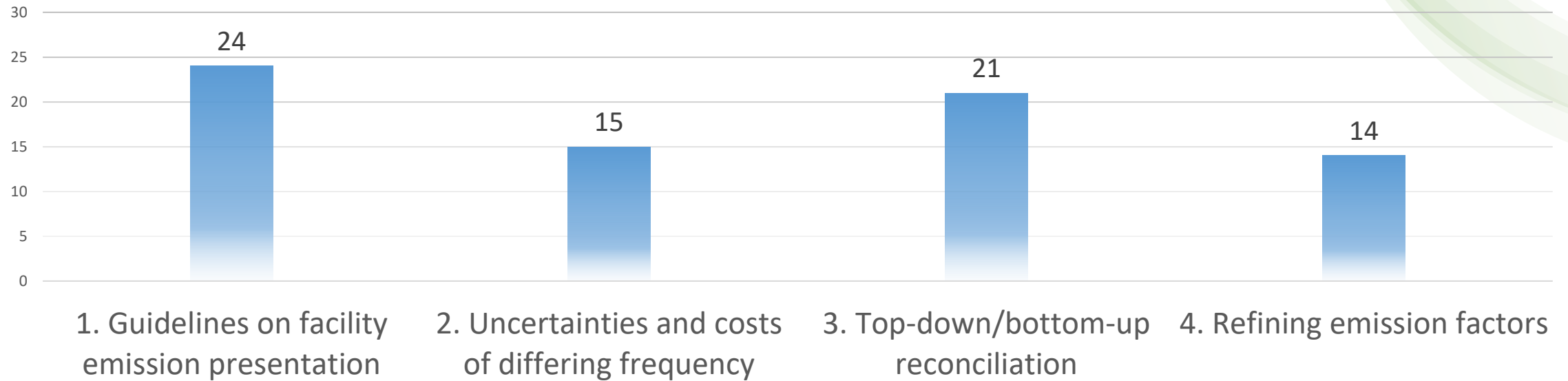
2ND ACTIVITY IDEA

IMPROVING EMISSIONS DATA AND INFORMATION FOR POLICYMAKING

Sub-activities proposed:

1. Developing guidelines for how **facility-based emissions from coal mines could be presented** for the public and/or for technical audiences
2. A publication/presentation **on uncertainties and costs associated with periodic measurements** of emissions for different sources with different frequencies (annual, quarterly, monthly, weekly, daily, continuous)
3. A guide/methodological approach for **reconciling top-down/bottom-up monitoring methods**
4. Draft report/proposal on **refining emission factors, including regional**. Exploration of application of top-down methods to estimate surface mine emissions

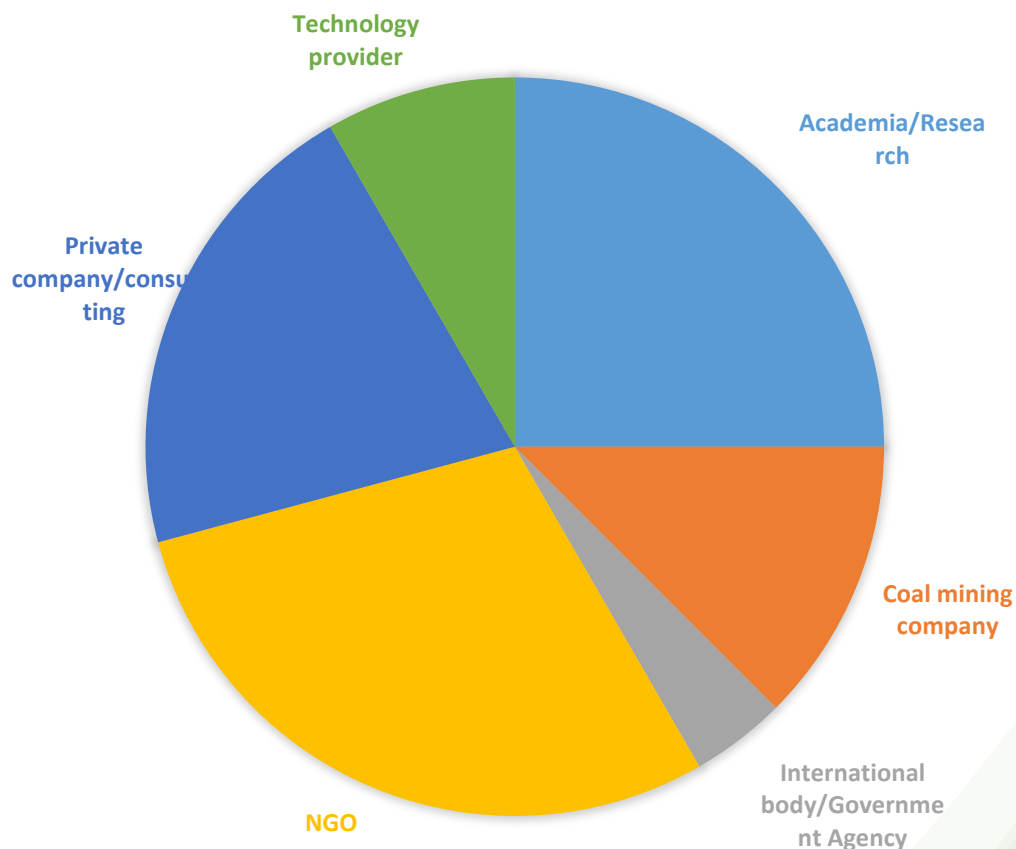
2ND IDEA: VOLUNTEERS



- Most popular activity: Developing guidelines for how **facility-based emissions from coal mines could be presented** for the public and/or for technical audiences
- Example: [U.S. Greenhouse Gas Reporting Program](#)
- Longer term activity: follow-up meeting to be scheduled

TO-DO: GUIDE FOR PRESENTING EMISSION DATA

WHO?



Alina Mroz (Project Developer) * (*=repeated volunteer)

Angel Esparza (GHGSat)

Artur Badylak (JSW S.A.)

C. Özgen Karacan (US Geological Survey) *

Caitlin Swalec (Global Energy Monitor)

Carsten Walddörfer (Dürr Systems AG) *

Clark Talkington (ARI) *

Eleanor Whittle (Ember) *

Felicia A. Ruiz (Clean Air Task Force)

Gift Richard Maloya (The Initiative for Climate Action and Development) *

Grzegorz Plonka (Polish Mining Group PGG S.A.) *

Hanling Yang (Environmental Defense Fund)

Justyna Swolkień (AGH University of Science and Technology)

Klaudia Wilk-Zajdel (Oil and Gas Institute - National Research Institute, Department of Production Stimulation)

Melanie Lynn Mackay (Trillium Geoscience Ltd.) *

Meredydd Evans (Pacific Northwest National Lab) *

Michal Hetmanski (Instrat) *

Rajiw Lochan (Prabha Energy Private Limited - CBM Projects)

R Marc Bustin (UBC)

Ryan Driskell Tate (Global Energy Monitor)

Sebastian Swaczyna (JSW S.A.)

Sergio Mauricio Cabral Olivares (Preemptive Pollution Initiatives) *

Stefan Moellerherm (Technische Hochschule Georg Agricola Research Center of Post-Mining)

Sunjay (BHU, Varanasi India) *

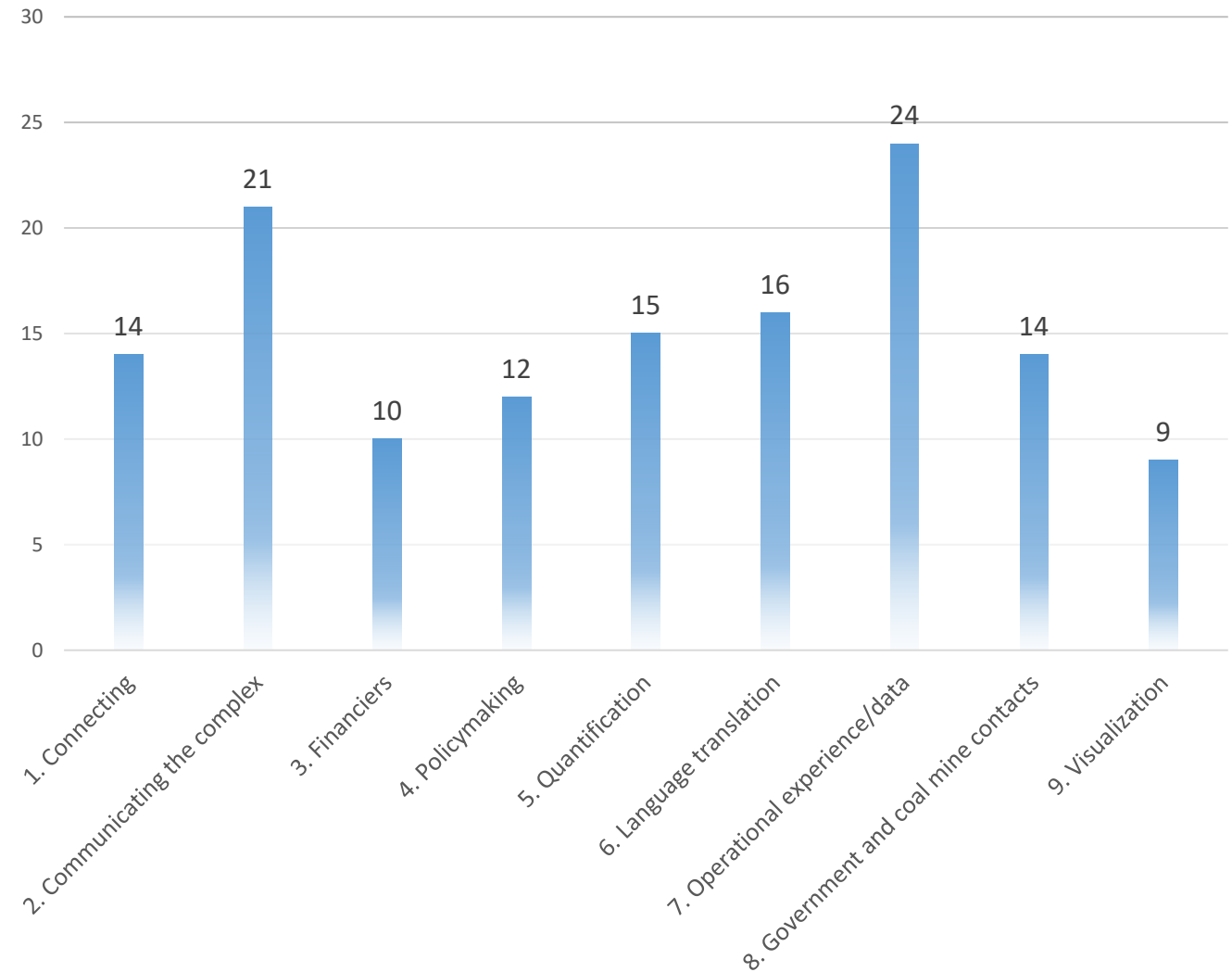
NEW IDEAS

- Brochure that clarifies the difference between CMM and CBM in a simple way, presents policy options
- Relevance of developing basin specific methane emission factors
- Comparison of CMM/VAM capture and use to other mitigation projects/ climate actions outside the coal mine business (e.g. Direct air capture, CCS) with the efforts necessary to treat VAM for gaining climate effects.
- Compendium of mitigation technologies, suppliers, case histories and costs.
- Developing a support system to enable the reduction of VAM emissions with investment funds.
- Exploring how to bring more coal companies into the task force - it would be really helpful to hear their perspective
- How to consider methane emissions in sectors where mining is usually considered out of scope for the emissions calculations for that sector (ex. iron and steel or other materials).
- Establish in-country nodes specially designed to mobilize non-state actors, civil society, private sector and academia.
- Capacity-building for policymakers working on policies surrounding methane. Policy-makers seem to not make any distinction between preventable fugitive emissions and safety-necessitated emissions.
- Research and development, distribution of technology and technic for effective degassing and utilization mine methane
- The new EU requirements for measurement, monitoring reporting and verification have produced new information on the national inventories related to CMM methane fugitive emissions. These new data can be used to produce a differential equation that may be then used for other UNECE member states to better estimate the as is emissions within their national inventories
- Updated technical, analytical and cost study on VAM now that a number of projects are operating in the US and China.
- Clear information to policymakers on the importance of gas rights and policy options
- Comparison of VAM mitigation vs improved gas drainage to determine optimal mitigation approach

- 1. Ability to connect with government and coal mines representatives (for online and in person meetings)
- 2. Communication (writing) of complex, technical material in easy-to-understand format, such as for policymakers

- 3. Connections/knowledge of with financiers/investors/funders (to help develop more effective communication materials and connect relevant interested parties)
- 4. Experience with policymaking
- 5. Experience with quantification, statistical methods, inventory, measurements of coal mine methane
- 6. Language translation
- 7. Operational experience/data (e.g., for analysis)
- 8. Relevant contacts in the government and coal mines that the group can reach out to
- 9. Visualization skills (graphics, charts, technical drawings)

SKILLS WITHIN THE TASK FORCE



TIMELINE

Near term (everyone):

1. Complete the resource catalog spreadsheet on SharePoint – by June 15th
2. Complete the coal mine/policymaker contact list spreadsheet – by June 15th

Longer term (everyone invited, focus on volunteers):

1. Develop **new, short, visual/interactive resources** (for non-technical audience)
 - Next step: Please share examples of short, visual/engaging resources that communicate effectively with non-technical audience, such as policymakers (any discipline) – by June 15th
2. Develop guidelines for how **facility-based emissions from coal mines could be presented** for the public and/or for technical audiences

Next: Launch these activities at the next TF meeting – mid-July

THANK YOU!
