

Oil & Gas Subcommittee  
14 December 2023  
Virtual

### **MEETING SUMMARY**

The Global Methane Initiative (GMI) Oil & Gas Subcommittee held a virtual meeting on 14 December 2023. The meeting was led by Mr. James Diamond of Environment and Climate Change Canada (ECCC) and Co-Chair of the GMI Oil & Gas Subcommittee. Representatives from 13 Partner Countries participated, including Argentina, Canada, China, Colombia, Germany, Indonesia, Japan, Kazakhstan, Mongolia, Norway, Saudi Arabia, the United Kingdom, and the United States. Representatives from France, Malaysia, the Netherlands, South Africa, Spain, and Switzerland also participated.

The meeting featured an overview of the Oil & Gas Subcommittee's priorities for the next year, a preview of the Oil & Gas Technical Sessions at the 2024 Global Methane Forum, presentations on new and existing oil & gas-related tools, and a discussion of some key takeaways from the COP28, including an overview of the United States Environmental Protection Agency's (U.S. EPA) final rule. The featured PowerPoint presentation is available on the [GMI website](#). The agenda is included in Annex II.

#### **Welcome and Adoption of the Agenda**

Mr. James Diamond, GMI Oil & Gas Subcommittee Co-Chair, ECCC, opened the meeting by welcoming participants. Mr. Diamond then reviewed the meeting agenda.

#### **GMI Secretariat Update**

Ms. Denise Mulholland, Director, GMI Secretariat, provided an update on recent GMI activities. Ms. Mulholland gave an overview of GMI, explaining that it is a partnership of 47 countries and nearly 1,000 private sector and multilateral partners that work collaboratively to reduce methane. She highlighted GMI accomplishments and methane mitigation activities since 2004, including growing the organization from 14 to 47 partner countries, reducing more than 640 million metric tons of carbon dioxide equivalent, and leveraging more than \$650 million in funding for projects and training. The GMI Secretariat's priorities through 2024 include assisting countries working to reduce methane emissions, supporting Subcommittee Co-Chairs, enhancing promotion of GMI through targeted communications, and planning the [2024 Global Methane Forum in Geneva, Switzerland](#). The Forum will take place from 18-21 March 2024 and will have high-level Plenary Sessions, with three technical tracks: Coal Mines, Oil & Gas, and Biogas, and opportunities for networking.

#### **Oil & Gas Subcommittee Business**

##### ***Action Plan Update***

Mr. Diamond provided an update on the Oil & Gas Subcommittee's progress towards meeting the objectives of the [2022-2025 Action Plan](#). Activities conducted over the past year include planning for

the 2024 Global Methane Forum in Geneva, Switzerland, regular promotion of oil and gas events on the GMI website and increasing engagement with GMI's Project Network. Additionally, GMI is finalizing the new Policymaker's Handbook and Emissions Factor-based tool.

#### ***Oil & Gas Subcommittee Co-Chair Recruitment***

Mr. Diamond shared that GMI is currently seeking two Oil & Gas Subcommittee Co-Chairs, specifically candidates who are government representatives. The responsibilities of GMI Subcommittee Co-Chairs include representing GMI in external events, participating in Subcommittee and Steering Committee meetings, and guiding members of the Subcommittee to make decisions by consensus.

#### ***Preview of the 2024 Forum Oil & Gas Technical Sessions***

Mr. Diamond noted that the Oil and Gas Technical Session will take place during the 2024 Global Methane Forum on 20 March, in conjunction with the 11<sup>th</sup> Session of the UNECE Group of Experts on Gas meeting. The sessions will focus on government and industry as vital drivers to mobilize methane action in the oil and gas sector, the importance of data collection and reconciliation to mobilizing methane action, an overview of emissions quantifications tools, and overcoming challenges for methane management in the oil and gas sector. Remaining agenda items for the 11<sup>th</sup> Session of the UNECE Group of Experts on Gas meeting include energy security as well as the role of hydrogen in a decarbonized energy supply chain.

#### **GMI Activities and Tools**

##### ***Policymaker's Framework for Addressing Methane Emissions***

Ms. Paz Aviles, U.S. EPA, provided information about the Policymaker's Framework, a resource developed by GMI to help countries accelerate their progress toward their methane emission reduction goals by providing a step-by-step process for implementing policies, programs, and partnerships to reduce methane emissions. This resource is meant to be a go-to source of information to support national methane mitigation and it can be applied at the national level or to specific methane-emitting sectors, including oil and gas, coal, and biogas. The Framework is organized into seven steps and provides best practices and key resources and tools for the oil and gas sector.

##### ***Waste Gas Recovery Project in Kazakhstan***

Ms. Volha Roshchanka, U.S. EPA, provided information about the Waste Gas Recovery Project from oil operations in Kazakhstan. She shared that GMI worked with a local partner to develop a viable strategy to conserve the waste gas associated with oil production from the Mangystau oilfield in Southwest Kazakhstan. She explained that the EPA team evaluated two categories of mitigation technologies, including mini gas-to-liquid (mini-GTL) and liquids extraction technologies. The advantages of these technologies include opportunities to produce more lucrative value-added products suitable for shipment to markets, mitigation of harmful emissions, and alignment with Kazakhstan's National Environmental policy. Ms. Roshchanka concluded that mini-GTL and liquids extraction technologies were both viable options for stranded gas recovery and achieve a payback period of less than three years.

##### ***Overview of the New EPA Tool for National Greenhouse Gas (GHG) Inventory Refinement from Oil and Gas Facilities: SMART+***

Mr. Andrew Meluch, U.S. EPA, shared an overview of the new EPA tool, SMART+, that will support GHG inventory refinement from the oil and gas sector in alignment with Paris Agreement climate goals. The EPA received funding from the U.S. Department of State's Transparency Accelerator program to assist

developing countries in refining their national GHG inventories from oil and gas facilities. SMART+ allows countries to report emissions to the United Nations Framework Convention on Climate Change in accordance with the Paris Agreement reporting and transparency requirements. One of the tool's highlighted features is that it can allow countries to calculate Intergovernmental Panel on Climate Change Tier 2 emission factors. The tool will have the ability to be translated into several foreign languages and will be available to be downloaded for free from the GMI website. Mr. Meluch emphasized that SMART+ is a user-friendly tool that can be used by national governments or oil and gas companies. Mr. Meluch noted that the tool can be used in conjunction with numerous existing tools to further develop successful policies and accurate GHG inventories. He explained that the tool is being finalized and peer reviewed, and a preview of the tool will be featured at the 2024 Global Methane Forum, with a public release in Spring 2024.

### **Presentations on Complementary Oil & Gas Tools**

Ms. Henry Patel, Clean Air Task Force (CATF), Ms. Anastasia Isaenko, Carbon Limits, and Mr. Alberto Alva-Argaez, Process Ecology, provided insights into their respective oil and gas tools.

#### ***Clean Air Task Force: Country Methane Abatement Tool (CoMAT)***

Ms. Patel shared an overview of the CATF tool, CoMAT. CoMAT was created to allow countries to refine their emissions estimations by providing a comprehensive understanding of the oil and gas industry profile and associated methane emissions. She emphasized that the tool is free and can be uniquely adjusted to fit an individual country's needs to support methane mitigation plans. Ms. Patel explained that the tool is designed to prepopulate information based on publicly available data from the country's oil and gas industry to streamline the process for data collection. Ms. Patel elaborated on the tool's core functionalities, highlighting its ability to foster collaboration and consensus building, provide access to industry resources and information, facilitate emissions calculations and estimates, and offer mitigation strategies and design approaches. Additionally, CoMAT has a comprehensive digital policy library.

#### ***Carbon Limits: Methane Inventory Systematic Tool (MIST)***

Ms. Isaenko shared an overview of the Carbon Limits tool, MIST, explaining that the tool allows oil and gas companies to understand where their emissions originate and offers solutions to address these sources. For each source, MIST will provide an emission estimate, a data quality rating, and an abatement potential and cost estimate. She explained that MIST allows companies to create their first emission inventory with very few inputs which can be improved over time with additional data. As companies progress further along their methane reduction journey, MIST's features, including abatement potential and cost estimates, become valuable tools. For companies already advanced in mitigation activities, MIST serves as a tracking tool, allowing them to monitor changes in emissions over time.

#### ***Process Ecology: Techno-Economic Analysis Model (TEAM)***

Mr. Alva-Argaez shared an overview of the Process Ecology tool, TEAM. TEAM is a web-based support tool that enables techno-economic evaluations and optimization of emissions mitigation strategies for industrial sectors, while also considering facility-level constraints and local economic parameters. Mr. Alva-Argaez outlined the construction of the TEAM tool, emphasizing its three integrated layers: Emission Source Assessment, Site and Source-Specific Mitigation Opportunities, and Economic Analysis. Through this process, the TEAM tool will produce an emissions inventory and portfolio of potential mitigation strategies. Mr. Alva-Argaez detailed the tool's use in Western Canada. He noted

that TEAM also calculates distances between facilities and key resources to offer a thorough economic evaluation.

### **The United Nations Economic Commission for Europe (UNECE) Needs Assessment**

Mr. Meluch outlined the partnership between UNECE and GMI in conducting a needs assessment to identify gaps and evaluate opportunities for the development of new tools and resources to build capacity of oil and gas stakeholders to effectively manage their methane emissions. The assessment aims to provide UNECE with insights into the priorities of oil and gas stakeholders and understand ways to collaborate with GMI on technical assistance. He explained that the needs assessment was sent to GMI Oil & Gas Subcommittee delegates via email with feedback requested by 20 December 2023. Following the conclusion of the assessment, a webinar will take place in January to discuss the results.

### **Highlights from the Conference of Parties (COP28)**

Mr. Diamond outlined the highlights and outcomes of COP28, including new Global Methane Pledge signatories, proposed methane emissions reduction policies and regulations from the United States, Canada, and Egypt, and announcements of methane-related partnerships and tools.

### **EPA's Final Rule**

Ms. Jodi Howard, U.S. EPA, gave an overview of the EPA's Final Rule that was announced on 2 December 2023. The rule aims to reduce methane and other harmful air pollutants from both new and existing oil and natural gas operations while giving the industry time to prepare to meet requirements and secure necessary equipment. Ms. Howard highlighted that the rule will cut emissions by nearly 80% from 2024-2038, reducing 58 million tons of methane, 16 million tons of volatile organic compounds, and 590,000 tons of air toxins. The estimated net climate and ozone health benefits are \$97 to \$98 billion dollars, equivalent to \$7.3 to \$7.6 billion a year, after accounting for the costs of compliance and savings from recovered natural gas. Ms. Howard also shared that at the beginning of the new year, the EPA will have a series of training courses for states, community groups, and industry vendors and personnel.

### **Wrap Up and Next Steps**

Mr. Diamond closed the meeting by encouraging attendees to register for the 2024 Global Methane Forum. He emphasized that Subcommittee members should look for opportunities where GMI can participate at oil and gas events, noting that the Oil & Gas Subcommittee would be happy to help develop content and participate in methane events. He thanked the participants and adjourned the meeting.

## ANNEX I

### Meeting Attendees

<b>Name</b>	<b>Affiliation</b>	<b>Country</b>
Alberto Alva-Argaez	Process Ecology Inc.	Canada
Evgeny Alexeyev	Methane Center PA	Kazakhstan
Andrés Ardila	Universidad Nacional de Colombia	Colombia
Paz Aviles	U.S. Environmental Protection Agency	United States
Marija Baliseva	Destinus Energy OPRA	
Laurence Bird	S&P Global	United Kingdom
Partha Bose	Orbio	United Kingdom
Bruce Chisholm	Preemptive Pollution Initiatives Inc	Canada
Christine Cinnamon	CEPEI	Canada
Jeff Coburn	RTI International	United States
John Dabbar	Conoco Phillips	United States
Christine Derieux	U.S. Environmental Protection Agency	United States
Ray Desjardins	Agriculture and agri-food Canada	Canada
James Diamond	Environment and Climate Change Canada	Canada
Victoria Eng	Tetra Tech	United States
Shannon Ferguson	Tetra Tech	United States
Matthew Hackworth	Booz Allen	United States
Ehsan Tavakoli Hashjini	Deus Pollutrack	Germany
Alexandra Hegarty	International Energy Agency	France
Jodi Howard	U.S. Environmental Protection Agency	United States
Prio Hutomo	GMI Indonesia Community	Indonesia
Marco Inzaghi	Clearblue Markets	The Netherlands
Anastasia Isaenko	Carbon Limits	Norway
Margaret Ju	Zhangjiagang CIMC Sanctum Cryogenic Equipment Co., Ltd	China
Tim Kabanko	Destinus Energy OPRA	The Netherlands
Jennyfer Kuanji	Petronas	Malaysia
Ali Lashgari	Project Canary	United States
Michael Layer	Natural Resources Canada	Canada
Junrong Liu	China University of Petroleum (East China)	China
Yuliana Lugo-Jose	Johnson Matthey	United States
Katlyn MacKay	Environmental Defense Fund	Canada
Andrew Meluch	U.S. Environmental Protection Agency	United States
Roy Montemarano	Heath	United States
Robert Moran	MSC LLC	United States
Giselle Moritan	Secretaria de Energia de Argentina	Argentina
Aldi Cahya Muhammad	PT Radiant Utama Interinsco Tbk	Indonesia

Denise Mulholland	Global Methane Initiative	United States
Robin Nava	SLB	United States
Naadira Ogeer	Commonwealth Secretariat	United Kingdom
Olubunmi Ogunsola	TEMEC	United States
Heny Patel	Clean Air Task Force	United States
Derrick Piater		South Africa
Faisal Qurooni	Ministry of Energy	Saudi Arabia
Volha Roshchanka	U.S. Environmental Protection Agency	United States
Ella Salzmman		Switzerland
Susana Lorenzo Sardiña	Enagás	Spain
Eric Six	Heath Consultants Incorporated	United States
Zitely Tzompa Sosa	Clean Air Task Force	France
Beni Suryadi	ASEAN Centre for Energy	Indonesia
Hiroshi Suyama	Corporate Sustainability Office Corporate Planning Department Idemitsu Kosan Co.,Ltd.	Japan
Gary Tulga	Mongolian Nature Environment Consortium	Mongolia
Jasmine Urisk	CGA	Canada
Timo Van Ellen	Underground Storage	Germany
Norberto P. Vidal	Ministry of Environment and Sustainable Development	Argentina
Grant Wach	Dalhousie University	Canada
Wei Wang	RMI	China
Wu Wenting	China University of Petroleum	China
Jeff Witwer	Onboard Dynamics	United States
Ming Xue	CNPC Research Institute of Safety and Environmental Technology	China
Hanling Yang	Environmental Defense Fund	United States
Klara Zimmerman	U.S. Environmental Protection Agency	United States

## ANNEX II

### Agenda

GMI Oil & Gas Subcommittee Meeting

Thursday, 14 December 2023

07:30 – 09:00 EST (UTC -5)

07:30 – 07:35	<b>Welcome and Opening Remarks; Adoption of the Agenda</b> <i>James Diamond, Co-Chair, Oil &amp; Gas Subcommittee, ECCC</i>
07:35 – 07:45	<b>GMI Secretariat Updates</b> <i>Denise Mulholland, Director, GMI Secretariat</i>
07:45 – 07:50	<b>Oil &amp; Gas Subcommittee Business</b> <i>James Diamond</i>
07:50 – 08:10	<b>GMI Activities and Tools</b> <i>Paz Aviles, U.S. EPA; Volha Roshchanka, U.S. EPA; and Andrew Meluch, U.S. EPA</i>
08:10 – 08:40	<b>Presentations on Complementary Oil &amp; Gas Tools</b> <i>Heny Patel, Clean Air Task Force; Anastasia Isaenko, CarbonLimits; and Alberto Alva-Argaez, Process Ecology</i>
08:40 – 08:45	<b>UNECE Needs Assessment</b> <i>Andrew Meluch</i>
08:45 – 08:55	<b>Discussion: Implications from COP28</b> <i>James Diamond</i>
08:55 – 09:00	<b>Concluding Remarks and next Steps; Adjourn</b> <i>James Diamond</i>