

GLOBAL METHANE INITIATIVE
9TH STEERING COMMITTEE MEETING

Mexico City, Mexico
8 December 2017

GMI9/Doc.2

**2018 Global Methane Forum Planning
Discussion Paper**

I. Purpose

This paper provides an overview of the planning to date and next steps for the 2018 Global Methane Forum (GMF), to be held in April 16-18, 2018 in Toronto, Canada.

II. Background

In March 2016, GMI organized a Global Methane Forum (GMF) in Washington, DC, USA, that attracted more than 500 people from 62 countries and was held in conjunction with the Climate and Clean Air Coalition (CCAC) Working Group meeting. The Forum comprised a two-and-a-half day GMI meeting, including a wastewater treatment plant site tour, two plenary sessions and parallel technical sessions focusing on oil and gas, biogas, and coal mines, as well as the GMI Steering Committee meeting. During the week, CCAC hosted a Working Group meeting, a Science Policy Dialogue, initiative-specific meetings (e.g., Bricks, Cook stoves, Finance), and meetings of the Science Advisory Panel (SAP). An overview of all the meetings and sessions held at the 2016 Global Methane Forum can be found in Appendix A and the proceedings can be found at: www.globalmethane.org/forum/index.html.

Building on the success of the 2016 GMF, the 2018 GMF would allow GMI to support increased international momentum on methane mitigation and to continue building its collaboration with the CCAC and potentially the UNECE in key methane-emitting sectors and cross-cutting initiatives.

III. 2018 Global Methane Forum Planning To Date

Update

During its June 2017 meeting, the GMI Steering Committee agreed to hold a second GMF in conjunction with the anticipated April 2018 CCAC Working Group meeting in Canada. Since then, Environment and Climate Change Canada (ECCC) and CCAC have started planning for the event. First, the city and dates were selected. The City of Toronto has been selected and facilities are being secured for April 16-20, with GMI sessions to be held Monday through Wednesday, April 16-18, in large part jointly with the CCAC, and CCAC governance meetings to be held on Thursday and Friday, April 19 -20 (see Draft GMF Agenda with Potential Session Topics and Speakers in Appendix B).

Overarching Theme

It has been suggested there be an overarching theme for the 2018 GMF to emphasize the event's focus (e.g., Financing or Methane Science) and assist with marketing (e.g., appeals to and attracts potential attendees). The ASG and Steering Committee Co-Chairs would be interested to hear from delegates and alternate contacts what themes might appeal to potential attendees from their countries.

Please provide your suggestions via email to the ASG for discussion at the Steering Committee meeting. Plenary topics would then be further defined to ensure alignment with the selected overarching theme.

Planning for a joint CCAC and GMI Steering Committee

It was suggested in March 2016 when the alliance between the GMI and the CCAC was struck, that the Steering Committees from the two organizations hold joint meetings on a punctual basis to help build synergies and prevent potential duplication. The ASG and Steering Committee Co-Chairs are also interested to hear from delegates and alternate contacts regarding potential topics for the joint CCAC and GMI Steering Committee meeting that might take place (pending topic identification) on Tuesday, April 17, during the GMF. Your input on potential ideas to help strengthen the GMI-CCAC alliance would also be welcome.

Please provide your suggestions via email to the ASG for discussion at the Steering Committee meeting. The Secretariat would then compile suggestions and provide a support document ahead of the meeting.

Plenary Sessions

In 2016, GMF plenary sessions focused on financing opportunities and country-level methane policies. For the 2018 Forum, the ASG, Canada and the CCAC suggest to again focus on finance and policy for the plenary session on Tuesday April 17, and to also incorporate clean technology and innovation as an accompanying theme. At this time, we would welcome specific finance, policy, and technology innovation related topics and/or suggested speakers¹ that can be circulated to the Steering Committee for consideration and further discussion during its December meeting.

Please provide your suggestions via email to the ASG for discussion at the Steering Committee meeting.

Outreach

The ASG has developed a GMF logo in collaboration with Canada and the CCAC (see right) that will be featured on the event web page on GMI.org, emails, and outreach materials. The ASG, for example, has already prepared and started to distribute postcards promoting the 2018 Forum at climate- and/or sector-related meetings and conferences (e.g., GMI Biogas Subcommittee meeting held in conjunction with the International Solid Waste Association World Congress and Solid Waste Association of North America WASTECON 2017 in Baltimore, Maryland, USA on September 25-27, 2017). As in years past, the ASG will also post information on various online conference listings (e.g., Conference Alerts) once the Forum registration page is live and will explore opportunities to leverage CCAC outreach opportunities. The ASG and Co-Chairs encourage GMI Partner Countries to help promote the Forum and will make the logo available for inclusion on country-related outreach materials.



Joint Statement

At the 2016 GMF, the GMI, CCAC and the UNECE made a joint statement announcing their alliance. For the 2018 GMF, the GMI and its partners could also consider making a joint statement to reiterate their alliance, promote joint work and signal key initiatives. For example, in the GMI Strategic Objectives adopted at the June 2017 Steering Committee meeting, the GMI could consider launching a Year of

¹ The ASG would be interested to receive the names of potential plenary session speakers that you have heard at other climate-related conferences that while might not have address finance- or policy-related topics, they provided a message that would be appropriate to the GMI audience.

Methane Awareness campaign jointly with the CCAC and the UNECE to continue building international momentum on methane mitigation. This could also include more tangible initiatives, which could be discussed and approved at the joint GMI-CCAC Steering Committee meeting to be held during the GMF.

IV. Next Steps / Items for Steering Committee Consideration

1. Should there be an overarching theme of the 2018 GMF, and what should it be?
2. What topics should be the focus of the joint CCAAC/GMI Steering Committee meeting?
3. Do Partner Country delegates support the concept of a joint statement and what would be the content?

Appendix A
Overview of Meetings and Sessions at 2016 Global Methane Forum

GMI Biogas-Related Ad Hoc Meeting
U.S. EPA Office of Air Quality and Planning Standards (OAQPS) Environmental Benefits Mapping and Analysis Program (BenMAP) Workshop
World Bank Pilot Auction Facility for Methane and Climate Change Mitigation (PAF) Overview Session
CCAC Bricks Initiative Meeting
CCAC Health Initiative Meeting
CCAC SNAP Initiative Meeting
CCAC Steering Committee Meeting*
CCAC Supporting National Action and Planning on SLCPs (SNAP) Lead Partners Meeting
GMF Biogas Technical Sessions*
GMF Coal Technical Sessions*
GMF Oil and Gas Technical Sessions*
GMF Plenary Sessions*
GMI Steering Committee Meeting*
UNECE Gas Leakages Session
UNECE Group of Experts on Coal Mine Methane (CMM) Meeting
UNECE Methane Management Meeting
CCAC Agriculture Finance Session
CCAC Finance Initiative Session*
CCAC Oil & Gas Initiative Meeting
CCAC Science Advisory Panel (SAP) Meeting
FIA Foundation Meeting
CCAC Agriculture Initiative Meeting
CCAC Cookstoves Initiative Meeting
CCAC Diesel Initiative Meeting
CCAC Oil and Gas Methane Partnership (OGMP) Steering Group Meeting
CCAC Science Policy Dialogue Meeting and Associated Breakout Sessions
GMI Coal Logistics Outreach Meeting
GMI Waste-Related Workshop*
CCAC Regional Assessments SG Meeting
CCAC Working Group Meeting and Associated Breakout Sessions*

**included multiple sessions and/or meetings over more than one day*

APPENDIX B: DRAFT AGENDA – Global Methane Forum 2018

Monday, April 16 – Pre-Opening	
All day	Clean technology demonstrations from private sector and academia
Morning	Site tours
Afternoon	Site tours GMI Steering Committee Meeting
Tuesday, April 17 – Opening	
All day	Clean technology demonstrations from private sector and academia
Morning	Opening and Keynote Address Plenary Session – “Global action on methane mitigation in 2018 and beyond” Joint GMI-CCAC sector-specific technical sessions (oil and gas, waste, agriculture, wastewater) – Common theme: “technology innovation and financing” CCAC Initiative Meetings
Lunch	Joint GMI-CCAC Steering Committee meeting
Afternoon	GMI technical sessions (oil and gas, biogas, coal mining) – Common theme: “Partner country approaches and international collaboration” GMI – The way forward by sector (Oil and gas, coal mining, biogas) CCAC Initiative Meetings Closing Plenary – The Way Forward on reducing methane emissions
Wednesday, April 18 - Science Policy Dialogue	
All day	Clean technology demonstrations from private sector and academia
Morning	Opening and Keynote Address Plenary Session – Latest SLCP Science Announcements and Keynote Address (TBC)
Afternoon	Plenary - From Google Cars to Satellites: Monitoring methane emissions on both a global and local scale (TBC in collaboration with CCAC) Plenary and break-out groups – Methane Topic (TBD in collaboration with CCAC) Closing
Evening	Joint Reception GMI-CCAC
Thursday, April 19 and Friday, April 20 – CCAC Working Group (Open to CCAC Partners only)	

Detailed Draft Agenda including potential topics and speakers– Global Methane Forum 2018

Monday, April 16, 2018 – Pre-Opening / Voluntary (site visits, technology demonstration/workshops, GMI Steering Committee)

9:00-17:00	<p>Clean Technology Demonstrations by private sector relating to key methane-emitting sectors</p> <p>Potential Participants (would be distributed over Monday to Wednesday):</p> <ul style="list-style-type: none"> - ECCC’s CRUISER mobile platform and CAMS trailer (measure air quality species including methane) - Google Streetview car equipped with methane detection technology (may be hard to get across the border) - John Crane Group (innovative self-financing tool for compressor stations retrofits) - CELScan (controller technology in oil and gas sector) - Rebellion Photonics (Gas Cloud Imaging leak detection system using hyperspectral imaging technology and algorithms) - Shell (continuous emissions monitoring platform by laser technology, devices on microsatellites) - Questor Technology (efficient clean combustion technology, and conversion of waste heat to power) - MaRS Innovation Lab - Quadrogen (Integrated Biofuel Clean-up system technology) - WY technology platform (waste-to-energy, carbon sequestration and use) - Tazman Turbinz , In-Pipe Turbine Generator (IPTG) (ERA ZKO Oilfield Industries pilot project) - GHG Sat Inc., GHG detection satellites - Clearstone Engineering, Alberta Energy Regulator, Petroleum Technology Alliance Canada (PTAC), University of British Columbia, University of Calgary (Projects funded by Canada to reduce methane) - IBM Research Center, chip-based methane spectrometer (absorption spectroscopy) - University of Toronto, Barbara Sherwood Lollar, Tunable Infrared Laser Direct Absorption Spectroscopy (TILDAS) - OGCI Climate Investments (provide capital to clean technology innovations) - Zaluvida (biotech company behind Mootral, a new natural feed probiotic supplement reducing cow methane emissions) - Martin Instrument and Microdrones, new aerial methane detection microdrone - Methane detection infrared camera displayed in 2013 (is still relevant today)
9:00-12 :00	<p>Site Visits</p> <p>Potential site visits:</p> <ul style="list-style-type: none"> - ECCC’s Atmospheric GHG Laboratory (Downsview) - Toronto CCI Disco Road green bin processing facility (15 miles / 24 km distance) - Toronto Zoo – presentation on biogas power plant project (opening later in 2018) - Hamilton Wastewater Treatment Plant (44 miles / 70 km distance)
12:00-13:30	Lunch
13:30-16:30	Site Visits (cont’d)
13:30-16:30	<p>GMI Steering Committee Meeting</p> <ul style="list-style-type: none"> - Country updates - Planning for 2018 and 2019 - Discussions joint CCAC and GMI Steering meeting for Tuesday

Tuesday, April 17, 2018 – Opening (Joint Plenary and technical sessions, GMI and CCAC subcommittee and initiatives meeting)

9:00-17:00	Clean Technology Demonstrations by private sector relating to key methane-emitting sectors		
8:00-18:00	Registration		
9:00-9:30	<p>Opening by the GMI and CCAC co-chairs and Keynote Address</p> <ul style="list-style-type: none"> - <i>Opening the GMF, welcome from 1 GMI co-chair and 1 CCAC co-chair, 5 minutes each</i> - <i>Overview of critical role of methane and global efforts on mitigation</i> - <i>Brief update of progress on GMI and CCAC initiatives and collaboration since the March 2016 Global Methane Forum</i> - Keynote to speak on innovation (technology, policy, initiatives) related to methane/SLCP mitigation/climate change <p>Potential Keynote Speaker:</p> <ul style="list-style-type: none"> - John Tory, Mayor of Toronto <ul style="list-style-type: none"> o Keele Valley Landfill is an example of early adoption of recovery and reuse; Toronto is a C40 city, committed to reduce GHG emissions by 80% from 1990 levels by 2050; 30% reduction by 2020; goal to make Toronto North America’s most environmentally sustainable city 		
9:30-10:15	<p>Plenary – “Global action on methane mitigation in 2018 and beyond”</p> <p><i>Panelists will discuss recent actions and trends in methane mitigation and highlight the latest innovation and financing opportunities which can support ambitious actions to reduce methane emissions.</i></p> <p>Potential Speakers (10 minutes each):</p> <ul style="list-style-type: none"> - 1) Methane in context of Paris Agreement implementation - which countries have included ambitious methane targets in their NDCs, gap in pledges to reach long-term goal; what leading countries and organizations are doing to reduce methane emissions, including financial institutions (Canada or Mexico, or representative to UNFCCC or other) - 2) Methane as part of global energy outlook - including cleaner energy mix in China, International Energy Agency (Fatih Birol, Executive Director) - 3) Latest clean tech innovation and perspectives for investments in sustainable technology related to methane (Celine Bak or other) - 4) World Bank – update on methane global initiatives/projects, Pilot Auction Facility <p>Alternate options:</p> <ul style="list-style-type: none"> - Quantifying methane emissions – Latest studies (Drew Nelson, EDF) Green Climate Fund - what methane projects and financing being offered - Inter-American Development Bank/Asian Development Bank/European Investment Bank /Global Environmental Facility (GEF)/ Climate Technology Centre and Network (UNFCCC) 		
10:15-10:45	Networking Break		
10:45-12:45	<p>Joint CCAC-GMI sector-specific technical sessions (e.g. oil and gas, agriculture, waste, etc.)</p> <p><i>Common theme for all sectors: technology innovation and financing</i></p>	CCAC Initiative meetings (e.g. Bricks, Health)	CCAC Steering Committee (TBC)

Oil and Gas

Potential topics:

- 1) *UNECE Best Management Practice Presentation – Oil and Gas for methane management*
- 2) *Mitigation Technology*
- 3) *Quantification and detection methods/technology*

Potential speakers:

- Stephanie Saunier, Managing Director, Carbon Limits, Norway
- Jackson Hegland, Executive Director, Methane Leadership Alliance
- Joshua Anhalt, President, Greenpath Energy Ltd.
- Jim Ellis, Alberta Energy Regulator
- John Crane Group (innovative self-financing tool for compressor stations retrofits – pilot projects)
- Rebellion Photonics (Gas Cloud Imaging leak detection system using hyperspectral imaging technology and algorithms)
- Shell (pilot projects on continuous emissions monitoring)
- Clean Air Task Force: policy options for detecting emissions from storage tanks (new study)
- Yogesh Surendranath, MIT / Private sector (firms TBC): Cost-effective alternatives to flaring

Waste

Potential Topics:

- 1) *Renewable Natural Gas (RNG) – opportunities and challenges related to conversion of biogas into end uses (focus: Developing countries, Cities) getting biogas projects to markets: state of play and way forward*

Potential speakers:

- Biogasdoneright™ by Fabrizio Sibilla, PhD, Industrial Biotechnologist, Conzorzio Italiano Biogas (Italy): use of biogas in the agricultural sector
- Jenny Hartfelder, President – Vice President, Stantec (USA)
- Gary Crawford, Vice President, International Affairs, Veolia (France), and Chair, International Solid Waste Association (ISWA) Working Group Climate Change and Waste Management

	<p>Agriculture: (continue over lunch if more time needed)</p> <ul style="list-style-type: none"> - Potential topics tbd <p>Wastewater (TBD, if valued added to biogas session in afternoon)</p> <p>Potential topics:</p> <ol style="list-style-type: none"> 1) Implementing capture and reuse, a comparison of different country approaches (China, etc.) 		
12:45-14:15	Lunch	<p>Joint GMI-CCAC Steering Committee Meeting (TBC)</p> <ul style="list-style-type: none"> - Introductions - Financing - Joint initiative / year of awareness 	
14:15-15:30	<p>GMI technical sessions (oil and gas, biogas, coal mines)</p> <p><i>Theme: Partner country approaches and international collaboration</i></p> <p>Oil and Gas</p> <ul style="list-style-type: none"> - Comparing policy approaches - Mexico, Canada, Norway (off-shore), US States (Colorado, California, Pennsylvania, New Mexico), China - Oil and Gas Climate Initiative (OGCI): investments in clean gas project <p>Biogas – Series of 10 – 12 minute technical presentations</p> <p>Potential topics:</p> <ul style="list-style-type: none"> - Renewable natural gas (Canadian speaker through associations) - Co-digestion of organics with wastewater biosolids and manure - Organics collection strategies (Milan or San Francisco) - Wastewater utility of the future (or morning session) - Integrated on-farm digester system - Financing models <p>Potential speakers:</p> <ul style="list-style-type: none"> - Patrick Serfass, American Biogas Council (USA) - Expanding Biogas and Digestate Use at Wastewater Treatment Plants - Dr. Masa Iwanaga, President, Japan International Research Center for Agricultural Sciences (JIRCAS) 	<p>CCAC Initiative Meetings (e.g. HFCs, Household energy, SNAP)</p>	

	<ul style="list-style-type: none"> – Daniel Bida, Executive Director of ZooShare - Toronto Zoo biogas plant cooperative financing model – Canadian Gas Association (biogas network) – Canadian Biogas Association (promoting biogas projects at the municipal level) <p>Coal</p> <p>Potential Topics:</p> <ul style="list-style-type: none"> – Coal mine methane situations in GMI partner countries such as Colombia, Poland, Australia, China – Overview of methane extraction and utilization from abandoned coal mines around the world – Drainage of gas from open pit coal mines – Financing opportunities and challenges for coal mine methane – Best practices (or recommendations) on sustainable management of abandoned coal mine, risk management tools on gas controls 	
15:30-16:00	Networking Break	
16:00-17:30	<p>GMI – The way forward by sector (oil and gas, biogas, coal mines)</p> <p>Oil and Gas – Adoption of the Subcommittee Action Plan, upcoming activities and meetings</p> <p>Biogas – Subcommittee Meeting (topics TBD)</p> <p>Coal - Country Updates and planning for Subcommittee activities for the year – October 2018 in person meeting in Geneva</p>	CCAC Initiative Meetings (<i>cont'd</i>) (e.g. HFCs, Household energy, SNAP)
17:30-18:30	<p>Closing Plenary</p> <p>Topic: The Way Forward on reducing methane emissions – based on discussions, key take-aways for policy makers, investors, non-governmental organizations, and opportunities for collaboration</p>	

Wednesday, April 18, 2018 – Building Global Momentum for Methane Mitigation / Science Policy Dialogue

9:00-17:00	Clean Technology Demonstrations by private sector relating to key methane-emitting sectors	
8:00-8:45	Registration	
8:45-9:00	Keynote Opening (e.g. <i>high-level rep from an international organization, involved in climate negotiations</i>)	
9:00-9:45	Plenary Session – Methane Science <i>Latest updates in SLCP science related to methane (TBC in collaboration with the CCAC)</i>	
9:45-10:15	Networking Break	
10:15-11:45	Announcements and Keynote Address (TBC)	
11:45-12:00	Group Photo	
12:00-14:00	Lunch	Potential Side event: International Emissions Trading Association (IETA) , Climate Challenges market solutions
14:00-15:00	Panel Discussion – Methane Topic (to discuss with the CCAC) <ul style="list-style-type: none"> - <i>Suggested theme: From Google Cars to Satellites: Monitoring methane emissions on both a global and a local scale</i> - Measurements – EDF study – key finding and relevance of this study for methane reduction in oil and gas sector and other methane sectors - NASA’s efforts to measure methane from space – current developments and plans for the future, implications for methane measurement over medium and long term - Poland and/or China Coal Mine Methane work – Centre for Excellence with UNECE – status update, discussion on high level, potential for replication in other sectors <i>Potential speakers:</i> <ul style="list-style-type: none"> - Member of CCAC’s Scientific Advisory Panel - Drew Nelson, Environmental Defence Fund (US) - Dr Ben Poulter, NASA Goddard Space Flight Center - Dr. Doug Worthy/ Dr. Shao-Meng Li, ECCC 	
15:00-16:00	Panel – Methane topic – to be provided by the CCAC	
16:00-16:30	Networking Break	
16:30-17:15	Breakout Groups – Methane topic from previous panel discussion	
17:15-17:45	Reporting back from breakout groups	
17:45-18:00	Closing of the Science Policy Dialogue by the GMI and CCAC co-chairs	
18:00-20:00	Joint Reception GMI-CCAC-UNECE (TBC)	

Thursday, April 19, 2018 – CCAC Working Group meeting (Open to CCAC Partners only)

8:00-8:45	Registration
8:45-9:00	Opening of CCAC WG Meeting
9:00-10:15	Panel Session
10:15-10:45	Networking Break
10:45-11:45	Break-out Groups
11:45-13:45	Lunch
13:45-15:15	Initiative-specific topics of interest for GMI and UNECE (<i>e.g. Partners in Action, SLCP Solution Center</i>)
15:15-15:45	Networking Break
15:45-17:00	Initiative-specific topics of interest for GMI and UNECE (<i>e.g. Partners in Action, SLCP Solution Center</i>)
17:00-17:15	Closing

Friday, April 20, 2018 – CCAC Working Group meeting (CCAC Partners Only)

09:00-12:30	CCAC Working Group Meeting – Open to CCAC Partners Only
12:30-14:30	Lunch
14:30-18:00	Site visits – SLCPs Potential site visits: <ul style="list-style-type: none">- Enwave’s Deep Lake Water Cooling- District Energy Systems (Enercare Center)