Global Methane Initiative Oil & Gas Subcommittee 3 November 2010 New Orleans, Louisiana

FINAL MINUTES

Summary of Key Discussions and Conclusions

Thirty-three participants representing five countries— Canada, India, Mexico, Poland, and the United States—attended the recent Oil & Gas Subcommittee meeting in New Orleans, Louisiana. During this meeting, the attendees largely focused on issues related to the launch of the Global Methane Initiative (GMI). A representative of the World Bank's Global Gas Flaring Reduction Partnership (GGFR) also gave a presentation on its oil and gas related Clean Development Mechanism (CDM) activities. Lastly, member countries provided brief updates on relevant activities in their country since the March 2010 Expo. The meeting attendees established the following main action items:

- The Administrative Support Group (ASG) is seeking to revise the country-specific action plan template. The revised plan template will be comprehensive (including all sources, no longer sector-specific) such that it can be integrated into each country's existing framework for environmental protection, clean energy, carbon mitigation, and/or other appropriate national level plans. Subcommittee and Project Network members are requested to send the ASG thoughts and ideas for the revised action plan template. As appropriate, the ASG will incorporate those ideas into the revised template.
- Subcommittee members are requested to continue to explore linkages between Subcommittee
 work and other relevant international initiatives and partnerships and, as appropriate given each
 country's current circumstances, support these initiatives and partnerships.
- The ASG is requesting that Subcommittee members come to the next meeting with a list of barriers and/or issues facing industry such that these can be discussed as a group with the overarching goals of identifying themes of commonality and building a results inventory.
- The ASG is seeking new, fresh content for the redesigned website. The website is designed to be utilized as a clearinghouse to share GMI successes and information, which will serve to strengthen our ability to showcase GMI as a world class initiative. Subcommittee and Project Network members are requested to provide website content to the ASG on an ongoing basis.

The ASG is currently considering a third Expo, to be held in mid-2012. In preparation, the ASG is looking at possible host locations, formats (e.g., technical workshop, exhibits, subcommittee meetings), and lessons learned from past Expos. The ASG is seeking member input to ensure that the Expo is as useful as possible for the oil and gas sector participants.

 Mr. Sucre of the World Bank updated the Subcommittee on their efforts to reduce gas flaring and venting through policy change, stakeholder facilitation and project implementation. In particular, he is leading a working group focused on improving methodologies and communication with the United Nations Framework Convention on Climate Change (UNFCCC) to improve utilization of CDM carbon credits in the oil and gas industry. Anyone interested in additional information or supporting World Bank should contact Mr. Sucre at <u>fsucre@worldbank.org</u>. The meeting agenda and list of participants are included as Annex I and II, respectively. Additionally, the complete technical and policy sessions and Subcommittee meeting proceedings are available online at http://www.globalmethane.org/news-events/event_detailsByEventId.aspx?eventId=284.

Welcome Addresses and Adoption of Agenda

Co-Chair Mr. Cruz Ernesto Hernandez with Mexico's Petróleos Mexicanos (PEMEX) opened the meeting by thanking everyone for attending. He recognized everyone for their participation in the Natural Gas STAR Annual Implementation Workshop and looked forward to an engaging Subcommittee meeting with input from everyone in attendance. His sentiments were echoed by Co-Chair Mr. Michael Layer with Natural Resources Canada. Mr. Layer further recognized the meeting hosts and Project Network members for their hospitality. He made note of the Partnership's re-launch as the GMI and expanded Terms of Reference (TOR) that go beyond methane recovery and use activities to include abatement. Mr. Hernandez echoed his remarks and further, made a call for the inclusion of energy efficiency.

Mr. Layer then led brief introductions of the meeting participants and a review of the meeting goals. He noted one addition to the meeting agenda; specifically, a presentation from Mr. Francisco Sucre of the World Bank. Mr. Layer asked if there were other changes or additions to the agenda. Hearing none, he announced the adoption of the agenda.

Report Out from the Steering Committee

Ms. Ashley King of the ASG presented a brief report out from the 8th Steering Committee meeting as well as significant Ministerial meeting decisions. Specifically, she focused on "charges" of note to the Oil & Gas Subcommittee and Project Network members. Main elements of the GMI include the new TOR, action plans and reporting, and new resource commitments from developed country partners.

Ms. King acknowledged that the new TOR has been approved. She noted that key elements included expanding the scope to include wastewater and methane abatement while indicating that all Partners and activities under the Methane to Markets Partnership would become part of the GMI. She also explained the ASG would update existing outreach materials to reflect the GMI name. Ms. King added that the new TOR reinforces the need for action plans and indicated that the ASG will create new templates to capture critical information, as well as support the development and implementation of such plans. The action plans would be comprehensive; no longer source- or sector-specific and developed such that they could be integrated into each country's existing framework for environmental protection, clean energy, carbon mitigation, and/or other appropriate national-level plans. She asked that members provide ideas and suggestions for the new templates to the ASG.

Ms. King emphasized the need for Partners to periodically report activities and/or achievements to the ASG. This is further supported by added language to the new TOR. She noted the next step for reporting is to determine frequency and format (e.g., the GMI online project tracking system or other template format).

Ms. King was excited to announce GMI has welcomed Nicaragua, Turkey, Indonesia, Serbia, and Peru as new members. The continued growth in members is an indication of the GMI's overall success. Additionally, delegates from Peru and Turkey will join the Oil and Gas Subcommittee.

Ms. King reported the ASG has decided to hold a third Expo. The purpose of the Expo will be to show case projects and serve as a premier event for methane mitigation. A main issue associated with holding a third Expo includes coming to consensus on a location and date. In closing, she encouraged members to provide comments and suggestion for a third Expo to the ASG.

Review of Leadership

Ms. King opened this discussion by noting all the Subcommittees were required to review current leadership and/or query delegates to determine if there might be other delegates interested in serving as a chair(s). Mr. Layer, Mr. Hernandez and Dr. Kaplan Basniev of GUBKIN Russian State University of Oil and Gas Russian Academy of Natural Sciences are the current Co-Chairs of record to the Oil and Gas Subcommittee. Ms. King explained the ASG formally requested that delegates were asked to express interest in a leadership position or provide recommendations on the state of Subcommittee leadership; however, receiving none, leadership would remain the same.

She concluded the discussion by acknowledging concerns regarding Russia's lack of participation on the Subcommittee and providing an overview of the situation to include recent conversations with Russia's GMI representatives. There is institutional uncertainty as to Russia's future participation on the Subcommittee. Their Co-Chair position could be offered with sufficient interest in the future.

Mr. Layer asked if it was acceptable for leadership to be an ongoing discussion or if a decision was required. Ms. King said that no timeline had been set for a decision; the ASG merely wanted the Subcommittee to discuss leadership.

Presentation from World Bank – Global Gas Flaring Reduction Partnership

Mr. Layer introduced Mr. Sucre of the World Bank's GGFR public-private partnership. He thanked the United States Environmental Protection Agency (U.S. EPA) for arranging Mr. Sucre's participation and noted that GGFR's participation in the meeting was an action item coming out of the last Subcommittee meeting.

Mr. Sucre opened his presentation with some facts on global flaring and explained why flaring occurs. It is GGFR's vision to seek a world free of routine gas flaring and venting. He explained that the partnership is in its third incarnation and can identify with the GMI re-launch. He commented that GGFR Partners resemble GMI members and include governments, multilateral organizations, oil companies, and other organizations directly involved in emission reduction projects. The GGFR Partnership is involved with 30 projects in the oil and gas sector (e.g., associated gas flare reduction, process gas, methane recovery). He admitted, however, only two of the projects have received certified emissions reduction credits.

Mr. Sucre reported the Clean Development Mechanism/Joint Implementation (CDM/JI) process has not been well utilized by the oil and gas sector and that absent significant changes to the existing methodological approaches, this trend is expected to continue. For the CDM/JI process and/or other future schemes to work, the sector needs to be proactive in revising existing methodologies and drafting new methodologies. Thus, the GGFR Partnership created the Oil and Gas CDM/JI workgroup in late 2009 to engage with the UNFCCC to bring forward an improved review and approval process.

Mr. Sucre noted that the workgroup's short- and mid-term objectives are to foster CDM/JI flare reduction projects and support other abatement opportunities such as methane releases and carbon dioxide (CO_2) venting, where additional potential approaches foster significant greenhouse gas (GHG) emission reductions, respectively. The workgroup will also facilitate communication with the UNFCCC to promote a better understanding and awareness about the sector.

He also provided an update on workgroup activities. Specifically, he reported in addition to capacity building, the workgroup is planning and procuring consulting services for future activities, preparing a

technical references handbook, and planning a workshop with the UNFCCC in early 2011. Mr. Sucre identified potential, future areas of collaboration which include:

- Expanding the GGFR's focus to other methane recovery activities
- Developing a framework for Program of Activities
- Working on new, post 2012 emissions schemes

He reported that most recently, the workgroup has discussed possible solutions for methodology revisions.

Mr. Sucre concluded his presentation by providing an update on their technical network, which was set up to facilitate an improved understanding of the technical aspects of flare reduction activities. Six topics of focus have proposed for the Network, in order of priority:

- 1. Measurement and reporting of flare and venting volumes
- 2. Associated gas utilization technologies-particularly those suitable for small-scale utilization-
- 3. Flare optimization
- 4. Production process optimization and operational best practice
- 5. Industry management practices for flare reduction
- 6. Associated gas recovery plan preparation.

Anyone interested in additional information or supporting World Bank should contact Mr. Sucre at <u>fsucre@worldbank.org</u>.

Mr. Bill Schneider of COMM Engineering inquired about how to get information on GGFR's charter. Mr. Sucre responded the charter is on the <u>GGFR</u> website.

Mr. A.B. Chakraborty of Oil and Natural Gas Corporation (ONGC) of India remarked that ONGC has two CDM projects and the process was very difficult. Lastly, he speculated this might be a reason that the sector does not utilize the CDM/JI process. Mr. Sucre acknowledged his remarks. He reiterated the role of the workgroup and technical network, and the corresponding supportive process.

Mr. Chakraborty further expressed concerns about who has knowledge and experience to support the various aspects of the process. Mr. Sucre responded by inviting ONGC to contribute to the workgroup and/or technical network. In an attempt to wrap up the discussion, Mr. Layer outlined observed discussion themes:

- The GMI and Subcommittee need to position itself as a go to place for results oriented solutions;
- The technical solution to methodological deficiencies exists amongst the Subcommittee and Project Network members;
- The sector is missing key elements to bring forth credible emission reduction projects;
- The policy to support project development has emerged. Accordingly, the sector needs the right tools to implement projects.

Mr. Larry Richards of Hy-Bon reiterated Mr. Layer's remarks. He then added that the CDM/JI process is laborious and that GMI members should actively participate in the framework development process. Mr. Layer agreed that members should participate and as appropriate, bring forth issues for resolution.

Ms. Carey Bylin with U.S. EPA proposed that as an action item, the Subcommittee could work collaboratively to improve the CDM/JI process. She inquired as to how best to get involved and how the

GMI member can get linked in to the process. Mr. Sucre responded that GGFR is the best mechanism to affect change. Anyone interested in additional information or supporting World Bank should contact Mr. Sucre at <u>fsucre@worldbank.org</u>. Mr. Layer added that GGFR is results-oriented and wants to report its successes. He further commented that emission reduction projects are not an added cost; rather, they are a business opportunity and should be viewed as such.

Action Plans

Following the World Bank – GGFR presentation and a break for lunch, Ms King led a deeper discussion on comprehensive country-specific action plans. As previously mentioned, the action plans would be comprehensive; no longer source- or sector-specific and developed such that they could be integrated into each country's existing framework for environmental protection, clean energy, carbon mitigation, and/or other appropriate national-level plans. She reinforced the need for such plans as a useful tool to inform others, identify needs, and share successes.

Ms. King indicated next steps for action plans would be creating new templates to capture critical detail and supporting action plan development and implementation. She reiterated the need for member input to create the new, revised templates. Ms. King concluded by saying that the ASG intends for the template to include basic elements that might encompass the various stages of a country's domestic evolution and should describe opportunities for taking action.

As a way to capture all perspectives, Mr. Layer encouraged Subcommittee and Project Network members to provide the ASG comments and suggestions for the new templates. He further commented that although objectives of the GMI align with other existing national programs, many countries still agonize with developing and implementing projects. He suggested that members come to the next meeting with a list of barriers and/or issues prohibiting project advancement such that these could be discussed as a group with the overarching goals of identifying themes of commonality and building a results inventory. Mr. Hernandez echoed these remarks and noted the importance of working collaboratively to share experiences.

Mr. Sucre added that PEMEX continues to put forth significant effort to advance project development and implementation and their experiences will be useful to other members. To wrap up the discussion, Mr. Layer acknowledged their points and reiterated the logic to develop standard solutions that are transferrable to others with the goal to create global business opportunities that are eligible for credit under existing schemes.

Review of Oil and Gas Activity Since the Partnership Expo, Including Country-Specific Updates

Following the Action Plan discussion, Mr. Layer led the member country updates that mainly focused on activities since the last Subcommittee meeting.

Canada

Mr. Joseph Odhiambo of Environment Canada thanked the U.S. EPA for hosting this meeting and congratulated the GMI on a successful Subcommittee meeting. He reported that Canada continues to focus on multilateral initiatives as well as working collaboratively with the United States. These efforts continue to evolve moving from field measurement campaigns to overall program management and capacity building.

India

Mr. Chakraborty indicated ONGC has made considerable progress to advance its GHG management program and ONGC has realized that mitigation opportunities exist throughout their organization. He further noted that ONGC is equipped to develop projects with the CDM process in mind. ONGC completed its first sustainability report that broadly follows the Global Reporting Initiative requirements. Lastly, ONGC continues to build its internal expertise such that it is able to share technical information to all affiliates.

Poland

Ms. Krystyna Robaszewska of the Ministry of Economy reported that Gaz-Systems continues to evaluate results of its GHG emissions inventory as well as supportive emissions factors. Gaz-Systems is also looking at flaring and venting activities with hope of bringing forward a project opportunity.

Mexico

Mr. Hernandez reported that PEMEX has completed several field measurement campaigns (on- and offshore) and is looking at the results for possible project opportunities to meet its emission reduction commitment. PEMEX has set up a special climate change program responsible for managing activities that contribute toward meeting emission reduction commitments.

United States

Ms. Bylin reported the United States is actively providing technical support to Latin America (i.e., Chile, Argentina, and Mexico), China, India, Poland, and Russia-based oil and gas companies. Specifically, U.S EPA continues to work with these companies to identify, analyze, promote, and anticipate methane emission reductions from identified project opportunities. She also noted the Partnership paper on "Designing Ideal Emissions Reductions Strategy for Offshore Platforms" was presented at the Society of Professional Engineers International Conference on Health, Safety and Environment in Oil and Gas Exploration and Production held 18 April 2010 in Rio de Janeiro, Brazil.

Lastly, she gave a brief domestic policy update that focused on the development of the Mandatory Greenhouse Gas Reporting Rule for petroleum and natural gas systems. She reported the U.S. EPA rule is currently under review and that after it is signed, U.S. EPA will hold a series of webinar training sessions and prepare supportive informational material.

Administrative Issues

Ms. King commented on possible options for facilitating information exchange, noting the redesigned GMI website is not being used by Partners. The website should be utilized as a clearinghouse to share GMI successes and information, which will serve to strengthen our ability to showcase GMI as a world class initiative. Subcommittee and Project Network members should provide website content to the ASG on an ongoing basis.

Summary of Action Items Discussed at this Meeting

The meeting attendees established the following action items:

- Subcommittee and Project Network members are encouraged to send the ASG thoughts and ideas for the revised action plan template. As appropriate, the ASG will incorporate those ideas into the revised template.
- Subcommittee members are requested to continue to explore linkages between Subcommittee
 work and other relevant international initiatives and partnerships and, as appropriate given each
 country's current circumstances, support these initiatives and partnerships.
- Subcommittee members are asked to come to the next meeting with a list of barriers and/or issues
 facing industry such that these can be discussed as a group with the overarching goals of
 identifying themes of commonality and building a results inventory.
- Subcommittee and Project Network members are encouraged to provide website content to the ASG on an ongoing basis.
- The ASG is seeking member input on possible future Expo host locations and formats, as well as comments on lessons learned from past Expos.
- Anyone interested in additional information or supporting World Bank on their efforts to reduce gas flaring and venting should contact Mr. Sucre at <u>fsucre@worldbank.org</u>.

As appropriate, the ASG and U.S. EPA will work with the Subcommittee over the next few months to complete these action items in anticipation of the next Subcommittee meeting.

Ms. King posed a question to members as where and when to hold the next meeting. Hearing no response, she asked members that might be interested in hosting the next Subcommittee to contact the ASG.

Mr. Layer thanked everyone for their contributions to the meeting and continued support to the GMI. The meeting was adjourned.

Annex I

3 November 2010 – Subcommittee Meeting Final Agenda

1000–1015	Welcome Addresses EPA Representative Co-Chairs Cruz Ernesto Hernandez (Mexico) and Michael Layer (Canada)
	Brief introduction of meeting participants.
1015-1030	Adoption of Agenda Subcommittee Chairs
	Confirm the overall meeting objectives and specific mandates to the Oil and Gas Subcommittee as discussed in New Delhi, India, and provide an update on achieved emissions reductions.
1030-1100	Report Out From the Steering Committee Ashley King, ASG
	The ASG will provide a report out on significant Steering and Ministerial meeting outcomes to include an update on the Global Methane Initiative and general progress report/status update on Partnership activities and the Charge to the Subcommittee.
1100-1115	Review of Leadership Ashley King, ASG
	The review of leadership is required per the recent revisions to the Terms of Reference. Subcommittee members should discuss existing leadership and, by consensus, make recommendations for changes or continuing with the existing leaders.
1115-1200	World Bank – Global Gas Flaring Reduction Partnership Francisco Sucre, GGFR
	A presentation on the World Bank's Global Gas Flaring Reduction (GGFR) public-private Partnership initiative developed to seek a world free of routine gas flaring and venting.
1200-1300	Lunch
1300-1330	Action Plans Ashley King, ASG
	Working discussion of country-specific action plans to include country commitment to prepare and implement plans, review of content, identification of challenges and barriers, and recommendations for scaling up activities.

1330-1400	Review of Oil and Gas Activities Since the Partnership Expo, Including Country-Specific Strategies and Activity Update Subcommittee Chairs
	Dialogue with Country Delegates Member countries will review their activities in support of the Partnership's strategic goals and Charge to the Subcommittee (promote the Partnership and events, provide content for the website, engage Project Network members, and explore linkages between Subcommittee work and other relevant international initiatives and partnerships). As appropriate, representatives will also provide a brief update on other relevant activities in which their country has been involved since the Expo in New Delhi.
1415–1430	Administrative Issues Subcommittee Chairs
	Communications mechanisms (i.e., what works best?). Updates to Subcommittee rosters.
1430 – 1445	Summary of Action Items Discussed at this Meeting Ashley King, ASG
	Meeting action items. Specific tasks that meeting participants agree to accomplish and report on at the next meeting. Possible agenda topics for the next Subcommittee meeting. Confirmation of meeting location.
1445	ADJOURN

Annex II

Participants

Cruz Ernesto Hernández Petróleos Mexicanos/cruz.ernesto.hernandez@pemex.com Joseph Odhiambo Environment Canada/ joseph.odhiambo@ec.gc.ca K.D. Kalita Oil & Natural Gas Corporation/ kalita_kapildeb@ongc.co.in Krystyna Robaszewska Ministry of Economy/krystyna.robaszewska@mg.gov.pl Jonathan Goss El Paso Corporation/jonathan.goss@elpaso.com Mark Null El Paso Corporation/mark.null@elpaso.com El Paso Corporation/tim.canton@elpaso.com Tim Canton Arun Naik Shell Upstream Americas/arun.naik@shell.com Francisco Sucre World Bank/fsucre@worldbank.org U.S. EPA/bartos.scott@epa.gov Scott Bartos Jim Cormack TransCanada Pipelines/jim cormack@transcanada.com American Petroleum Institute/ritterk@api.org Karen Ritter Joshua McIntosh mailto:Chevron/joxx@chevron.com Kate Hauer Chevron Energy Technology Company/katehauer@chevron.com Shankar Ananthakrishna Chevron Energy Technology Company/ shank@chevron.com U.S. EPA /Blackman.jerome@epa.gov Jerome Blackman Jacobs Consultancy/ jeff.gerber@jacobs.com Jeff Gerber Brad Wynnemer Alliance Pipeline, LP/brad.wynnemer@alliancepipeline.com Clearstone Engineering Ltd/michelle.xue@clearstone.ca Minxia Xue Waeel Natah OXY/waeel natah@oxy.com Jose Gago OXY/jose.gago@oxy.com COMM Engineering/brian@commengineering.com Brian Boyer ICF International/sseastream@icfi.com Sandra Seastream Chesapeake Midstream Partners LP/dennis.alder@chk.com Dennis Adler Natural Resources Canada/ mlayer@nrcan.gc.ca Michael Layer Clearstone Engineering Ltd/ david.picard@clearstone.ca **David Picard** Oil & Natural Gas Corporation/Chakraborty ab@ongc.co.in Ashok Baran Chakraborty Allison Berkowitz ERG/allison.berkowitz@erg.com U.S. EPA/bvlin.carev@epa.gov Carey Bylin **Roger Fernandez** U.S. EPA/fernandez.roger@epa.gov Ashley King U.S. EPA/king.ashley@epa.gov Hy-Bon/Irichards@hy-bon.com Larry Richards G.W. (Bill) Schneider COMM Engineering/lripka@commengineering.com

Please see the Global Methane Initiative website for full contact information.