

**Methane to Markets Partnership
Oil & Gas Subcommittee
16 September 2009
Lake Louise, Alberta, Canada**

MINUTES

Summary of Key Discussions and Conclusions

Twenty-two participants attended the Oil & Gas Subcommittee meeting, representing seven countries: Australia, Canada, India, Mexico, Poland, Russia, and the United States. During this meeting, the attendees largely focused on planning for the Methane to Markets Partnership Expo in March 2010 in New Delhi, India. Member countries also provided a brief update on relevant activities in their country. The meeting attendees established these main action items:

- India Partnership Expo
 - The Administrative Support Group (ASG), with assistance from Subcommittee members, will:
 - Develop targeted invitation letters to key potential Expo participants.
 - Identify individuals who may need support to attend the Expo.
 - Subcommittee members should send a list of important potential participants to the ASG for targeted recruiting.
 - Members should actively support Expo preparation activities and attend.
- Oil & Gas Subcommittee—General
 - The ASG will develop targeted outreach material to demonstrate the business value associated with Methane to Markets Partnership.
 - The ASG and the U. S. Environmental Protection Agency (U.S. EPA) will seek participation from Subcommittee members and other key stakeholders to develop a compendium of standards for methane emission identification and measurement.

The meeting agenda, list of participants, and meeting summation slides are included as Annex I, II, and III respectively.

Welcome Addresses and Adoption of Agenda

Co-Chair Mr. Javier Bocanegra with Mexico's Petróleos Mexicanos (PEMEX) opened the meeting by thanking everyone for attending. He recognized everyone for their efforts to travel to and engage in this important meeting to plan for the upcoming Partnership Expo in New Delhi, India, on 2 – 5 March 2010. His sentiments were echoed by all Subcommittee and Project Network members in attendance. He reiterated the importance of the Methane to Markets Partnership and all that it has to offer members.

Mr. Bocanegra then led brief introductions of the meeting participants and a review of the meeting goals and adoption of the agenda.

India Partnership Expo

Ms. Ashley King of the ASG initiated meeting discussions by presenting a brief report on the timeline and status of planning for the Partnership Expo. Ms. King reviewed the role of the Subcommittee and Project Network members for making this Expo successful. Specifically, the ASG is looking for all Subcommittee and Project Network members to:

- Submit methane reduction project ideas to highlight in posters at the Expo. The projects can be completed, in process, or at the pre-feasibility phase.
- Provide potential presentation abstracts for the workshop and policy session component of the Expo.
- Contribute toward the development of the Oil & Gas technical agenda.
- Promote the Expo in their home country.
- Coordinate sector representation in country booths.
- Support Expo preparations, as called upon, and attend the Expo.

Ms. King also reviewed the ASG's outreach strategy and materials (full-color flyer and brochure). Upon request, the ASG is open to sharing the templates for foreign language translation.

Ms. King also requested that members begin to identify people in need of travel assistance. The World Bank and the Asian Development Bank have offered financial assistance for attendees and delegates in need of travel assistance. She further indicated that additional in-kind contributions are being sought. To conclude, Ms. King reviewed the Expo timeline (distributed in attendee folders) to remind everyone of key milestones leading up to the Expo and to reiterate the Subcommittee's role in Expo planning.

Mr. A.K. Hazarika, Director (Onshore) of the Oil and Natural Gas Corporation (ONGC) of India, provided his assurances that India is actively working to coordinate all aspects and all sectors of the Expo and that India is very much looking forward to the Expo. He also shared possible plans for a facility tour. Specifically, ONGC is considering a one-day trip to Mumbai. He cautioned that due to necessary security clearances, the host facility will require two months advance notice to accommodate the tour.

Mr. Bocanegra thanked Mr. Hazarika for his remarks and asked if anyone could offer lessons learned from the China Expo that could be applied to improve the India Expo.

Mr. Roger Fernandez with U.S. EPA commented that the India Expo is expected to attract more people than the China Expo. He encouraged everyone to identify potential participants (e.g., government officials, technology developers, and project developer/investors) that should attend the Expo. Lastly, he commented that everyone is looking forward to what will be a spectacular event.

Mr. Bocanegra suggested that to encourage attendance, the ASG should consider sending invitations. He further suggested that Project Network members could show their support by participating with goods and services and displaying information about their projects. As follow-on, Mr. Larry Richards of Hy-Bon expressed his support for Mr. Bocanegra's remarks. He commented that the Expo is a great venue and its location is key for drawing attendees from Asia and the Middle East. He suggested that the outreach material be circulated to the various national oil companies (NOCs), as the NOCs support project implementation and are well connected with privately owned companies. He further suggested that the ASG circulate an electronic version of the brochure so that Project Network members could share the brochure with their representatives' in-country to promote the Expo.

Ms. Carey Bylin with U.S. EPA thanked everyone for their comments and echoed many of the same comments to promote participation. She thought that invitation letters could be sent directly to potential participants and, further, that the letters could be sent out under the signatures of the ASG, U.S EPA, or perhaps, ONGC (as the host of events for the oil and natural gas sector), depending on the participants' circumstance.

Mr. Bocanegra again stressed the importance of reaching out to potential participants. He also began a discussion of the preliminary sector-specific agenda and encouraged everyone to contribute towards the development of the technical agenda.

Mr. Hazarika made note of the conflict between the Steering Committee meeting and the site tour. Ms. King provided assurance that the ASG is aware of the conflict and is working to balance the Expo schedule. Mr. Hazarika then remarked that a representative of their Sector Ministry would be speaking at the plenary session to set the tone for the Expo event.

Ms. Bylin commented that the response from the Call for Presentations will drive the agenda. Ms. King responded that agenda planning will begin in November and that the ASG would be mindful of any gaps in the agenda. Mr. Chakraborty of ONGC offered a potential agenda topic—UNFCCC methodologies covering fugitive emissions and related technology mitigation. Ms. Bylin concurred with the topic. The ASG will consider the topic for the technical agenda.

India Partnership Expo—Country-Specific Update

Following the ASG report on India Partnership Expo-related activities, Mr. Bocanegra led the update from member countries.

Australia

Mr. John Karas reported that Australia has established working groups among their Methane to Markets contact groups for each sector. They recently sent promotional flyers to industry contacts seeking support for the Expo. Additionally, Australia is seeking support (representation in the country booth and on the ground) from its trade commissions. Mr. Karas concluded by reiterating Australia's support for Methane to Markets and the Asia Pacific Partnership and agreed to take any action items coming out of this meeting to the appropriate points of contact.

Canada

Mr. Joseph Odhiambo of Environment Canada reported that Canada has secured governmental funding to advance projects abroad. Canada hopes to make more formal announcements shortly and is committed to showcasing project activities related to the oil and gas sector.

India

Mr. A.B. Chakraborty of ONGC of India provided the update on his country's efforts. ONGC has put together a formal Methane to Markets program team. The team has recently completed hands-on training on measurement techniques. Since the Monterrey Subcommittee meeting this past January, ONGC has completed two additional field measurement studies at their Uran and Kallol facilities and five table-top analyses of new installations.

Regarding actionable items coming out of the Monterrey Subcommittee meeting, ONGC has committed to showcase two projects at the Expo and has identified five companies to attend the Expo.

Mexico

Mr. Bocanegra reported that since 2006, Mexico has collaborated with Methane to Markets and has recently completed a comprehensive emission inventory. The inventory has proven to be a valuable tool.

PEMEX is working with its technical contractors to share its experience at the Expo. Participation at the Expo is fully support by the Mexico's government.

Poland

Ms. Eliza Dyakowska with Gaz-System S.A provided the update on her country's efforts to support the Expo. She agreed to take any action items coming out of this meeting to the appropriate points of contact in Poland and to encourage active participation.

United States

Ms. Bylin reported that the United States is aggressively marketing the Expo through industry contacts.

Mr. Hazarika suggested that the Expo brochure be sent in hard copy to the Subcommittee and Project Network members, and that the Expo be advertised in trade journals. These activities will better position members to follow up within their respective countries and garner support for the Expo.

Ms. Bylin reported that Methane to Markets will have a presence at upcoming events such as the Conference of Parties (COP) and volunteered to follow up with attendees by requesting contact information for those people that should receive an invitation letter for the Expo. The letter could be sent out under the signatures of the ASG, U.S. EPA, PEMEX (as Co-Chair of the Subcommittee), and ONGC (as the host of the event for the oil and natural gas sector).

Ms. Magdalena Muir, a research associate with the Arctic Institute of North America, offered to share contact information for colleagues at the European Union and suggested that the ASG reach out to people in the academic community. Ms. King thanked Ms. Muir for the offer and restated the Methane to Markets charter with respect to research; the Partnership is interested in good research on the cusp of implementation.

Report from the ASG

Following the country-specific update, Ms. King provided the Subcommittee with a report out from the recent Steering Committee meeting and overall ASG activities. She reported that the Dominican Republic is the newest country to the Methane to Markets Partnership and that Georgia (a new Partnership member) is considering joining the Oil & Gas Subcommittee.

The ASG recently completed a redesign of the Methane to Markets Web site. The site was redesigned to place greater emphasis on access to tools and news from country- and sector-specific perspectives, and to add more country pages. The ASG has made considerable progress towards completing the Partnership Accomplishments Report and anticipates having the report available in time for distribution at the COP in December.

Ms. King reported that the Partnership Terms of Reference (TOR) have been extended until new ones are approved at the ministerial meeting in 2010. The ASG hopes that the new TOR will solicit greater commitment (financial and personnel resources). Her report concluded with a reminder about upcoming events.

During the question-and-answer session following the report, several meeting attendees commented on the level of participation. Ms. King acknowledged that the level of participation is consistent across all the sectors and that the ASG is looking at ways to foster greater participation. She commented that the ASG hopes that the new TOR would go along way at getting the right people resources to the Partnership with

partner governments becoming more active over time. Mr. Bocanegra remarked that the Subcommittee Chairs are also responsible to invoke and invite active participation.

Mr. Karas expressed the need to co-locate meetings with other large events that draw international industry experts. Others agreed and further suggested that consideration be given to strategically selecting meeting locations to foster country participation.

To wrap up the discussion, Mr. Bocanegra suggested that the ASG prepare outreach material showing the business value of the Partnership as it relates to its members. The ASG agreed and will develop targeted outreach material to demonstrate the business value associated with Methane to Markets Partnership.

Country-Specific Strategies and Activity Update

Australia

Mr. Karas did not offer a formal report but shared a few thoughts on the status of emissions in Australia. He commented that liquefied natural gas-related activities continue to grow. Accordingly, Australia is addressing ancillary marketplace issues. Australia has set an emission reduction goal and is aggressively looking at technologies to reduce emission, including fuel switching.

Canada

Mr. Odhiambo reported on behalf of Canada. He again thanked the U.S. EPA for its support and thanked all the developed and developing countries for their actions to quantify and reduce emissions. He is looking forward to advancing funding and collaborative efforts under the Methane to Markets Partnership.

India

India's country presentation was covered as part of the India Partnership Expo—Country-Specific Update presentation.

Mexico

Mr. Sergio Novelo from the Ministry of Environment and Natural Resources presented to the Subcommittee an overview of Mexico's climate change activities. He indicated that Mexico might be willing to reduce emissions by up to 50 percent by 2050, contingent on financial and technical assistance. Mexico is continuing to evaluate this emission reduction statement in light of the COP and capacity within the country. The Mexican government has established a Special Program for Climate Change. The objective of the program is to come up with a long-term strategy (mitigation and adaptation) for dealing with climate change. Mexico has several ongoing Methane to Markets projects in several sectors.

Mr. Bocanegra updated the Subcommittee on Methane to Markets activities in Mexico since the Monterrey meeting. Specifically, PEMEX completed a comprehensive bottom-up methane emission inventory. The inventory results were used to come up with marginal abatement curves (MAC) to determine the cost effectiveness of reducing emissions at various break-even points. Through the MAC analysis process, PEMEX has been able to determine that many of the emission sources identified through the inventory can be mitigated or reduced using available technologies and practices. Moving forward, PEMEX is actively refining its emission inventory, finalizing its climate change implementation strategy and strengthening its international position on climate change. PEMEX has received top management support. These efforts will culminate in a PEMEX climate change policy.

Poland

Ms. Krystyna Magorzata Robaszewka, an expert with the Ministry of Economy, offered an update on behalf of Poland. She reported to be in close contact with companies and research and development firms in-country to advance projects. The government is considering incentives to advance project development Such as in the form of favorable tax policy.

Ms. Dyakowska reported the completion of its first greenhouse gas (GHG) emissions inventory. The results of the inventory were consistent with European peer companies and will be used to support policy- and operations-related decisions.

Russia

Dr. Greta Akopova, head of environmental protection for VNIIGAZ, reported on behalf of Russia. She reported having completed a comprehensive GHG emissions inventory covering the major GHGs and all emission sources. Like colleagues in Poland, the results will be used as the basis for future decisions including project prioritization. Current operating programs at GAZPROM are all aimed at reducing GHG emissions. The inventory will be updated annually and will consider available methodologies and measurement technologies.

United States

Ms. Bylin reported on behalf of the United States. She reported that the United States continues to collaborate internationally with Argentina, Brazil, Canada, Chile, China, India, Mexico, Poland, Russia, and Ukraine. These efforts will identify, analyze, promote, and track methane emission reductions from projects and engage new partners.

Methane to Markets representatives will be at the 24th World Gas Conference to present a poster titled “Methane’s Role in Promoting Sustainable Development in the Oil and Natural Gas Industry.” The poster is based on a paper developed in collaboration with PEMEX of Mexico, Pluspetrol S.A. of Argentina, Gazprom of Russia, and EnCana of the United States. It will showcase environmental and economic benefits of successful methane emission reduction projects implemented by each of these companies. The United States also is collaborating with a Global Gas Flaring Reduction Partnership working group to increase clean development mechanism utilization within the oil and gas industry.

To conclude, Ms. Bylin reported that Natural Gas STAR methane emission reduction numbers have been compiled. Domestic partners (based in the United States) reported emission reductions of 114 billion cubic feet (BCF), and international partners reported emission reductions of 51 BCF.

As a follow-on question, Dr. Akopova inquired about the availability of guidance documents (standards and technical application). Ms. Bylin responded that the ASG and the U.S. EPA are seeking input to develop a compendium of standards for methane emission identification and measurement. Ms. King offered use of the ON TIME Tool as a repository to house the compendium long term. Mr. Donald Robinson of ICF International urged everyone to contribute (by sharing experiences and pictures) to the compendium. Mr. Bocanegra concluded the discussion by suggesting that a working group be formed to review the compendium when ready.

Directed Inspection & Maintenance—Policy That Leads to Cost-Effective Development of Offset/Trading

The presentation was cancelled and might be rescheduling for a later meeting.

Administrative Issues

Following the Partner country updates, Mr. Bocanegra led a discussion on administrative issues. The members agreed that Subcommittee communications are effective.

Summary of Action Items

Ms. King summarized the major action items decided upon at the meeting. The main action items include the following:

- India Partnership Expo
 - The Administrative Support Group (ASG), with assistance from Subcommittee members, will:
 - Develop targeted invitation letters to key potential Expo participants.
 - Identify individuals who may need support to attend the Expo.
 - Subcommittee members should send a list of important potential participants to the ASG for targeted recruiting.
 - Members should actively support Expo preparation activities and attend.
- Oil & Gas Subcommittee—General
 - The ASG will develop targeted outreach material to demonstrate the business value associated with Methane to Markets Partnership.
 - The ASG and U. S. Environmental Protection Agency (U.S. EPA) will seek participation from Subcommittee members and other key stakeholders to develop a compendium of standards for methane emission identification and measurement.

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

Mr. Hazarika extended an invitation for everyone to attend the Expo and promised that it would be a great experience with many benefits.

Mr. Bocanegra thanked everyone for their participation and continued support. The meeting was adjourned.

Annex I

16 September 2009 – Subcommittee Meeting

- 0900–0945 **Welcome Addresses**
Canadian Government Representative
Chairman Kaplan Basniev (Russia), Chairman Javier Bocanegra (Mexico), and
Vice Chairman Michael Layer (Canada)
Brief Introduction of Meeting Participants
- 0945-1000 **Adoption of Agenda**
Subcommittee Chairs
- Confirm the overall meeting objectives and specific mandates to the Oil and
Gas Subcommittee as discussed in Monterrey, Mexico
- 1000-1015 **India Partnership Expo**
Ashley King, ASG
- Goals of India Partnership Expo
Timeline and status of planning for Expo and role of Subcommittee members
- 1015-1045 BREAK
- 1045-1200 **India Partnership Expo—Country-Specific Update**
Subcommittee Chairs
- Dialogue with Country Delegates on *actionable items* for the March 2010 Expo.
Each Subcommittee member should be prepared to discuss:
- Target companies, organizations and individuals that could contribute to the
topic of reducing methane emissions (via research, inventories, relevant
technologies, active or future projects, etc.) whom each Subcommittee
member will contact to encourage participation in Expo (minimum of two,
including contact information).
Relevant technologies and methane emission reduction projects (active or
planned) that each Subcommittee member will showcase or encourage others
to showcase at the Expo (minimum of two).
Ideas for general strategies to encourage attendance and participation in
Expo.
- 1200-1215 **India Partnership Expo—Technical Abstract**
Michael Layer, Vice Chairman
- 1215–1330 LUNCH
- 1330-1400 **Report from the Administrative Support Group (ASG)**
Ashley King, ASG

General progress report/status update on overall ASG activities, to include the Methane to Markets Partnership-wide Accomplishments Report

1400-1515

Country-Specific Strategies and Activity Update

Subcommittee Chairs

Dialogue with Country Delegates

Member countries will provide a brief update on relevant activities in which their country has been involved since the Monterrey meeting

1515-1545

BREAK

1545-1615

Directed Inspection & Maintenance—Policy that Leads to Cost-Effective Development of Offsets/Trading

Larry Richards, Hy-Bon Engineering

1615–1645

Administrative Issues

Subcommittee Chairs

Communications mechanisms (i.e., what works best?)

Updates to Subcommittee rosters

1645 – 1700

Summary of Action Items Discussed at this Meeting

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

1700

ADJOURN

Annex II

Participants

John Karas	Australia Department of Resources, Energy, and Tourism/ John.Karas@ret.gov.au
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Suzie Walter	U.S. EPA/ waltzer.suzane@epa.gov

Please see the Methane to Markets Web site for full contact information

Annex III

Meeting Outcomes

- Active subcommittee participation is necessary for the next Expo to be successful (details next slide)
- The ASG, with help from Subcommittee members, will:
 - Develop targeted invitation letters to important potential Expo participants, including North African companies and individuals
 - Identify individuals who may need support to attend Expo
- Countries provided updates on their activities in the oil & gas sector.
- In considering the future of the Partnership, ensuring active participation from all subcommittee delegates is very important.
- Emissions inventories are valuable tools for emission management efforts.
- Marketing material targeted at oil & gas companies to demonstrate the business value associated with the M2M Partnership would be useful.
- ASG & EPA will seek participation from Subcommittee members and other stakeholders to develop a compendium of standards for methane emission identification and measurement to be compiled using the experience of member countries in the oil & gas sector.
 - Could consider certification by international body.
- The Co-Chairs and the ASG greatly appreciate the active participation and ongoing efforts of the Subcommittee delegates and Project Network members who participated in today's meeting.

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Role of the Subcommittee in Expo Planning

- Identify and assist in data collection for potential projects to showcase, and provide updates to Beijing projects (when applicable)
- Develop Oil & Gas technical agenda
- Market the Expo in home countries
- Identify sponsors, technology vendors, and other attendees
 - Subcommittee members to send list of important potential participants to ASG/EPA for targeted recruiting
- Coordinate sector representation in country booths
- Attend!

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