

**Methane to Markets Partnership
Oil & Gas Subcommittee
5 March 2010
New Delhi, India**

MINUTES

Summary of Key Discussions and Conclusions

Seventeen participants, representing eight countries, attended the recent Oil & Gas Subcommittee meeting in New Delhi, India. The countries represented included Australia, Canada, India, Italy, Japan, Mexico, Poland, and the United States. During this meeting, the attendees largely focused on planning for future Subcommittee activities. Member countries also provided a brief update on relevant activities in their country. The meeting attendees established the following main action items:

- Subcommittee will review leadership per the agreed upon charge from the Steering Committee. This topic will also be included as an agenda item for the next Subcommittee meeting. In the meantime, members should send the Administrative Support Group (ASG) recommendations on the state of Subcommittee leadership. These recommendations will be shared prior to the next meeting.
- Subcommittee and Project Network members should send the ASG thoughts and ideas on integrating Subcommittee meeting components into the technical and policy sessions of the technical session that will accompany the next subcommittee meeting, which will be the Natural Gas STAR Annual Workshop. As appropriate, ASG will provide feedback to the Subcommittee members.
- Subcommittee and Project Network members should send the ASG thoughts and ideas on integrating Subcommittee meeting components into the technical and policy sessions of the Expo. As appropriate, ASG will provide feedback to the Subcommittee members.
- The ASG will look into the feasibility of simultaneous Web casts of Subcommittee events. Pending the outcome, the ASG will provide feedback to the Subcommittee members.
- Canada will share Terms of Reference (TOR) for projects currently being undertaken in Canada concerning the development of two Best Management Practices (BMP) and two emissions models.
- The ASG, at the direction of Subcommittee and Project Network members, will assist with engaging those Subcommittee members not actively participating in Partnership activities.
- United States Environmental Protection Agency (U.S. EPA) will seek participation from the Global Gas Flaring Reduction (GGFR) public-private partnership at the next Technology Transfer Workshop and/or Subcommittee meeting.
- The Subcommittee and Project Network members should support the larger Partnership's strategic goals and Charge to the Subcommittee. In general, the Charge to the Subcommittee includes the following:
 - Promote Methane to Markets Partnership events.
 - Review their leadership and select new co-chairs as/if necessary.
 - Work with the ASG to provide information for the redesigned Web site on an ongoing basis.
 - Distribute Methane to Markets materials and/or make presentations at relevant events.
 - Continue to better engage Project Network members (e.g., success stories, speaking opportunities, concurrent meetings with industry events).
 - Continue to develop country-level, sector-specific action plans if they have not already.
 - Explore linkages between Subcommittee work and other relevant international initiatives and partnerships.

The meeting agenda and list of participants are included as Annex I and II respectively. The complete Partnership Expo, technical and policy sessions, and Subcommittee meeting proceedings are available on the Methane to Markets Web site at <http://www.methanetomarkets.org/expo/index.htm>.

Welcome Addresses and Adoption of Agenda

Mr. Luis Betancourt with Mexico's Petróleos Mexicanos (PEMEX) opened the meeting by thanking everyone for attending. He recognized everyone for their efforts to travel to India and engage in the previous day's workshops and this important meeting to plan for future Subcommittee activities. His sentiments were echoed by Vice Chair Mr. Michael Layer with Natural Resources Canada. Mr. Layer further recognized the importance of aligning Methane to Markets Partnership and Subcommittee synergies with other relevant programs (e.g., Asia-Pacific Partnership).

Mr. Layer then led brief introductions of the meeting participants, review of the meeting goals, and adoption of the agenda. As follow-on, Mr. Donald Robinson of ICF International (ICF) requested that the action items coming out of the Lake Louise meeting be revisited and further, suggested that each Subcommittee meeting be opened with a report out on actual emissions reductions recorded since the prior meeting. Mr. Layer recapped the action items coming out of the Lake Louise meeting.

Report from the Steering Committee ASG

Ms. Ashley King of the Administrative Support Group (ASG) presented a brief report out from the Steering Committee meeting. Specifically, she focused on "charges" of note to the Subcommittee. The ASG is looking for all Subcommittee and Project Network members to:

- Utilize outreach materials and communications for in-country efforts to promote the Partnership. As appropriate, translate materials and communications into native language.
- Look at the recently re-designed Methane to Markets Web site and provide the ASG with content for posting on the country Web page. The provided content should reflect individual country operating circumstances and/or Partnership participation.
- Establish links of commonality between Subcommittee work and other relevant international initiatives, partnerships and domestic policies. As appropriate, the Partnership/Subcommittee will work collaboratively to leverage common efforts.
 - *For example, possible collaboration with the World Bank GGFR Partnership under the expanded Methane to Markets Partnership scope of methane abatement.*
- Complete and submit country-specific action plans.
- Review leadership per the agreed upon draft revised Terms of Reference.

Ms. King remarked the Steering Committee was not prescribing how the Subcommittee should review its leadership other than the review needs to conform to the proposed Terms of Reference. Mr. Layer thanked Ms King for the report out.

Mr. A.K. Hazarika, Director (Onshore) of the Oil and Natural Gas Corporation (ONGC) of India, welcomed everyone to India and provided some brief comments on the benefits that ONGC has realized as the result of their Methane to Markets participation. He further commented that additional methodologies are needed to support the Clean Development Mechanism (CDM) project process and

encouraged Methane to Markets to take this on as an action item. Mr. A.B. Chakraborty of ONGC of India echoed Mr. Hazarika's sentiment concerning the need for additional methodologies and further, commented a new CDM project methodology based on Capturing Fugitive Emission needs to be developed which could be helpful for oil & gas companies. Developing a new CDM methodology is a time and resource intensive exercise and as such it is important that U.S. EPA fund the required CDM methodology development exercise.

He also further emphasized the need for a study tour for key ONGC employees in line with the tour conducted for officials from China by U.S. EPA. He insisted that ONGC is developing its internal team to undertake company-wide measurement studies. It would be necessary for the internal team members and other related key officials involved in the implementation of Methane to Markets program to be exposed to such installations where emission control interventions have been undertaken globally in the United States, Canada or in Latin America. This study tour would be necessary for capacity building and also to provide gainful experience to the team in the implementation through field exposure.

Mr. Layer wrapped up the discussion by noting that approved methodologies would allow for the development of carbon credits and offset opportunities from verifiable reduction of methane emissions.

Mr. Betancourt shared his observations of the Plenary Sessions. He felt that the jurisdictional agencies did not understand the sector and/or the accomplishments made in reducing emissions. Thus, emissions and emissions reduction opportunities in the oil and gas sector are not well understood. He spoke of PEMEX's link to the GGFR public-private partnership and the upcoming 16th meeting of the Conference of the Parties (COP16) meeting in Cancun, Mexico. He reiterated the need to align Subcommittee efforts with other relevant climate change and energy efficiency programs and in-country regulatory policies.

Mr. Layer questioned Mr. Chakraborty about absent stakeholders and how the Subcommittee could provide better support and/or outreach to encourage key stakeholders to attend Partnership events. Mr. Chakraborty responded that international consultants with CDM-related experience should have been invited to participate. Ms. Carey Bylin with U.S. EPA acknowledged Mr. Chakraborty's remarks; commented that the GGFR Program of the World Bank was chairing a working group in an attempt to make the CDM project process work better for the sector projects that reduce the amount of gas flared and vented; and offered to invite Francisco Sucre of the GGFR to the next Technology Transfer Workshop and/or Subcommittee meeting.

Review of Oil and Gas Content and Outcomes from Expo

Following the ASG report out and related discussions, Mr. Layer led the update from member countries. The reports mainly focused on activities in support of the Expo. A second activity update occurred later in the meeting.

United States

Ms. Bylin reported that the United States aggressively marketed the Expo through targeted invitation letters to key potential Expo participants. She noted a need for more face-to-face meetings as a way to leverage in-country member relationships.

Australia

Ms. Margaret Sewell of the Australian Department of Resources, Energy and Tourism did not offer a formal report but shared a few thoughts on meeting attendance. She commented that the Partnership and Subcommittee needs to be reprioritized. By doing so, the issue of emissions reductions would be firmly

on its members “radar screen.” She further commented that liquefied natural gas- (LNG-) related activities continue to grow and that Australia has a new carbon pollution reduction scheme before their parliament.

Italy

Mr. Francesco Presicce of the Italian Ministry for the Environment and Land and Sea reported on the status of Italy’s program participation. He expressed support for the Partnership’s proposed TOR to include methane abatement and efforts to explore linkages between the Subcommittee work and other relevant international initiatives and partnerships. He also noted that inclusion of methane abatement in the Partnership’s scope will set the basis for stronger links with carbon markets and the United Nations Framework Convention on Climate Change (UNFCCC), where efforts are already underway to improve global carbon markets. Methane to Markets could make positive contributions to these initiatives.

As follow up to Mr. Presicce’s update, Mr. Robinson shared some comments on ICF’s participation in the GGFR partnership. He reported that ICF periodically reports methane emissions to GGFR. Mr. Chakraborty commented that ONGC had been approached by GGFR but felt the fee to participate was rather high. Mr. Roger Fernandez with U.S. EPA commented that GGFR is a like-minded Partnership seeking to leverage the expertise of others in order to improve and develop CDM methodologies and advance emissions reduction efforts in the industry. Ms. Bylin noted that the U.S EPA is collaborating with a GGFR working group to increase clean development mechanism utilization within the oil and gas industry and further, that the GGFR working group is open to all. She also thought it worthwhile to invite GGFR to the next Subcommittee meeting.

This concluded the update from member countries with respect to activities in support of the Expo. The meeting recessed for lunch. The meeting resumed with Ms. King leading a discussion on the Charge to the Subcommittee to review their leadership. Per the proposed TOR, the Subcommittee should conduct a review of leadership every three years. The review process is at the discretion of the Subcommittee. The Steering Committee does not expect to establish a process for the review; rather it must conform to the agreed upon final TOR (to be approved in late 2010). She reiterated that no decisions were needed; instead the Subcommittee should just begin discussions of this issue. It was agreed that this review of leadership will also be included as an agenda item for the next Subcommittee meeting. In the meantime, members should send the ASG recommendations on possible changes to the leadership. Any recommendations received will be shared prior to the next meeting.

Review of Oil and Gas Country-Specific Strategies and Activity Update

Following the Subcommittee leadership discussion, Mr. Layer led the update from member countries. The update reports mainly focused on activities that member countries have been involved with since the last Subcommittee meeting.

United States

Ms. Bylin reported that the United States is actively providing technical support to Latin America (Chile, Brazil, and Mexico), China, India, Mexico, Poland, Russia, and Ukraine-based oil and gas companies. U.S EPA continues to work with these companies to identify, analyze, promote, and track methane emission reductions from projects and engage new Country and Project Network members. Many of the companies showcased their Partnership activities at the Expo.

Methane to Markets and Partnering Companies won the “Best Paper” award at the World Gas Conference that took place in Buenos Aires, Argentina, on 5-9 October 2009. The paper titled “Methane’s Role in

Promoting Sustainable Development in the Oil and Natural Gas Industry” is available at: www.epa.gov/gasstar/documents/best_paper_award.pdf. Additionally, the Partnership paper on “Designing Ideal Emissions Reductions Strategy for Offshore Platforms” was accepted to the Society of Professional Engineers International Conference on Health, Safety and Environment in Oil and Gas Exploration and Production to be held 18 April 2010 in Rio de Janeiro, Brazil. Petrobras is a principal sponsor of the conference. U.S. EPA is collaborating with an International Gas Union working group to prepare for the World Gas Conference: Sustaining Future Global Growth to be held in Kuala Lumpur, Malaysia, 4-8 June 2012.

Mr. Fernandez gave the domestic policy update. He is leading development of the Mandatory Greenhouse Gas (GHG) Reporting Rule for petroleum and natural gas systems. The proposed GHG reporting rule would require annual reporting of fugitive and vented carbon dioxide and methane emissions from petroleum and natural gas systems. Under the reporting rule, data collection would begin in 2011 with reports due to U.S. EPA in March 2012.

The United States offered to host the next Subcommittee meeting in conjunction with the Natural Gas STAR Annual Implementation Workshop. The Subcommittee accepted the offer. The next meeting will be held in conjunction with the Natural Gas STAR Annual Implementation Workshop during the first week of November in New Orleans, Louisiana.

India

Mr. A.B. Chakraborty provided the update on his country’s efforts. ONGC has made considerable progress in the past few years to reduce emissions and expects to issue a sustainability report in the next few months. Long term, ONGC is working to be carbon neutral. ONGC plans to support UNFCCC COP 16 activities.

Italy

Mr. Presicce reported that Italy supports the overall Partnership objectives with special regard to international activities. In fact, in Italy, the oil & gas sector is using the most up-to-date technologies and further emission reduction potential is limited. As a result, the Italian Ministry for the Environment Land and Sea is working largely on international collaborations. Italian companies are active internationally as well. Mr. Presicce referenced Eni’s efforts in several African countries.

Canada

Mr. Layer updated the Subcommittee on Canada’s efforts to develop continuous methane monitoring and source location models that Mathew Johnson of Carleton University presented at the September 2009 Technology Transfer Workshop in Lake Louise, Alberta, Canada. Canada is now looking to engage a host facility to assist with completing the model. Canada will share its TOR for the continuous methane monitoring and emissions source location model as well as a second newly developed model to quantify the GHG emissions associated with solution or associated gas flaring. The model is intended to enable accurate and verifiable baseline inventories of flaring related GHG emissions or quantification of avoided emissions due to reduced or eliminated solution gas flaring. Canada has also developed two BMPs— assessing and monitoring emissions from storage tanks and assessing Fugitive Emissions Best Management Practice for the upstream oil and gas industry. Canada will share the TOR for these BMPs. Canada hopes that the modeling work and BMP development will contribute to CDM methodology development. Canada is also participating with the U.S. on emissions reduction opportunity assessment work efforts in China and Mexico. Using Canadian money, U.S. efforts have been leveraged to include energy efficiency and process optimization.

Action Items in the Coming Year

Following the country-specific update, Mr. Layer led a discussion on what comes next for the Subcommittee. He suggested a few areas of potential focus to initiate the discussion. The areas included: completing the country-specific profiles, developing papers, and collaborating on a methodology.

Mr. Larry Richards of Hy-Bon suggested that presenters offer more insight as to how they have been able to overcome cultural and structural barriers to allow for project implementation. Mr. Layer remarked that country members look at activities in-country and their drivers to establish linkages with Partnership activities.

Mr. Presicce remarked that members need to re-affirm their commitment to the Partnership and should consider doing so in their country-specific plans. Also, using the plans, members could perform a gap analysis to identify technical needs. The plans need not focus solely on Partnership activities but all activities that advance the cost effective recovery and use of methane, and that reduce emissions regardless of program driver. As follow on, Mr. Layer reiterated the importance of action plans. Partner countries should update existing, or develop new, country-level oil and gas sector specific action plans and in order to better leverage efforts and resources, identify opportunities for collaboration and knowledge transfer. The plans should reference existing domestic energy or climate change programs or policies and associated activities which align with existing and emerging Methane to Markets objectives (e.g., proposed expanded Partnership scope to include methane abatement). It was noted that completing and submitting country-specific action plans is a specific Charge to the Subcommittee from the Steering Committee.

Mr. Robinson commented on the Project Network member representation at the Subcommittee meeting. He thought that Project Network members should be given the opportunity to present on their related activities. Mr. Layer suggested that to encourage Project Network member support, the Subcommittee consider parallel communications to mature Project Network member support. He encouraged Project Network members to identify and share issues of concern. As follow-on, Mr. Richards suggested that someone “Chair” the Project Network. This person could interface with the Steering Committee and convey information to Project Network members.

Mr. Fernandez suggested that country members commit to completion of country-specific plans and report on their activities at the next Subcommittee meeting. This would serve as an ideal platform for Country and Project Network members to discuss potential synergies.

Ms. Bylin shared her thoughts on the Subcommittee attendance. She acknowledged that many Country members are not active participants; do not attend meeting or respond to Partnership communications. The goal should be to get the right people to attend and be active in the Partnership. Ms. Sewell noted the Steering Committee is in a similar situation with members (i.e., absorbing information but not presently active in the Partnership). She expressed the need to re-engage at the Ministerial level.

Mr. Presicce commented that countries embrace the concept of a Partnership and to encourage participation we should update contact lists more frequently. Mr. Layer remarked that, for the most part, participants are “volunteers” with a limited sphere of influence. Many Partners lack funding and/or people resources (government and industry) and as a result, Country members heavily weigh and consider opportunities.

Mr. Richards made note that Partnership signatories should be expected to honor their commitment to the Partnership. Ms. Sewell questioned the overall concern about participation as she feels it is perfectly acceptable for members to watch, but not actively engage.

Mr. Robinson commented on the absence of a process to show results. Ms. King affirmed that the Partnership has a process and mechanisms in place to show results. Specifically, the Partnership recently published its *Partnership Accomplishment Report*. The Project Network members were given the opportunity to contribute to the report and provide feedback. Mr. Layer reminded everyone that the Partnership Web site and Subcommittee Web page is available for everyone to provide content.

Mr. Fernandez proposed that the Subcommittee consider integrating its meeting into a Technology Transfer Workshop. The workshop could be set up such that it is relevant to the audience we are trying to reach. It was also proposed that the Workshop be distributed via simultaneous Web cast. Mr. Fernandez offered to look into the feasibility of both ideas. Mr. Layer, Mr. Robinson, and Ms. Sewell all supported the proposal. In the meantime, it was suggested the Subcommittee and Project Network members send the ASG thoughts and ideas on integrating Subcommittee meeting components into the Technology Transfer Workshop portion of the meeting event. As appropriate, ASG will provide feedback to the Subcommittee members.

It was suggested that the Subcommittee set achievable goals with respect to developing products that support the Steering Committee's interest in expanding the Partnership's scope to include methane abatement. This could include a gas flaring model and fugitive and tanks BMPs. Further, it was suggested that the Subcommittee develop these products such that they could be submitted as a methodology. Representatives from Canada, India, and Mexico all expressed interest in pursuing these product ideas. As follow-on to the discussion regarding participation and outreach, Mr. Betancourt offered to do some opportunistic outreach to his peers at gas company operations in Columbia, Brazil, and Argentina. Ms. Bylin offered to assist as needed. She inquired whether the Subcommittee needs to increase participation or actual membership, and whether a formal outreach effort is needed to garner support.

Mr. Fernandez reemphasized the need to attract Partner and Project Network member involvement and encouraged everyone to think about how the Subcommittee could better attract member involvement. This topic will be discussed further at the next meeting.

Administrative Issues

Following this discussion, Ms. King offered to send members an email with the major action items decided at the meeting. The members accepted the offer.

Summary of Action Items

The meeting attendees established the following action items:

- Subcommittee will review leadership per the agreed upon charge from the Steering Committee. This topic will also be included as an agenda item for the next Subcommittee meeting. In the meantime, members should send the ASG recommendations on the state of Subcommittee leadership. These recommendations will be shared prior to the next meeting.
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 - Review their leadership and select new co-chairs as/if necessary.
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 - Distribute Methane to Markets materials and/or make presentations at relevant events.
 - Continue to better engage Project Network members (e.g., success stories, speaking opportunities, concurrent meetings with industry events).
 - Continue to develop country-level, sector-specific action plans if they have not already.
 - Explore linkages between Subcommittee work and other relevant international initiatives and partnerships.

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 their discussion at the next Subcommittee meeting.

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

Annex I

5 March 2010 – Subcommittee Meeting

- 1200–1245 **Welcome Addresses**
Host Government/ONGC Representative
Chairman Luis Betancourt (Mexico) and Vice Chairman Michael Layer (Canada)
Brief Introduction of Meeting Participants
- 1245-1300 **Adoption of Agenda**
Subcommittee Chairs
- Confirm the overall meeting objectives and specific mandates to the Oil and Gas Subcommittee as discussed in Lake Louise, Alberta, Canada
- 1300-1330 Report Out From the Steering Committee
Ashley King, ASG
- General progress report/status update on Partnership activities
- 1330-1430 LUNCH
- Working lunch in meeting room.
- 1400-1530 **Review of Oil and Gas Content and Outcomes from Expo, Including Country-Specific Strategies and Activity Update**
Subcommittee Chairs
- Dialogue with Country Delegates**
Member countries will review their contributions to the Expo and summarize any relevant outcomes. As appropriate, representatives will also provide a brief update on other relevant activities in which their country has been involved since the September 2009 meeting in Lake Louise, Alberta, Canada
- 1530-1600 BREAK
- 1600-1630 **Action Items in the Coming Year**
Subcommittee Chairs
- Each Subcommittee member should be prepared to discuss:
- What comes next for the Subcommittee/What does the Subcommittee want to achieve/What ideas and activities should the Subcommittee pursue in the coming one to three years?
- 1630–1645 **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

Confirmation of meeting location

1700

ADJOURN

Annex II

Participants

Margaret Sewell	Australia Department of Resources, Energy, and Tourism/ Margaret.Sewell@ret.gov.au
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Please see the Methane to Markets Web site for full contact information