



**Methane to Markets Partnership
Oil & Gas Subcommittee
20 May 2008
Rome, Italy**

FINAL MINUTES

Summary of Key Discussions and Conclusions

The Oil and Gas Subcommittee meeting was attended by 20 participants representing seven countries (Canada, Italy, Mexico, Poland, Romania, Russia, and the United States) and the European Commission (EC). During this meeting, the attendees largely focused on strategic planning (i.e., development of country-specific strategies). The group also discussed the white paper from the Administrative Support Group (ASG) on how to effectively engage the Project Network in Subcommittee activities as well as improve communications with the Project Network and the industry sector as a whole.

The main action items that came out of the meeting related to:

- Country-Specific Strategies.
 - Each Partner country is encouraged to develop their country-specific strategy (see the guidance documents at the [Methane to Markets](#) Web site) as soon as possible. Final strategies should be sent to the ASG for inclusion on the Web site.
 - The ASG can assist with development of these on a case-by-case basis.
 - A template to summarize the individual country-specific strategies will be drafted by the United States. The United States will also draft a summary of the highlights of the country-specific strategies.
- Project Network Engagement and Acknowledgement
 - The Subcommittee agreed to implement several informal mechanisms for acknowledging Project Network and to increase involvement (success stories, hosting workshops concurrently with Subcommittee meeting etc.)
 - The ASG will coordinate with the other Subcommittees, to develop recommendations for more formal mechanisms to increase involvement (such as recognizing specific Project Network members or specific Projects). These recommendations will be shared with Subcommittee for comment prior to submission to the Steering Committee for discussion at next Steering Committee meeting.

The Subcommittee also considered possible options to host future Subcommittee meeting. The meeting agenda and list of participants are included as Annex I and II, respectively. The meeting proceedings are available at the [Methane to Markets](#) Web site.

Welcome and Introductions

Co-Chair Mr. Javier Bocanegra with Mexico's Petróleos Mexicanos (PEMEX) opened the meeting by thanking Eni for hosting the Subcommittee at their Research Center of Monterotondo and for participation in the Subcommittee meeting. He further recognized their efforts and overall willingness to discuss program successes. His sentiments were echoed by all Subcommittee chairs and members.

Additionally, he acknowledged the Italian Ministry for the Environment and Territory for its support in hosting the Subcommittee meeting in Rome. Mr. Bocanegra then led brief introductions of the meeting participants and a review of the agenda.

Report from the Administrative Support Group

Mr. Henry Ferland, ASG Co-Director, initiated meeting discussions by presenting a brief report out on the major outcomes of the most recent Steering Committee meeting, including:

- **Planning Update**—The 2007 Partnership Expo was deemed a success. The ASG resurrected the Expo Task Force to assess whether or not to move forward with another Expo in the 2009 to 2010 timeframe and if so, identify possible venues for holding the Expo.
- **Methane to Markets Accomplishments report**—The ASG will be developing an annotated outline of a Partnership wide report for consideration by the Steering Committee and will be seeking input from the Subcommittee to ensure inclusion of accurate information from the Oil and Gas sector.
- **Project Network Engagement**—The ASG is pleased with the current level of Project Network membership and diversity, but would like to continue to grow the number of Project Network members and encourage their further engagement. The ASG and Subcommittees will be working collaboratively to provide their final recommendation for next steps to the Steering Committee in December 2008.
- **Country-Specific Strategic Plans**—Each Partner country has been asked to draft a strategic plan to focus activities beyond the Subcommittee action plan. Each country should consider their current situation, access to resources, and infrastructure in drafting their plan.

To conclude his presentation, Mr. Ferland discussed related upcoming meetings and events. He indicated that the Partnership will continue to be present at most major conferences. He also noted that the next Subcommittee meeting will be held simultaneously with the next Steering Committee meeting (and concurrently with the three other Subcommittees). The ASG notes that additional progress has been made on planning this since the Subcommittee meeting. Mexico has agreed to host and we are tentatively looking at the week of January 26th in Mexico City.

Strategic Planning – Development of Country-Specific Strategies

Following the ASG report, Vice Chair Mr. Michael Layer with Natural Resources Canada led the strategic planning discussion. Mr. Layer opened the discussion with an overview of the charge to the Subcommittee and the importance of strategic plan development—to identify achievable goals and create credible project opportunities. He suggested that the integration of the individual plans into a clear, concise user-friendly summary document might help promote project opportunities. The summary might also facilitate project development with Project Network members, as funding mechanisms are in place for projects that promote the Partnership objectives to advance the recovery and use of methane as a valuable clean energy source.

Mr. Bocanegra expressed the need for a way to share project experience and successes. Mr. Francesco Presicce with the Italian Ministry for the Environment, Land and Sea expressed a similar need but went on to suggest that project experiences and successes should feed into an overarching Subcommittee plan.

Mr. Roger Fernandez with the U.S. Environmental Protection Agency (U.S. EPA) proposed drafting a template and summarizing key highlights from the country-specific strategies. The template will serve as

a platform for sharing accomplishments and facilitating project opportunity discussions between the developer and finance and host countries/companies. This first draft of the template could be ready for review by the Subcommittee on 20 June 2008.

Update from Member Countries on Country-Specific Strategies

Australia

Mr. Ferland spoke on behalf of Australia's delegation, who could not attend the meeting. Australia has prepared a strategic plan that outlines the current status and key sector data in Australia, and policy initiatives that support their ratification of Kyoto and participation in the Methane to Markets Partnership. The plan specifies the creation of national emissions trading as a main way for achieving their greenhouse gas emissions (GHG) reduction target. Economically viable ways to reduce fugitive emissions from venting, distribution networks, and the use of natural gas as a fuel were identified as key needs/barriers. Australia has several existing domestic programs to support their GHG emissions reduction targets that cut across all levels of government in Australia, including the State and Territory levels.

Canada

Mr. Layer reported that Canada is attempting to harmonize their country-specific efforts with overall Partnership objectives to reduce global emissions. Canada is also actively coordinating with other domestic nongovernmental and governmental agencies to make everyone aware of their strategic plan activities. Their intent is to bring forward a strategic plan that creates complementary, verifiable emissions reduction credits. A key part of their strategic plan is working to leverage existing Project Network member relationships to develop competencies within like organizations in other countries. This would allow them to bring forward projects that support the Methane to Market Partnership. Lastly, he reported that Canada is in the process of reviewing its strategic plan, which will be made available shortly.

European Commission

Mr. Chris Bolesta with the European Commission (EC) reported that the EC does not have dedicated staff or budget to implement its Methane to Market program. The EC, however, does have the mechanisms in place to design policy that supports its program participation and to fund technical studies outside of the EC. It was noted that the EC has recently joined the Partnership.

Italy

Mr. Presicce reported on the status of Italy's strategic plan. Italy is a net importer of energy and has seen their GHG emissions increase as compared to their baseline/base year measurements. Italy has ongoing efforts to enact complementary legislation and is considering best available control technology options to reduce emissions. Additionally, the ministry is involved in various related pilot studies (e.g., bio-fixation of carbon dioxide using algae) and field activities (e.g., carbon capture and storage). Mr. Presicce reported that Italy is in the process of preparing its country-specific strategic plan.

Mexico

Mr. Bocanegra reported that Mexico has recently completed a GHG emissions inventory covering all emissions sources at the country's major facilities, and completion of this emissions inventory was an important step in advancing their program implementation. Now, PEMEX is in the position to look at its

results across operating facility lines and further, outside the company. Lastly, he reported being in the process of finalizing Mexico's strategic plan, which will be made available shortly.

Poland

Ms. Eliza Dyakowska with Gaz-System S.A and Mr. Krzysztof Frajs with Poland's Ministry of Economy provided an update on their country's strategic plan. It was reported that Poland's Methane to Markets participation is currently under legislative review. Poland is a net importer of energy. A complete GHG emissions inventory of all gas systems within the country has not been performed per se; Ms. Dyakowska reported they are performing basic emissions estimating only. Poland is a Kyoto signatory and as such, has ongoing efforts to enact complementary legislation that includes energy efficiency. Moving forward, Poland would like to work with the Partnership to better refine emissions factors used by the oil and gas sector, evaluate practices that reduce vented and fugitive emissions, and prioritize areas of focus. Mr. Frajs reported that Poland will formulate its update into a country-specific strategic plan.

Russia

Co-Chair Dr. Kaplan Basniev with the Russian Academy of Natural Sciences reported on strategic planning efforts in Russia. The country has recently seen a steady increase in gas production. This is expected to continue well into the future with several new projects coming online and the discovery of promising new reserves. Russia is also actively building new a pipeline route to expand its European market presence. Gazprom—who operates Russia's domestic gas pipeline network and delivers gas to countries throughout Europe and Central Asia—is actively engaged in exploration and production activities in countries such as India, Venezuela, Vietnam, and Uzbekistan. Dr. Basniev reported that Russia continues to refine the data in its strategic plan and, as appropriate, will refine its strategic plan.

United States

Mr. Fernandez and the U.S. Department of Energy (DOE) Delegate to the Subcommittee, Mr. Christopher Freitas, updated participants on U.S. strategic plan activities. Mr. Fernandez reported that most U.S. activities are coordinated through the Natural Gas STAR program. Program resources include technical documents, information on emissions factors, case studies, and outreach material. Through the program, the United States hosts onsite and online Technology Transfer Workshops focused on cost-effective methane emission reduction opportunities in the industry. Mr. Freitas reported that the U.S. DOE is actively working to pursue opportunities with project financiers and developers to advance projects that reduce methane emissions in the oil and gas industry.

The United States has collaborative activities in China, Mexico, Ukraine, Colombia, and India. These efforts will identify, analyze, promote, and track methane emission reductions from projects in-country. The United States is also working with Canada on enhancements to and maintenance of the Nodal Analysis Tool. Lastly, Mr. Fernandez reported that a first draft of the U.S. strategic plan is available on the [Methane to Markets](#) Web site.

Mr. Ferland concluded the country-specific strategic planning discussion and stated that to date, the ASG has not received any feedback from the Project Network members on received strategic plans. He encouraged Partner countries that have not done so to please submit their strategic plan to the [ASG](#) for inclusion on the Methane to Markets Web site.

Project Network Engagement

Following the Partner country updates, Mr. Ferland presented the ASG white paper on how to effectively engage the Project Network members in Subcommittee activities, and improve communications with the Project Network and the oil and gas industry as a whole. The [white paper](#) review included a discussion of approaches to encourage/enhance participation in Partnership meetings and provide formal/informal recognition for Project Network contributions.

Regarding approaches to encouraging/enhancing participation in Partnership meetings, Mr. Freitas suggested that meetings be tied to a side event such as an international conference/expo or a sector-specific activity. It was generally agreed that meetings would be tied to a side event as much as practicable. Furthermore, he suggested that meetings might be tailored around a technical point of reference (e.g., fugitive emissions).

Mr. Ferland continued the discussion by asking how formal/informal recognitions translate culturally. There was concurrence that at the company and individual level recognition is important and could be in the form of a plaque or newsletter article prepared by a third party.

Mr. Larry Richards with Hy-Bon Engineering Company, Inc., a Project Network member, expressed the need for a formal recognition program such that a company is able to state publicly as having received an award for “best project of the year” or the like. This was followed by a suggestion from Mr. Bocanegra that three types or levels of acknowledgements be established:

- Company level to create publicity for the project and host company.
- Individual level to recognize key people for their contributions to the project.
- Project/support team level to identify third-party providers (e.g., technical contractors, financier).

Mr. Fernandez agreed with the proposals presented by Mr. Richards and Mr. Bocanegra but cautioned that a formal recognition program would require well-defined evaluation criteria/threshold and third-party validation that would require funding. Regarding the creation of evaluation criteria, Mr. Layer thought it might make for a good master thesis topic and suggested talking to a university. Dr. Basniev offered his assistance in creating evaluation criteria. Mr. Ferland acknowledged Dr. Basniev’s offer and stated that such an effort would be coordinated with the other Subcommittees and would require the use of resources outside the immediate Subcommittee.

As follow-on, Mr. Freitas suggested that validation of project attributes reside with the involved parties and that consideration be given to a mechanism that would merely publicize a project as having occurred under the Partnership. The U.S. DOE currently uses a similar approach with their Techline (news) that provides updates on topics of interest and news announcements. Techline is available on the [U.S. DOE Web site](#).

During this discussion, Mr. Freitas conveyed to the Subcommittee a request made by Mr. Emil Pena with the Rice Alliance at Rice University to work with the U.S. DOE to evaluate the possible commercialization of select Natural Gas STAR Partner Reported Opportunities. The Rice Alliance supports entrepreneurs and early-stage technology ventures through education, collaborations, and research. Mr. Freitas will take the lead to follow up with Mr. Pena on this opportunity and will report back to the Subcommittee.

As to the informal acknowledgement, Mr. Presicce commented on the visibility of presentations made by Project Network members and suggested that presentations be given greater prominence on the Methane to Markets Web site and further suggested that the site have search capabilities. Mr. Layer acknowledged that this was the intent behind the Nodal Analysis Tool. There was concurrence that search capabilities

are needed. Mr. Ferland indicated that the ASG would investigate changes needed to the website to implement this action item.

Other informal recognition options briefly discussed included redesign of the Methane to Markets Web site to make it more project- rather than process-focused, highlighting case studies in the *Methane International*, creating a “hall of fame” at Expo-type events and to make the Project Network member Web page sortable using meta-data (e.g., region and sector).

To conclude this discussion, Mr. Ferland proposed having the ASG:

- Coordinate with the other Subcommittees as to the possible next steps for engaging the Project Network through formal recognition, and develop a recommendation to the Steering Committee.
- Move forward with potential Web site/page enhancements and with easier to implement informal mechanisms to better involve the Project Network.

Project Tracking

Mr. Fernandez suggested the Subcommittee table discussion of this issue until the next meeting and that Partners and Project Network members wishing to submit project ideas and activities continue to do so at the [Projects & Activities](#) Web page.

Presentation: Vapor Recovery from Oil Storage and Condensate Tanks

Mr. Richards presented several case studies on the use of vapor recovery unit (VRUs) to prevent emissions losses. By way of summary, crude oil storage tanks are used to hold oil for brief periods of time in order to stabilize flow between production wells and pipeline or trucking transportation sites. During storage, light hydrocarbons dissolved in the crude oil—including methane and other volatile organic compounds, natural gas liquids, hazardous air pollutants (HAP), and some inert gases—vaporize or “flash out” and collect in the space between the liquid and the fixed roof of the tank. As the liquid level in the tank fluctuates, these vapors are often vented to the atmosphere. One way to prevent emissions of these light hydrocarbon vapors and yield economic savings is to install VRUs on oil storage tanks. VRUs are systems that can capture energy-rich vapors for sale or for use onsite as fuel. The case studies show significant savings from recovering and marketing these vapors while at the same time reducing methane and HAP emissions.

Administrative Issues

Following the Hy-bon presentation, Mr. Bocanegra led a discussion on administrative issues. It was agreed that Subcommittee communications are effective and he noted no new additions to the roster. It is noted that since the Subcommittee meeting, Mexico has agreed to host the next Subcommittee meeting. We are tentatively looking at the week of January 26th in Mexico City.

Summary of Action Items

Mr. Ferland summarized the major action items coming from the meeting that related to the country-specific strategies and the Project Network engagement and acknowledgement. The main action items include the following:

- Country-Specific Strategies—A template to summarize the individual country-specific strategies will be drafted by the United States. The United States will also draft a summary of the highlights

of the country-specific strategies.

- Project Network Engagement and Acknowledgement—The ASG will coordinate with the other Subcommittees, as well as follow up on several possible options that recognize activities at all levels and for various types of achievement.

The ASG 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. Bocanegra thanked everyone for their participation and continued support. He again thanked Eni and the Italian Ministry for the Environment and Territory for all their efforts to make this a successful meeting.

The meeting was adjourned.

Annex I – Agenda

OIL AND GAS SUBCOMMITTEE MEETING
20 May 2008
Rome, Italy

PRELIMINARY / AGENDA

Tuesday, 20 May 2008

Continental Breakfast

- | | |
|---------------|---|
| 08:00 – 09:00 | Registration |
| 09:00 – 09:30 | Welcome, Brief Introduction of Meeting Participants/Review of Meeting Goals, and Adoption of Agenda
<i>Chairman Kaplan Basniev (Russia), Chairman Javier Bocanegra (Mexico), and Vice Chairman Michael Layer (Canada)</i> |
| 09:30 – 10:00 | Report from the Administrative Support Group (ASG)
<i>ASG</i> <ul style="list-style-type: none">• Update on Report out from Partnership Expo• Methane to Markets Partnership-wide accomplishments report• Plans for 2009 Partnership Expo |
| 10:00 – 10:30 | Strategic Planning – Development of Country-Specific Strategies
<i>Michael Layer, Natural Resources Canada</i> <ul style="list-style-type: none">• Review of guidance documents and process, lessons learned, and areas for improvement |
| 10:30 – 11:00 | Coffee Break |
| 11:00 – 12:15 | Update from Member Countries on Country-Specific Strategies
<i>Oil and Gas Technical Sector Delegates will present a status report on their progress in developing a country-specific strategy. As appropriate, the ASG will present any feedback from the Project Network members.</i> |
| 12:15 – 13:30 | Working Lunch: Midday meal will be served such that participants will bring lunch back into the meeting room |
| 12:30 – 13:30 | Update from Member Countries on Country-Specific Strategies (continued) |
| 13:30 – 14:30 | General Discussion
<i>ASG and meeting participants will discuss how to effectively engage the Project Network in Subcommittee activities as well as improve communications with the Project Network and the oil and gas industry as a whole.</i> <ul style="list-style-type: none">• ASG will present a white paper• Open discussion from all is welcomed |

14:30 – 15:00	Coffee Break
15:00 – 15:45	Discussion: Project Tracking <i>Roger Fernandez, U.S. EPA</i> <ul style="list-style-type: none"> • Mechanisms to better report on projects and activities
15:45 – 16:30	Presentation: Vapor Recovery from Oil Storage and Condensate Tanks <i>Larry Richards, Hybon Engineering</i>
16:30 – 17:00	Administrative Issues <i>Subcommittee Chairs</i> <ul style="list-style-type: none"> • Next meeting (when and where?) • Communications mechanisms (i.e., what works best?) • Updates to Subcommittee rosters
17:00 – 17:15	Summary of Action Items Discussed at this Meeting
17:15	Adjourn

Annex II - Meeting Participants

DELEGATES

CANADA

- 1. Michael Layer (Vice Chair)**
Natural Resources Canada CETC-Devon
580 Booth Street
13-C2-2
Ottawa ON, K1A 0E4
Canada
+1 613 852 2733
Fax: +1 613 947 1016
Email: mayer@nrca.gc.ca

ITALY

- 2. Francesco Presicce**
Italian Ministry for the Environment, Land and Sea
Via C.Bavastro 174 00147
Rome
Italy
+39 06 57228162
Fax: +39 06 57228178
Email: presicce.francesco@minambiente
- 3. Pierpaolo Garibaldi**
Italian Ministry for the Environment Land and Sea
Via C.Colombo 44
Rome, 00147
Italy
+39 06 57228101
Fax: +39 06 57228175
Email: pierpaolo.garibaldi@fastwebnet.it

MEXICO

- 4. Javier Bocanegra Reyes (Committee Co-Chair)**
Deputy Director of Environmental Protection
Petroleos Mexicanos - PEMEX
Torre Ejecutiva Marina Nacional 329
Piso 35 Col. Huasteca C.P.
Mexico Distrito Federal, 11311
México
+52 55 1944 8946
Fax: +52 55 1944 8668
Email: jbocanegra@dco.pemex.com

POLAND

- 5. Eliza Dyakowska**
Coordinator

The Gas Transmission System Operator
Gaz-System S.A.
Bohomolca 21, 01-613
Warszawa
Poland
+48 22 560 16 14
Fax: +48 22 560-16-61
Email: eliza.dyakowska@gaz.system.pl

- 6. Krzysztof Frajs**
Ministry of Economic Affairs
Pl. Trzech Krzyży 3/5
Warsaw, 01-159
Poland
+48 22 693 5418
Fax: +48 22 693 4129
Email: krzysztof.Frajs@mg.gov.pl

RUSSIA

- 7. Kaplan Basniev (Committee Co-Chair)**
Professor
GUBKIN Russian State University of Oil and Gas
Russian Academy of Natural Sciences
65 Leninski Prospect
Moscow 119991
+7 495 135 7956
Fax: +7 495-135-7956
Email: ksb@gubkin.ru

UNITED STATES

- 8. Roger Fernandez**
Oil and Gas Team Leader
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (6207-J)
Washington, DC 20460
USA
+1-202-343-9386
Fax: +1-202-343-2342
Email: fernandez.roger@epa.gov
- 9. Christopher Freitas**
Natural Gas Analyst
U.S. Department of Energy
Forestall Building (FE-32)
1000 Independence Avenue, SW
Washington, DC 80585
USA
+1-202-586-1657
Fax: +1-202-586-6221
Email: christopher.freitas@hq.doe.gov

EUROPEAN COMMISSION

10. Chris Bolesta

European Commission
200 Rue de las Loi B-1049
Brussels
Belgium
+32 2 298 69 67
Fax: +32 2 296 43 37
Email: chris.bolesta@ec.europa.eu

PROJECT NETWORK MEMBER AND OTHER PARTICIPANTS

11. Larisa Basnieva

GUBKIN Russian State University of Oil and Gas
Russian Academy of Natural Sciences
65 Leninski Prospect
Moscow 119991
+7(495)930-92-68
Fax: +7(495)135-79-56
Email: ksb@gubkin.ru

12. Patrizia Buttini

Eni SpA
via E. Ramarini 32
Monterotondo, 00016
Italy
+39 0690673302
Fax: +39 0690673 296
Email: patrizia.buttini@eni.it

13. Emiliano Fioravanti

Eni SpA
via E. Ramarini 32
Monterotondo, 00016
Italy
+39 0690673213
Fax: +39 0690673 296
Email: emiliano.fioravanti@eni.it

14. Leonardo Gelpi

Eni SpA
via E. Ramarini 32
Monterotondo, 00016
Italy
+39 0690673359
Fax: +39 0690673 296
Email: leonardo.gelpi@eni.it

15. Maria Mantini

Fugitive Emissions Monitoring in Eni Upstream
Oil/Gas Treatment Plants
Eni S.p.A.
via Laurentina 449
Rome, 00142
Italy
+39 065 9885981
Fax: +39 065 9885358
Email: maria.mantini@eni.it

16. Monica Musicanti

Eni S.p.A.
via Laurentina 449
Rome, 00142
Italy
+39 065 9886017
Fax: +39 065 9885358
Email: monica.musicanti@eni.it

17. Marius Claudiu Petrescu

Amgaz Furnizare
46 A, Bisericii Ortodoxe street
Cluj-Napoca, 400900
Romania
+0040723293293
Fax: +0040264450399
Email: marius.petrescu@amgazfz.ro

18. Larry Richards

Hy-Bon Engineering Company, Inc.
PO Box 4185
Midland, TX 79704
USA
+1-432-697-2292
Fax: +1-432-697-2310
Email: lrichards@hy-bon.com

ADMINISTRATIVE SUPPORT GROUP

19. Allison Berkowitz

Project Manager
Eastern Research Group, Inc.
609 Driftwood Lane
Downingtown, PA 19335
USA
+1-484-341-8095
Fax: +1-781-674-2851
Email: allison.berkowitz@erg.com

20. Henry Ferland

Methane to Markets Secretariat
1200 Pennsylvania Avenue, NW (6207J)

Washington, DC 20460
USA
+1-202-343-9330
Fax: +1-202-343-2202
Email: ferland.henry@epa.gov

21. Mark Grady

ERG
110 Hartwell Ave
Lexington MA, 01453
USA
+1-781-674-7313
Fax: +1-781-674-2906
Email: mark.grady@erg.com