



# Methane to Markets

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**Oil & Gas Subcommittee Report to the Steering Committee**

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**31 October 2007  
Beijing, China**

# Overview

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- Sector Action Plan Summary
- Activities since the 2006 Rome Meeting
  - Recent Subcommittee meetings
  - Partnership Expo Involvement/Marketing Efforts
  - Selected Subcommittee Achievements
  - Activities by Country
- Issues for Consideration/Decision by the Steering Committee
- Next Steps and Conclusions

# Background and Sector Action Plan Overview

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- **Key obstacles to project development in this sector**
  - Perception that opportunity costs are too high for project implementation.
  - Need for more commitment (funding?) from partner governments to assist subcommittee members with their participation.
- **Type of activities that can overcome these that are currently in the Action plan**
  - Rotating co-chairs to engage additional countries.
  - Revisions to Action Plan to reflect changing climate frameworks.
  - Dedicated funding from partner countries for methane emissions reduction project.

## Subcommittee Achievements since December 2006

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- **Subcommittee Meeting: 30 April 2007, in Aberdeen, Scotland**
  - 13 Oil & Gas Subcommittee and Project Network members.
  - Countries represented included: Canada, Italy, Mexico, Poland, Russia, United Kingdom, and the United States.
  - Three key topics: country reports, an update from the ASG, and the upcoming China Partnership Expo.
  - The subcommittee meeting time was dedicated to Expo agenda development for the oil and gas sector technical and policy session.

# Subcommittee Achievements since December 2006 (cont.)

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## *Aberdeen Subcommittee Meeting (cont.)*

- Action items resulting from the meeting included:
  - Selecting leaders for Expo workshop session topics.
  - Assigning responsibilities for recruiting speakers.
  - Choosing Oil & Gas Subcommittee participants as presenters and speakers for the Expo.
- The meeting also included a tour of the BP off-shore oil terminal and oil tank farm in Kinneil and Dalmeny.

## Subcommittee Achievements since December 2006 (cont.)

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- **Support for the M2M Partnership Expo**
  - Developed various draft agendas, worked with the Chinese government to incorporate its participation, discussed case studies/posters/flyers, presented ideas and worked with the Steering Committee on finalizing an agenda.
  - Developed a topic-specific technical and policy session agenda and identified session leads and potential speakers.
  - Outreach was conducted to potential attendees including: the Oil and Gas Project Network and Chinese oil and gas companies and ministries.

## Subcommittee Achievements since December 2006 (cont.)

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- **Developed a Beta Version of the Nodal Analysis Tool**
  - At the September 2005 Tomsk Subcommittee meeting, attendees talked about needing a project database.
  - Michael Layer of Canada suggested that M2M needed a Web-based interactive tool to:
    - Depict the oil and gas industry internationally in terms of accurately representative operational nodes.
    - Internationally communicate cost effective emission reduction project opportunities at the nodal level of operation.
    - Internationally track project progress and emission reduction magnitudes at the nodal level of operation so as to provide detailed case studies of implementable solutions.

# Subcommittee Achievements since December 2006 (cont.)

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## ***Nodal Analysis Tool (con't)***

- The Subcommittee approved and Mr. Layer committed to development of a Nodal Analysis Tool.
- During the Aberdeen Subcommittee meeting, Mr. Layer presented a Beta version of the interactive software for Subcommittee consideration and comment.
- The software is currently in final development and preparations are being made to launch the interactive tool on the M2M Web site.

# Subcommittee Achievements since December 2006 (cont.)

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## ■ New Partners

- At the December 2006 Rome Steering Committee meeting, Poland became the 19th Partner Country to join the Methane to Markets Partnership. Poland looks to be an active participant on the Oil and Gas Subcommittee; it already sent representatives to the April 2007 Aberdeen Subcommittee meeting.
- We look forward to working with the newest partner, the EC, as we plan the Subcommittee's work for the future.

## ***Activities by Country***

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### **■ Argentina**

- One M2M project is being funded—EPA will conduct M2M outreach in Argentina to engage government, industry, and other stakeholders to promote identification of emission reduction projects.

### **■ Brazil**

- Two M2M projects are being funded—1) EPA will issue a two-year \$175,000 grant to identify and implement methane emissions reduction projects in Brazil and 2) EPA will conduct M2M outreach in Brazil to engage government, industry, and other stakeholders to promote identification of emission reduction projects.

## ***Activities by Country (cont.)***

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### **■ Canada**

- Developed the Nodal Analysis Tool (as discussed in detail earlier).
- Provided support for and hosted a Technology Transfer Workshop in conjunction with EPA (3-days focusing on M2M and oil and gas sector emission reduction and energy efficiency opportunities).
- Providing support to various M2M projects including financial support to a major gas processing sector methane emissions reduction project identification and implementation study in China. EPA and the China National Petroleum Company (CNPC) are also providing financial support (see below).

### **■ China**

- Hosting this meeting!
- CNPC, EPA and Environment Canada collaborating on methane emission reduction opportunities in China.
- China National Petroleum Institute and Sinopec working with EPA to conduct basic economic analysis to prioritize technically feasible methane opportunities.

## ***Activities by Country (cont.)***

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### **■ Colombia**

- EPA continues to sponsor the identification and analysis of oil and gas sector methane emissions reduction project opportunities in Colombia.
- A feasibility study will be conducted to help Ecopetrol S.A. address the safety, security, and integrity of Colombia's hydrocarbon pipeline system. The study will involve a detailed assessment of the entire pipeline system (both petroleum products and natural gas) and will focus on the development of a systematic plan aimed at reducing product losses by significantly improving physical and operational security throughout the system, including at various pumping and transfer stations.
- USTDA Pipeline work.

### **■ Ecuador**

- EPA continues to sponsor the identification and economic analysis of oil and gas sector methane emissions reduction project opportunities in Ecuador.

## **Activities by Country (cont.)**

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### **■ India**

- EPA sponsored a general M2M two-day introductory workshop in New Delhi, India, which included a technical track on methane emission reduction opportunities in the oil and gas sector.
- EPA will sponsor the identification and economic analysis of oil and gas sector methane emissions reduction project opportunities in India.
- USAID is developing a leak detection and project identification program.

### **■ Italy**

- The Global Bioenergy Partnership (GBEP) has been launched—and is linked to M2M.

### **■ Japan**

- Continue to work on the GOSAT satellite system that will have the capability to detect methane emissions from orbit

## ***Activities by Country (cont.)***

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### **Mexico**

- EPA and USAID are cooperating to identify and implement cost-effective methane emissions reduction projects at PEMEX facilities.

### **Poland**

- At the December 2006 Steering Committee meeting in Rome, Poland became the 19th Partner Country to join the M2M Partnership. Poland was also invited to join the Steering Committee.
- The Polish Ministry of Economy is interested in how to initiate a project in cooperation with EPA. GAZ-SYSTEM would like to work on reducing natural gas emissions from Polish gas transmission systems.

## ***Activities by Country (cont.)***

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### **Russia**

- EPA has issued a five-year \$300,000 grant with the Russian Academy of Sciences to identify oil and gas sector methane emissions reduction project opportunities.

### **Ukraine**

- EPA will issue a four-year agreement for a total of \$750,000 to support the identification and implementation of methane emissions reduction projects in the Ukrainian gas transmission and distribution sectors. This will include focusing on leak detection in compression stations. The new four-year EPA-funded project will be rolled out initially with CherkasyTransGaz, a Ukrainian natural gas transmission company, local distribution companies, and the Ukrainian organization ARENA-ECO.

## ***Activities by Country (cont.)***

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### **■ United Kingdom**

- The United Kingdom hosted the April 2007 Subcommittee Meeting in Aberdeen, Scotland.
- Fortunately, all onshore facilities have vapor recovery systems in place—but offshore ones do not have any in place. The latter is something the United Kingdom wants to work on with those companies.
- The United Kingdom has quarterly meetings of the “Oil and Gas Focus Groups,” and will work on new novel infrared techniques for analysis of vented gas at the BP Dimlington Terminal. About 85 percent of the United Kingdom’s methane emissions come from transmission and distribution.

## ***Activities by Country (cont.)***

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### **■ United States**

- Began to enter oil and gas project data into the M2M online Project Tracking Database.
- EPA is currently working to translate all its Oil and Gas technical documents into Mandarin Chinese.
- Launched Gas STAR international and continued domestic methane capture and use development, which resulted in 2.6 BCM in methane reductions in 2006.

# Issues for Consideration/Decision by the Steering Committee

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## ■ Issues

- *Lack of coherent international framework for methane reduction is causing varied levels of commitment to the partnership by companies and countries.*
- *How can Methane to Markets participants interested in oil and gas methane emissions reduction efforts better engage when there are limited resources from home governments?*

## Next Steps

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- Next Subcommittee Meeting
  - May 2008
  - Location: TBD

# Summary and Conclusions

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**Thank you for your time.**