#### Global Methane Initiative Oil & Gas Subcommittee 14 and 15 October 2011 Krakow, Poland

#### FINAL MINUTES

#### **Summary of Key Discussions**

Approximately twenty five participants from ten countries— Canada, Germany, India, Indonesia, Italy, Norway, Poland, Sweden, the United Kingdon and the United States—attended the recent Global Methane Initiative (GMI) Oil & Gas Subcommittee Meeting in Krakow, Poland.

The meeting included a site tour and technical breakout sessions. The site tour was hosted by Gaz Systems at their compressor station and laboratory in Pogórska Wola. The tour included discussions about gas quality, noise and vibration measurements; a demonstration of FLIR and OPGAL infrared cameras; and presentations on the results of Gaz-System's methane emission measurement study.

The technical breakout sessions addressed a variety of topics including:

- Gaz-System's experience in testing methane identification and measurement equipment;
- Oil and Natural Gas Corporation's experience implementing vapour recovery units on crude oil tanks;
- Service provider and corporate experiences with methane leak detection and measurement studies;
- British Petroleum's (BP) use of reduced emission completions to minimize methane emissions from hydraulically fractured gas wells;
- Opengrid Europe's experience using pipeline pumpdown to minimize methane emissions during transmission pipeline repair; and
- BP's experience routing centrifugal compressor seal oil de-gassing emissions to fuel gas as an alternative to installing dry seals.
- PEMEX's experience undertaking measurement studies.

The breakout session also included a policy presentation on Indonesian climate policy and the importance of methane reductions in the oil and gas sector. The presenter introduced attendees to Indonesia's roadmap for developing a nationally appropriate mitigation action (NAMA). This plan is intended to advance efforts to reduce emissions and facilitate new emission reduction investment projects.

In all of these sessions, the presenters and participants discussed the importance of emission detection and measurement, which have broad benefits extending beyond conserving natural gas resources. These additional benefits include improving employee and public safety, increasing operating efficiencies and integrity, enhancing corporate image, and making positive contributions to the global environment.

The meeting agenda and list of participants are included as Annex I and II respectively. The complete Partnership-Wide meeting, technical and policy sessions, and Subcommittee meeting proceedings are available on the <u>Global Methane Initiative</u> website.

# Annex I

### 13 October 2011

11:30–11:45	Introduction and Welcome to the Oil & Gas Technical and Policy Sessions Carey Bylin, U.S. EPA	
11:45-12:00	<b>Global Methane Initiative</b> <i>Carey Bylin, U.S. EPA</i>	
12:00-12:30	GAZ-SYSTEM — Natural Gas Emission Reduction from Transmission System and Goals of GAZ-SYSTEM Activities Eliza Dyakowska, Gaz-System	
12:30-13:00	<b>ONGC Experience Implementing Vapour Recovery Units on Crude</b> <b>Oil Storage Tanks</b> <i>A.B. Chakraborty, Oil and Natural Gas Corporation Limited (ONGC)</i>	
13:00–13:30	Indonesian Climate Policy and the Importance of Methane Reductions in the Oil & Gas Sector Syamsidar Thamrin, Indonesian State Ministry of National Development Planning (BAPPENAS)	
13:30–14:30	Lunch	
14:30–16:00	Panel Session on Companies' Experiences with Methane Leak Detection and Measurement Studies Johan Tegstam, FLIR Systems AB; Milton Heath, Heath Consultants; A.B. Chakraborty, Oil and Natural Gas Corporation Limited (ONGC); Reid Smith, BP and Dr. Axel Scherello, Open Grid Europe GmbH	
	Panelists will give a brief presentation on their experiences followed by a question and answer session.	
16:00–16:15	Break	
16:15–17:45	<b>Using Reduced Emission Completions (RECs) to Minimize Methane Emissions from Hydraulically Fractured Gas Wells</b> <i>Reid Smith, BP</i>	
17:45–18:00	Wrap up and Adjourn Carey Bylin, U.S. EPA	

# 14 October 2011

09:00–09:05	<b>Opening Remarks</b> <i>Carey Bylin, U.S. EPA</i>
09:05–10:00	<b>Routing Centrifugal Compressor Seal Oil De-gassing Emissions to Fuel Gas as an Alternative to Installing Dry Seals</b> Don Robinson, ICF International Reid Smith, BP
10:00–10:30	Using Pipeline Pumpdown to Minimize Methane Emissions During Transmission Pipeline Repair Dr. Axel Scherello, Open Grid Europe GmbH
10:30–10:50	<b>Experience with Methane Emission Reductions</b> Cesar Rafael Chavez Ortiz, Ministry of the Environment and Natural
10:50-11:00	<b>Wrap up and Adjourn</b> <i>Carey Bylin, U.S. EPA</i>

## Annex II

# Participants

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