## PLACE AND DATE

Salon Monserrate, Hotel Tequendama Intercontinental Bogotá, D.C., Colombia October 6 and 7, 2005

#### **REGISTRATION**

Please, contact Ms. Adriana Ojeda: Adriana\_Ojeda@oxy.com or (571) 628 8151 Registration is open until September 15, 2005.

For additional information consult:

http://www.methanetomarkets.org

Methane to Markets







# 1st INTERNATIONAL WORKSHOP OIL & GAS - COLOMBIA



October 6 and 7, 2005 Bogotá, Colombia



Ministerio de Minas y Energía República de Colombia



Ministerio de Ambiente, Vivienda y Desarrollo Territorial



United States Environmental Protection Agency



Occidental Oil & Gas Corporation



#### **INTRODUCTION**

Due to accumulation of carbon dioxide, methane and other greenhouse gases in the atmosphere, the scientific evidence of the human impact on the climate is widely accepted. Methane is 21 times as potent a greenhouse gas as carbon dioxide; therefore, reducing methane emissions has a stronger positive effect on global warming than carbon dioxide. Methane is also the primary constituent of natural gas; therefore methane recovered and not emitted to the atmosphere can ofthen times be sold at a profit.

#### **METHANE TO MARKETS**

On November 16, 2004, the Colombian Government, represented by the Ministry of the Environment, Housing and Territorial Development, along with 13 other nations, joined the methane to markets partnership. Methane to markets is a voluntary initiative aimed at implementing cost-effective ways to reduce methane emissions from landfills, mining activities and the oil and natural gas industry.

The primary objective of this initiative is to identify and implement costeffective methane emissions reduction projects.

#### **WORKSHOP OBJECTIVES**

Deliver a series of presentations by oil and natural gas experts to help companies identify technologies and techniques to cost-effectively reduce methane emissions from their operations.

#### **LECTURERS**

- Ministry of Mines and Energy of Colombia.
- Ministry of the Environment, Housing and Territorial Development of Colombia.
- United States Environmental Protection Agency (EPA).
- European Comission.
- · World Bank.

#### **ATTENDEES:**

Production and environmental managers from oil and natural gas companies of the methane to markets partners, Argentina, Brazil, Colombia and Mexico, along with other neighboring countries.



Wednesday, October 5th

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Registra	ation	N/A	16:30 - 18:30

Thursday, October 6th

Registration  N/A  U.S. Ambassador to Colombia (invited)  Minister of Mines & Energy  Minister of Environment, Housing and Territorial Development  United States Environmental Protection Agency (EPA)  Occidental Oil & Gas Corporation  Erin Birgfeld EPA  9:00 - 9:30  Colombia's position on the methane to markets initiative  Colombia's position on the methane to markets initiative  Technical lectures - opportunities for methane reductions: Production  Natural gas industry methane emissions overview (what's the problem?)  Reduced emission well completions (green Completions)  Smart - well automation  Successful projects: Central/South America  Lunch  Technical lectures - opportunities for methane emissions reductions: All sectors  Pneumatic devices  Vapor recovery  Dehydrators  Successful projects: Central/South America  United States Environmental Protection Agency (EPA)  11:00 - 12:00  12:00 - 13:00  United States Environmental Protection Agency (EPA)  13:00 - 14:30  Technical lectures - opportunities for methane emissions reductions: All sectors  Pneumatic devices  Vapor recovery  Dehydrators  Successful projects: Central/South America  ChevronTexaco  All 15:00 - 15:30  Coffee break  All 15:00 - 15:30  Coffee break	i nursaay, October 6th				
Welcome - introduction  **Minister of Environment, Housing and Territorial Development* - United States Environmental Protection Agency (EPA) - Occidental Oil & Gas Corporation  **Scope of the methane to markets initiative*  Coffee break  Colombia's position on the methane to markets initiative  Colombia's position on the methane to markets initiative  Technical lectures - opportunities for methane reductions: Production - Natural gas industry methane emissions overview (what's the problem?) - Reduced emission well completions (green Completions) - Smart - well automation - Successful projects: Central/South America  Lunch  Technical lectures - opportunities for methane emission reductions: All sectors - Pneumatic devices - Vapor recovery - Dehydrators - Successful projects: Central/South America  United States Environmental Protection Agency (EPA)  United States Environmental Protection Agency (EPA)  11:00 - 12:00  12:00 - 13:00  13:00 - 14:30  13:00 - 14:30  ChevronTexaco  All  15:00 - 15:30	Registration	N/A	7:00 - 8:00		
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Colombia's position on the methane to markets initiative  Colombia's position on the methane to markets initiative  Colombian Ministry of Environment, Housing and Territorial Development  Technical lectures - opportunities for methane reductions: Production  Natural gas industry methane emissions overview (what's the problem?)  Reduced emission well completions (green Completions)  Smart - well automation  Successful projects: Central/South America  Lunch  Lunch  Technical lectures - opportunities for methane emission reductions: All sectors  Pneumatic devices  Vapor recovery  Dehydrators  Successful oil and gas sector methane emissions reduction project case study  ChevronTexaco  All  10:00 - 11:00  11:00 - 12:00	Scope of the methane to markets initiative		9:00 - 9:30		
Technical lectures - opportunities for methane reductions: Production  Natural gas industry methane emissions overview (what's the problem?)  Reduced emission well completions (green Completions)  Successful projects: Central/South America  Lunch  Lunch  Technical lectures - opportunities for methane emission reductions: All sectors  Pneumatic devices  Vapor recovery  Dehydrators  Successful oil and gas sector methane emissions reduction project case study  Ministry of Environment, Housing and Territorial Development  10:00 - 11:00  11:00 - 12:00  11:00 - 12:00  11:00 - 12:00  United States Environmental Protection Agency (EPA)  13:00 - 14:30  13:00 - 14:30  14:30 - 15:00  14:30 - 15:00	Coffee break		9:30 - 10:00		
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Technical lectures - opportunities for methane emission reductions: All sectors  • Pneumatic devices • Vapor recovery • Dehydrators • Successful oil and gas sector methane emissions reduction project case study  ChevronTexaco  Lited States Environmental Protection Agency (EPA)  13:00 - 14:30  14:30 - 15:00  14:30 - 15:00	reductions: Production  Natural gas industry methane emissions overview (what's the problem?)  Reduced emission well completions (green Completions)  Smart - well automation  Successful projects: Central/South America	9 ,	22.00		
emission reductions: All sectors  • Pneumatic devices • Vapor recovery • Dehydrators • Successful projects: Central/South America  Successful oil and gas sector methane emissions reduction project case study  ChevronTexaco  All  13:00 - 14:30  14:30 - 15:00  14:30 - 15:00	Lunch		12:00 - 13:00		
reduction project case study  Questions and discussions  All  15:00 - 15:30	emission reductions: All sectors  • Pneumatic devices  • Vapor recovery  • Dehydrators		13:00 - 14:30		
		ChevronTexaco	14:30 - 15:00		
Coffee break         15:30 - 16:00	Questions and discussions	All	15:00 - 15:30		
	Coffee break		15:30 - 16:00		





Technical lectures - opportunities for methane emission reductions: All sectors • Directed inspection and maintenance includes	H. S. J. Older Fr. Second J. D. Joseph	
optical imaging (successful industry projects)	United States Environmental Protection Agency (EPA)	16:00 - 18:00
• Compressors includes seals & best operating Practices	(EFA)	
Successful projects: Central/South America		
Dinner government officials		19:30

# Friday, October 7th

Technical lectures - opportunities for methane emission reduction: Pipeline maintenance & repair  • Using hot taps for in service pipeline connections  • Using pipeline pump-down techniques to lower gas line pressure before maintenance  • On-line pipeline repair: composite wrap  • Successful projects: Central/South America	United States Environmental Protection Agency (EPA)	8:00 - 8:30
Questions and discussion	All	8:30 - 9:00

### Available financial incentives:

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Clean development mechanism	Colombian Ministry of Environment, Housing and Territorial Development	9:00 - 9:30
Coffee break		9:30 - 10:00
Emission trading	European Commission	10:00 - 10:30
World Bank prototype carbon fund and another WB funds	World Bank	10:30 - 11:00
Current incentives in the colombian law for methane reduction projects	Colombian Ministry of Mines & Energy	11:00 - 11:30
Lunch closure	U.S. Ambassador to Colombia (invited) Minister of Mines & Energy Minister of Environment, Housing and Territorial Development United States Environmental Protection Agency (EPA) Occidental Oil & Gas Corporation	11:30 - 13:00

