



# Methane International

*The Methane to Markets Partnership Quarterly Update*

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## **Mexico Hosts Successful Partnership-Wide Meeting**

Growing concern over climate change and recognition of the importance of methane in solving this global challenge attracted more than 350 participants to the Methane to Markets Partnership's most recent [meeting in Monterrey, Mexico](#). From 27–29 January 2009, Mexico's

delegation graciously hosted the Partnership Steering Committee, Subcommittees, and Project Network members, where participants



Mr. José Natividad González Parás, State Governor of Nuevo León, Mexico, welcomes delegates and attendees during the opening plenary.

## **About Methane International**

*Methane International* is the quarterly newsletter of the Methane to Markets Partnership. Published by the Administrative Support Group (ASG), *Methane International* delivers news and information about the Methane to Markets community of Partners and Project Network members. We welcome your news, commentary, and contributions. Please send them to the ASG at [asg@methanetomarkets.org](mailto:asg@methanetomarkets.org). To view our archives, visit [www.methanetomarkets.org/resources/news/index.html](http://www.methanetomarkets.org/resources/news/index.html).



## Mexico Partnership-Wide Meeting Index:

The Mexico meeting consisted of a combination of site tours, two plenary sessions, technical workshops in all four sectors, and working meetings of all the Sector Subcommittees and the Steering Committee. Links to agendas, presentations, and proceedings are listed below.

- Overall [Agenda](#)
- Opening Plenary Session
  - Mr. José Natividad González Parás, State Governor of Nuevo León, Mexico
  - Mr. Juan R. Elvira Quesada, Minister of Environment and Natural Resources, Mexico
  - [Mr. Paul Gunning, U.S. Environmental Protection Agency](#)
  - [Mrs. Sandra Herrera Flores, Undersecretary for Environmental Regulation, Mexico](#)
- Steering Committee Meeting
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- Sector Subcommittee Meetings
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toured project sites, attended technical workshops, planned future activities, and shared ideas for and updates on advancing the Partnership's goals.

The plenary session was opened by Mr. José Natividad Gutiérrez Parás, the State Governor of Nuevo León, who delivered welcoming remarks to a multinational audience representing 26 countries. Mr. Juan R. Elvira Quesada, Mexico's Minister of Environment and Natural Resources, provided the formal opening address describing Mexico's national efforts to mitigate climate change.

The acting chair of the Steering Committee, Mr. Paul Gunning of the U.S. Environmental Protection Agency (U.S. EPA), [provided an overview](#) of the Methane to Markets Partnership and outlined the meeting goals. Ms. Sandra Herrera Flores, Mexico's Undersecretary for Environmental Regulation, also [addressed attendees](#) during the plenary session,

highlighting Mexico's ongoing commitment to and progress under Methane to Markets. Opportunities to address methane emissions at the international level were presented by Mr. Enrique Lendo Fuentes of Mexico's Coordinating Unit of International Affairs, who spoke specifically about Mexico's special programs to address climate change. Lastly, Mr. Rafe

### Partnership to Publish Report on Partner Country's Collective Accomplishments

The ASG is coordinating a Partner-wide effort to publish a report that summarizes the collective accomplishments of all the Methane to Markets [Partner Countries](#). With a planned completion date of December 2009, contributors are gathering information on the Partnership's history, goals, and accomplishments by key sector as well as specific data on projects launched, Project Network member activities, funding leveraged, and methane captured. For more information, please [contact the ASG](#).

Pomerance, President of Clean Air–Cool Planet, [provided an overview](#) of the rapid climate changes that are occurring in the Arctic region and how global efforts to reduce methane emissions play a critical role in reducing the near-term impacts of climate change.

During each of the four sector subcommittee meetings, planning began for the 2010 Methane to Markets Partnership Expo, scheduled to take place in India. The subcommittees laid out strategies to identify projects to showcase and collect updates on country-specific plans and progress. In addition, the subcommittees asked members to contribute case studies and data for the upcoming Partnership-Wide Accomplishments Report (see sidebar).

### **Agriculture**

The Agriculture Subcommittee began the week with a tour of the Ana Margarita swine farm in Montemorelos, Nuevo León, México. The facility operates a covered lagoon anaerobic digester that generates electricity for use on the farm.

The Subcommittee also held a [technical workshop](#) on the second day of the conference, focused on developing anaerobic digester projects from agro-industrial wastes. At the workshop, speakers presented technical considerations for digestion of agro-food wastes and project identification. Other participants shared country experiences or case studies of anaerobic digestion of food waste, including projects using palm oil as a substrate, sugar cane processing waste, slaughterhouse wastes, and juice processing plant waste.

One of the important topics discussed in Monterrey was the possibility of expanding the scope of the Partnership's work in the agriculture sector to include methane from enteric fermentation and rice cultivation. These are the largest sources of methane in the sector, but they represent a significant



(From left to right) Jorge Hilbert (Methane to Markets Agriculture Subcommittee Co-Chair from Argentina), José Luis Tamez Tamez (farm owner), and Jeremy Eppel (Methane to Markets Agriculture Subcommittee Co-Chair from the United Kingdom) in front of the covered lagoon anaerobic digester on the San Margarita swine farm in Montemorelos, Nuevo León, México.

departure from previous work by the Partnership, as there are no opportunities to capture and use the methane from potential mitigation projects. The ASG presented a white paper articulating these issues for the Steering Committee's consideration. The Steering Committee agreed that these are important sources and that mitigation options might exist, but expansion of the Partnership is a serious issue that deserves additional study. The ASG was directed to work with the Agriculture Subcommittee co-chairs to participate in an upcoming meeting of the [United Nations Framework Convention on Climate Change \(UNFCCC\) Ad Hoc Working Group on Long-Term Cooperative Action](#) in order to better determine if and how Methane to Markets could engage with these sources.

In the [Agriculture Subcommittee meeting](#), Partner Country representatives reported on country activities in the sector. Subcommittee members discussed the development of an international protocol for evaluating the performance of anaerobic digestion systems and the development of leakage rates for anaerobic

digestion systems. Finally, the Subcommittee reviewed and discussed the schedule of work for the coming year.

### **Coal Mines**

Meeting participants interested in the coal sector had the opportunity to visit the Esmeralda Mine. The field trip was sponsored by Minerales Monclova (MIMOSA) and consisted of two separate tours. One group of attendees descended into the mine; a second group toured MIMOSA's surface facilities, including the ventilation vertical shaft, degasification facilities, and gob well drill site.



Horizontal well for extracting CMM. The extraction rate averages about 300 m<sup>3</sup>/s, with an average methane concentration of 80 percent.

The Coal Subcommittee's [technical session](#) convened on the second day of the conference. Officials from the Mexican government began the meeting with overviews of the coal mine methane (CMM) project in Coahuila State and other Mexican mines. Jeff Schwoebel of [Resource Enterprises](#), Ray Pilcher of [Raven Ridge Resources](#), Ronald Collings of [Ruby Canyon Engineering](#), and Nicolas Duplessis of [Biothermica](#) then presented technical case studies and feasibility reports for existing or potential projects in China, Mexico, and the United States.

The first half of the subcommittee meeting was dedicated to brainstorming ideas for the coal portion of the 2010 Methane to Markets Partnership Expo. The meeting also featured

country-specific updates from Partner Countries and Project Network members on new projects and other activities in the coal sector. Another topic of discussion was a guidance document currently being developed by the United Nations Economic Commission for Europe, the World Coal Institute, and Methane to Markets. The document is intended to be a best practices guide for CMM degasification and utilization. The full subcommittee meeting convened on the last day.

### **Landfills**

Participants interested in landfills spent the first conference day touring the Monterrey Landfill in Salinas Victoria, Nuevo León. This landfill project was the first biogas recovery and electricity generation project in Latin America. In September 2008, the project added 5.4 megawatts (MW) of generating capacity, increasing its total generating capacity to 12.7 MW. This project provides electricity to the regional subway system, the governor's palace, and several other government buildings.

After touring the landfill, participants heard [technical case studies](#) from landfill operators and Project Network members in Mexico and Argentina. Representatives from the Secretaría de Medio Ambiente y Recursos Naturales



LFG engine generator at the Monterrey Landfill in Salinas Victoria.

(SEMARNAT) shared their experience with recovery and use of methane as a clean energy source, and the Landfill Gas Modeling Panel reported on their experience using the [U.S. EPA Landfill Methane Outreach Program's Mexico and China Models](#).

The last day of the conference focused on the Landfill Subcommittee's administrative agenda. The roundtable from the [International Solid Waste Association](#) reported developments and outcomes from its November 2008 meeting in Singapore. Subcommittee members spent the remainder of the meeting discussing the status of country-specific strategies, the [International Energy Agency](#) (IEA) database of renewable energy policies, and progress made on the International Landfill Database. The Subcommittee also brainstormed potential technical workshop topics for the upcoming Methane to Markets Partnership Expo.

### ***Oil & Gas Systems***

On the first day of the conference, the Oil & Gas Systems Subcommittee traveled to Centro Procesador de Gas Burgos, a [Petróleos Mexicanos](#) (PEMEX) facility. At the facility, committee members learned about PEMEX's methane emissions reduction activities and observed field demonstrations of technologies for leak detection, measurement, and quantification in an operating natural gas processing plant. Over the course of the day, visitors witnessed how the company identifies and measures fugitive methane emissions at various points within the processing facility. PEMEX engineers and technology service providers demonstrated a number of state-of-the-art techniques and technologies used for leak detection and quantification of methane emissions, including the remote methane leak detector, hi-flow sampler, and infrared leak imaging camera.

On the second day, at the Oil & Gas Technology Transfer Workshop, attendees heard more about PEMEX's Methane to Markets collaborations and methane emission reduction activities and experiences, technologies and practices that reduce methane



Joe Latour of Heath Consultants demonstrating the Hi-Flow Sampler at PEMEX facility.

emissions, and carbon finance opportunities in the oil and gas sector. Presenters included PEMEX officials, U.S. EPA, and industry experts.

The Oil & Gas Systems Subcommittee meeting convened the last day of the conference. Although the meeting largely focused on planning for the upcoming Methane to Markets Partnership Expo in 2010, it also featured a [presentation](#) by officials from the [Oil and Natural Gas Company of India](#) of a case study on their approaches to greenhouse gas management. Each country delegate in attendance provided an update on methane emissions reduction projects in their country or in another location, such as capacity building in countries that are developing or in economic transition.

### ***Steering Committee***

The Steering Committee met on 27-28 January to review past accomplishments and set forth action items for the coming year. Thirteen Partners were represented at the [meeting](#) including: Argentina, Australia, Brazil, Canada, China, the European Commission, Finland, India, Japan, Mexico, Poland, the United Kingdom, and the United States. Representatives from Chile also attended the first day. Participants heard

country updates from the Partners and progress reports from the subcommittee chairs. In addition to discussing how to improve outreach and communications and Project Network involvement, the Steering Committee members also considered the possibility of expanding the Agriculture Sector into enteric fermentation and rice cultivation, as well as the future direction of the Partnership, and gave approval for the next Partnership Expo, now scheduled for the spring of 2010 in India. Chile's request to join the Partnership was approved, as was Finland's request to join the Steering Committee.

## Methane to Markets Moving Forward

As the five-year anniversary of Methane to Markets approaches, the Partnership will be reviewing the original Terms of Reference (TOR) and considering new opportunities and directions for future expansion and growth. A [white paper](#) on this topic was presented to the Steering Committee by the ASG at the January Steering Committee meeting in Monterrey, Mexico. Over the coming months, the Partnership will consider a number of possible new directions, including considering other sources of anthropogenic methane emissions such as waste water, enteric fermentation, and rice cultivation, increased commitment by Partner Governments, enhanced monitoring and reporting, and the role of Methane to Markets in a post-2012 UNFCCC agreement. Ideas submitted by the Steering Committee to the ASG will be incorporated into a subsequent white paper further exploring these issues. The Steering Committee will continue these deliberations at its next meeting in September/October 2009.

## Welcome Chile!

The Methane to Markets Steering Committee welcomed Chile into the Methane to Markets Partnership as the 28<sup>th</sup> Partner.



Sharing the Partnership's goals of developing local, sustainable, and cost-effective renewable energy, Chile is already pursuing a number of methane recovery projects. Chile is looking to expand and broaden its portfolio of projects to reduce methane emissions even further and will be participating in the Agriculture, Landfill, and Oil & Gas Systems Subcommittees.

## Second Partnership Expo Set for India in 2010

Methane to Markets forged a new path in 2007 by holding a world-class Partnership Expo that created an international forum for policy, financial, and project professionals. Held in Beijing, the [2007 Methane to Markets Partnership Expo](#) set a bold precedent for future Expo events. At the recent Steering Committee meeting in México, India agreed to host the next Expo in early 2010 in New Delhi. With the support of a larger and more vigorous Methane to Markets Partnership, the event promises to attract participants from organizations all over the globe.

Planning for the Expo has already begun. All Subcommittees have issued a call for projects to be showcased, and the ASG has begun working to plan logistical details. Announcements for sponsors, speakers, and booth opportunities will be posted on the [Partnership's Web site](#) and in future [Methane International](#) updates, so stay tuned!

If you wish to actively participate in the development of the Expo, please [contact the ASG](#) about joining the Expo Task Force.

## **Methane to Markets Travels to United Nations Conference in Poland**

On 12 December 2008, the government of Poland hosted the first Methane to Markets side event at the [UNFCCC 14th Conference of the Parties](#), held in Poznan, Poland. The event showcased Methane to Markets' successful efforts to deliver near-term methane reductions that could slow the impacts of climate change.

The side event featured two panels of speakers, representing Partner Countries and Project Network members. The governments of Mexico, Poland, and the United States reported on their participation in the Partnership, while representatives from [MEGTECH](#), the São Paulo Environmental Protection Agency, and Poland's Oil & Gas Institute outlined how Methane to Markets has helped them advance their organizational goals.

Ashley King, Co-Director of the ASG, spoke about the history and structure of the Partnership and commended participants for their leadership and guidance. "The Partnership is a key example of how national governments can come together, share intelligence and resources, and create opportunities for the private sector and benefits for the common good all at the same time. We were delighted to be able to tell our story at this important venue," stated Ms. King. In addition to this side event, Ms. King spoke about Methane to Markets at another side event on opportunities to mitigate short-term climate forcers.

## **Administrative Support Group Seeking Input on Partnership-Wide Accomplishment Report**

The ASG is currently seeking information on projects and activities for inclusion in the first Methane to Markets Partnership-wide Accomplishment Report. The report will summarize the major accomplishments of the Partnership over its first five years. It will include high-level statistics capturing the scope of the Partnership's work and impact as well as project summaries. This document will be important in educating the international climate community on the value of the Partnership. It will also help Partnership and Project Network members communicate the benefits of participation to their stakeholders. In mid-February, the ASG distributed a template to all Methane to Markets Subcommittee delegates and Project Network members, requesting information on any projects and activities related to the Partnership. [Please submit](#) all information by 15 April 2009.

## **Collaboration in Colombia Reduces Landfill Emissions**

Two landfills near Medellin, Colombia, are slated to have their biogas trapped, reducing more than 1 million tons of carbon dioxide (CO<sub>2</sub>) equivalent between 2014 and 2018 while also enhancing safety and air quality. [Green Gas International](#), a Project Network member with a strong track record of developing methane capture and use projects in the coal mine and landfill sectors, partnered with the [University of Antioquia](#) to recover methane at two landfills in the Medellin region. The plan is to use advanced high-temperature flares to minimize emissions resulting from methane that is released naturally as waste decomposes in the

landfill. Both projects will generate certified emissions reductions credits. A [press release](#) provides more information on this partnership.

## Now Open for Business: India's CMM Clearinghouse

The first of its kind for India, [a clearinghouse](#) opened its doors to help share information about opportunities to develop coalbed methane and CMM projects in India. The clearinghouse will be instrumental toward providing technical, economic, financial, and policy information to potential investors and service providers. Located at the [Central Mine Planning and Design Institute](#) in Ranchi, the clearinghouse will serve as an initial point of contact for those interested in recovering methane from coal mines and using the gas as clean energy.



CMM pilot project at Moonidih Mine, India.

The CMM clearinghouse received support from the Methane to Markets Partnership, in cooperation with the government of India and U.S. EPA, as well as other U.S. federal partners. Methane to Markets helped launch similar clearinghouses in China, Russia, and Ukraine. For more information, visit [www.IndiaCBM-CMM.govtools.us](http://www.IndiaCBM-CMM.govtools.us).

## U.S. EPA Announces New Grant Funding for Methane to Markets Projects

Showing its continued support for Methane to Markets, the U.S. EPA issued another [request for proposals](#) (RFP) for methane recovery projects. The total estimated amount for this competitive funding opportunity is up to \$7 million.



U.S. EPA expects to award up to 40 cooperative agreements through this announcement, at \$100,000 to \$700,000 per award. The project period for awards from this solicitation will begin in September 2009. Proposed project periods may be up to three years. Successful proposals will advance project development in the Methane to Markets Partner Countries or countries that have submitted letters of intent to join the Partnership at the close of the RFP. Applications are due by 5 March 2009. [U.S. EPA offers more information on the grant funding](#) for interested applicants.

[Information on 2007 award winners](#) and [information on 2008 award winners](#) is now available.

## International Energy Agency Hosts CMM Workshop and Completes CMM and LFGE Reports

### *CMM Workshops in China and Russia*

Presenting findings from its recent CMM reports, IEA will sponsor two workshops in 2009. The first workshop will take place in Chengdu, China, on 7–8 April 2009. It will be co-hosted by the [National Center for International Cooperation in Work Safety](#) and the Sichuan Coal Mine Safety Bureau. The workshop will focus on policies and technologies for smaller-scale CMM use in China and feature national and international expert presentations. The second workshop, which has not yet been scheduled, is expected to take place in Moscow in May or June 2009. For more information about these events, contact IEA's [Tom Kerr](#).



### *Reports on CMM in China and Russia to Be Released in Spring 2009*

IEA is finalizing two new reports that analyze CMM in China and Russia, two key countries rich in CMM resources. The Chinese report, titled "Coal Mine Methane in China: A Budding Asset with the Potential to Bloom," compiles data from onsite interviews and analysis of small- to medium-sized coal mines in China. These mines are reportedly often passed over while other mines with richer resources are pursued. However, a number of smaller mines are actively pursuing CMM and adapting technologies to take advantage of the methane. Although the government has recently enacted policies that appear to support greater CMM recovery and use, the report finds that there are

hurdles to implementation that must be addressed to ensure safe and effective CMM use at smaller Chinese mines. The IEA report on China will be published in February 2009.

The report on Russia, as yet untitled, investigates regulations affecting CMM development. Publication is expected in April 2009. Both reports will be available for free download.

### *Report Finds Specific Policies Tied to LFGE Growth*

The leading international energy organization, [IEA](#), recently published an analysis of policies that promote landfill gas-to-energy (LFGE) recovery and use. The report pulls from IEA's Renewable Energy and Energy Efficiency Global Databases, which contain a wide range of national and regional policies and measures implemented to advance specific energy technology solutions. Key policies—including feed-in tariffs, tax relief, and interconnection, among others—are listed in the report as well as the jurisdictions that have used them to promote LFGE and/or biogas development. The key message from the report is that given the right mix of incentives, electricity access, and outreach policies, countries have seen strong growth in LFGE. [Download the report](#) for free.

## New Resources on the Web

The Methane to Markets Partnership is pleased to introduce these new and improved resources for Partners:

- [Project Network Brochure](#), which summarizes the benefits of joining the Project Network and ways in which Project Network members can become involved in the Methane to Markets Partnership.  [Download or view the brochure](#) in two formats and four languages (Chinese, English, Russian, and Spanish).
- [Methane Opportunities Fact Sheet](#), which provides a review of the significance of methane and activities to reduce methane emissions. The fact sheet goes into detail about methane reduction benefits as well as methane recovery and use opportunities in each of the four sectors. [Download or view the fact sheet](#) in four languages (Chinese, English, Russian, and Spanish).
- [U.S. Government's Methane to Markets Partnership Accomplishments Report](#), which highlights the U.S. accomplishments in methane capture and use projects. The report summarizes the contributions of participating U.S. government agencies and their activities.

In addition to these new resources, the ASG will complete a revision and update of the Methane to Markets Web site in 2009 and is seeking input on content and layout. [Please contact the ASG](#) with your ideas!

## Upcoming Methane to Markets Conferences and Related Events

Visit [www.methanetomarkets.org](http://www.methanetomarkets.org) for the most up-to-date information on Partnership conferences and events.

### Agriculture Meetings

**3–4 March 2009**

Methane to Markets Regional Workshop: Opportunities in Livestock and Food Processing Industry Sector  
New Delhi, India

[www.teriin.org](http://www.teriin.org)

**23–24 March 2009**

Greenhouse Gas Measurement Symposium  
[Symposium will address landfill sector issues as well]  
San Francisco, California

[www.awma.org/events/view\\_event.html?typeid=1&id=115](http://www.awma.org/events/view_event.html?typeid=1&id=115)

### Coal Mine Meetings

**23–26 February 2009**

Asia CBM Forum 2009  
Jakarta, Indonesia

[www.alleventsgroup.com/cbm](http://www.alleventsgroup.com/cbm)

**10–11 March 2009**

2nd CBM World Conference: Developing Coal Seam Gas as LNG on Global Markets—Challenges Ahead  
Jakarta, Indonesia

[www.cmtevents.com/aboutevent.aspx?ev=090315&](http://www.cmtevents.com/aboutevent.aspx?ev=090315&)

**17–19 March 2009**

Carbon Market Insights 2009  
Copenhagen, Denmark

[www.pointcarbon.com/events/conferences/cmi09/1.986082](http://www.pointcarbon.com/events/conferences/cmi09/1.986082)

**18–22 May 2009**

2009 International Coalbed and Shale Gas Symposium  
Tuscaloosa, Alabama, USA  
[coalbed.ua.edu](http://coalbed.ua.edu)

**12 October 2009**

Coal Mines Subcommittee Meeting  
Geneva, Switzerland  
[www.methanetomarkets.org/events/index.htm](http://www.methanetomarkets.org/events/index.htm)  
Details coming soon!

**Landfill Meetings**

**21–22 April 2009**

International Solid Waste Association (ISWA) Workshop  
Abuja, Nigeria  
[www.iswa.org/c/portal/layout?p\\_l\\_id=PUB.1.46](http://www.iswa.org/c/portal/layout?p_l_id=PUB.1.46)

**Russia to Host WasteTech 2009**

WasteTech-2009, a biannual landfill exhibition and conference, will meet in Moscow on 26–27 May 2009. The conference will target commercial use of non-traditional methane and biomass resources for energy production. Environmental technologies and services related to waste management and recycling will be showcased. Panel discussions will address emission reduction strategies, best practices, and key barriers for different methane sources. For conference information, contact the [International Information, Training and Consulting Center](#).

**Oil & Gas Systems Meetings**

**14–17 September 2009**

Oil & Gas Systems Subcommittee Meeting  
Alberta, Canada  
[www.methanetomarkets.org/events/index.htm](http://www.methanetomarkets.org/events/index.htm)  
Details coming soon!

**General**

**1–3 April 2009**

Navigating the American Carbon World 2009  
San Diego, California, USA  
[www.pointcarbon.com/events/conferences/navigating09/1.1007782](http://www.pointcarbon.com/events/conferences/navigating09/1.1007782)

**7–8 April 2009**

Carbon TradeEx America  
Washington, D.C., USA  
[www.carbontradeexameric.com](http://www.carbontradeexameric.com)

**26–27 May 2009**

WasteTech-2009  
Moscow, Russia  
[www.incot.ru](http://www.incot.ru)