



Methane to Markets

United States of America Country Strategy & Update

Coal Subcommittee Meeting

12 October, 2009

Geneva, Switzerland

Outline

- US Domestic Strategy
- US Plan to Support International Activities through the Methane to Markets Partnership
 - Overarching activities
 - Country-specific activities:
 - China
 - India
 - Mexico
 - Mongolia
 - Nigeria
 - Poland
 - Russia
 - Ukraine
- US Plans to support 2010 Expo in India

US Domestic Strategy for CMM

- **Focus:**
 - Overcoming regulatory & institutional barriers to project development through technical exchange
- **Key agencies:**
 - US EPA Coalbed Methane Outreach Program (nodal agency)
 - US Trade & Development Agency
 - US Agency for International Development
 - US Department of Energy

US International Strategy: Support for M2M Partnership

- Recent M2M activities
 - Support for CMM project development through EPA M2M grant solicitation
 - Awarded six grants in 2007 (China, India, Mexico, Nigeria)
 - Awarded six grants in 2008 (China, India, Mongolia, Poland)
 - Award new grants in 2009
- Participate in Asia Pacific Partnership on Clean Development & Climate – Coal Mining Task Force

US Strategy and Activities in China

■ **Goals / objectives**

- Assist with project development and on-the-ground activities
- Continue capacity building and outreach
- Continue working with provinces to support local projects

■ **Ongoing / upcoming activities**

- CMM feasibility studies – 5 underway
 - Songzao, Chongqing (complete)
 - Hebi mines, Henan province
 - Liuzhuang, Huainan, Anhui province
 - 2 with mine hosts TBD
- US EPA awarded grants for CMM work in China
- US EPA concluded work with IEA to conduct outreach and to identify project opportunities in Sichuan and Guizhou Provinces

US Strategy and Activities in India

■ **Goals / objectives**

- Provide assistance for:
 - CMM policy, legal and regulatory development
 - India Coal Mine/Coalbed (CMM/CBM) Methane Clearinghouse start-up
 - VAM and CMM resource assessment
 - Capacity building and technology transfer

■ **Recent activities**

- CMM/CBM Clearinghouse established at Central Mine Planning and Design Institute (CMPDI)
- US EPA awarded grants

US Strategy and Activities in Mexico

- **Goals / objectives**
 - Assess CMM resources
 - Facilitate legal and regulatory development
- **Recent activities**
 - EPA funding a CMM to LNG demonstration project in the Sabinas coal basin with CleanMetFuel

US Strategy and Activities in Mongolia

- **Goals / objectives**
 - Help to build in-country capacity for CMM analysis and implementation
- **Recent activities**
 - US EPA funding pre-feasibility study of CMM recovery at the Nalaikh mine with the Mongolian Nature and Environmental Consortium.
 - Potential GEF follow-on project
- **Upcoming activities**
 - EPA identifying ways to support capacity building for Mongolia's CMM project development

US Strategy and Activities in Nigeria

■ Goals / objectives

- Encourage greater country participation in M2M, especially coal owners and the Ministry of Solid Minerals
- Build Capacity in CMM through support of government and private sector participation in M2M Coal Subcommittee meetings

■ Recent activities

- EPA completed a grant with TEMEC/CPE to conduct prefeasibility studies at the Onyeama and Owukpa mines (Enugu coal field), including assessment of CMM resources

■ Upcoming activities / plans:

- Provide assistance in development of robust country-specific strategy

US Strategy and Activities in Poland

- **Goals / objectives**

- Poland has considerable expertise and experience with CMM
- As needed, assist in identifying and overcoming barriers to CMM that exist

- **Recent activities**

- EPA funding grants with the Central Mining Institute (VAM) and the Institute of Ecology of Industrial Areas (LNG) to study CMM resources at active and abandoned mines.
- Facilitate capacity building, particularly with VAM technology transfer

US Strategy and Activities in Russia

- **Goals / objectives**
 - Focus on addressing legislative and regulatory barriers to project development in Russia
- **Recent activities**
 - EPA worked with IEA to develop CMM policy recommendations based on successes in other countries.
 - Worked with IEA to develop best practices guidance; held workshop/roundtable (May 2009)
- **Upcoming activities**
 - Continue to work with IEA to finish Coal Mine Methane in Russia white paper (October 2009)

US Strategy and Activities in Ukraine

■ Goals / objectives

- Focus on addressing legislative and regulatory barriers to project development in Ukraine
- Update printed material on project opportunities for developers and other interested parties

■ Recent activities

- EPA worked with Battelle and ARENA-ECO on several initiatives:
 - Round Table on Promoting Use of CMM with the Ukrainian Parliament Committee on Fuel
 - White paper on Reducing Methane Emissions in Ukraine Coal Mining Sector
 - Analysis of International Best Practices for CMM Recovery and Utilization
 - Updated mine profiles in Ukraine Handbook
 - Assisted Parliament with the passing of Ukraine's new CMM Law

■ Upcoming activities

- EPA project with ARENA-ECO will continue:
 - Update “Ukraine Handbook” with new introduction and profiles of coal mines
 - International Finance Roundtable in 2010
 - Assist policymakers with implementation of new CMM Law

US collaboration to promote CMM project development

- United Nations Economic Commission for Europe
 - Completed work to improve financing capacity for CMM projects in FSU
 - Working with UNECE Ad Hoc Group of Experts on CMM and World Coal Institute to develop a “Best Practices” guidance document on methane degasification, recovery, and usage

M2M Expo 2010

- EPA evaluating status of projects showcased at 2007 Expo
 - Provide support for updated information on opportunities that are still viable
- EPA working to identify new project opportunities for posters and flyers
 - Invited M2M grantees to submit ideas, information
 - Tasked CMOP contractors with identifying opportunities, developing project profiles
- EPA will develop profiles of one or two projects highlighting successes from the 2007 Expo

USEPA Support for M2M Expo 2010

- Supporting CMM Technical Session development
- Willing to provide one or more presentations
- Soliciting sponsors and promoting Expo
- Devoting staff time to ensure event success
- Willing to consider travel support for key personnel

M2M Expo 2010

Country	Estimated # of project opportunity templates to be developed
China	~ 10
Mongolia	1
Poland	2
India	5
Mexico	1
Russia	1
Ukraine	4
Georgia	1
Kazakhstan	1

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