

Coal Subcommittee Progress Report

**GMI Steering Committee Meeting
12-14 March 2013**

Vancouver, Canada

Co-Chair Huang Shengchu (China)
Co-Chair A.K. Debnath (India)
Co-Chair Felicia Ruiz (United States)

Overview

- Coal Subcommittee activities since October 2011 (meeting in Krakow, Poland)
 - Webinar Highlights
 - Sydney Highlights
- Next Steps
- Country activity highlights

Subcommittee Activities Update

- **Webinar Meeting Highlights (May 2012)**
 - Approximately 26 attendees representing 10 countries
 - 6 Partner countries provided updates on CMM activities
 - Australia discussed goals and plans for the upcoming Coal Mining Methane Abatement Seminar to be held in Sydney, Australia
 - Connect the Australia coal industry with domestic and international CMM abatement technology providers
 - Evaluate potential opportunities to use the new \$70 million set aside to invest in technologies, research and development, and reducing greenhouse gas emissions by enhancing drilling and drainage systems and VAM projects
 - The Subcommittee discussed a rough agenda and path forward for planning the coal technical and policy sessions for Methane Expo 2013
 - Completed policy white paper, *Flaring of Coal Mine Methane*

Subcommittee Activities Update

- **Sydney, Australia Meeting Highlights (September 2012)**
 - Hosted by the Australian government in conjunction with 3-day Coal Mining Methane Abatement Seminar
 - Approximately 42 attendees representing 6 countries
 - The ASG, CCAC, 6 Partner countries, and one Project Network member provided updates
 - Subcommittee discussed plans for the coal technical and policy sessions for Methane Expo 2013 in detail
 - Tracks planned on policy, best practices, technology, and financing
 - Topics covering use, safe and effective capture, and innovation and adaptation of technologies for CMM and VAM; carbon markets; incentives; funding sources
 - A call for posters on project success stories and project opportunities
 - Meeting attendees were reminded to update projects in the International CMM Projects database

Next Steps

- Next Subcommittee Meeting
 - Fall 2013
 - Possibly via webinar
- Co-Chairs will update and enhance the Coal Subcommittee Action Plan
- Subcommittee members will update CMM Technology Database

Highlights of CMM Activities

■ Australia

- Australia's Clean Energy Futures Plan went into effect on 1 July 2012, with the goal of reducing GHG emissions by 80 percent of 2000
 - Coal Sector Jobs Package: \$1.2 billion over 6 years in transitional assistance to the most emission-intensive mines
 - Coal Mining Abatement Technology Support Package: \$70 million over 5 years to support industry efforts to develop technologies to safely reduce fugitive methane emissions
- Australia trading and European Union trading will be linked
- In 2015, Australian companies can offset up to 12 percent of domestic liabilities by funding international methane abatement projects

Highlights of CMM Activities

■ China

- Two VAM projects recently completed within Shanxi coal group and Henan province
- Five full-scale feasibility study assessments have been conducted in China
 - One full-scale feasibility study led to construction of a CMM to liquefied natural gas (LNG) plant
- China Energy Markets Report released, which features market information on mines in four provinces
- Regional Handbook on Degasification published and database of abandoned mines in Shanxi province published, both results of GMI grants
- In 2012, CMM utilization 7.1 percent more than 2011
- Focus on CBM, low concentration CMM, and VAM during implementation of China's 12th five-year plan

Highlights of CMM Activities (2)

■ India

- Rapidly expanding its development of CBM; production underway
- CBM/CMM Clearinghouse is working on development of CBM/CMM policies to clarify ownership and legal issues
- CMM demonstration project funded by UNDP Global Environmental Fund; led India to focus more on CMM
- Results of study of gassiest underground mine (Moondih mine) will be published in 2013

■ Kazakhstan

- US EPA conducted a scoping mission in 2011
- Developing pre-feasibility study for several mines in the Karaganda Coal Basin

Highlights of CMM Activities (3)

■ Mongolia

- Conducting CMM resource assessment and emissions inventory at five mining areas
- In 2013 and 2014, hope to attract foreign investment, build capacity, and complete one pre-feasibility assessment at one mine site

■ Poland

- Government is focusing on increasing methane capture and utilization in Polish hard coal mines; considering changing economic incentives, including developing incentives for VAM utilization
- Polish scientists developing a VAM utilization technology
- Government may spend money drilling pilot wells to verify drainage ahead of mining
- Study on VAM emissions at 10 gassy mines will be published in 2013

Highlights of CMM Activities (4)

■ Russia

- Uglemetan is initiating new effort to improve measurement of VAM emissions in the Kuzbass
- A new prefeasibility study was launched

■ Turkey

- Collaborative effort between Virginia Center for Coal and Energy Research and Turkish Coal Enterprises, funded by US EPA

■ Ukraine

- A pre-feasibility study at one mine is being finalized and a second is underway

Highlights of CMM Activities (5)

■ United States

- Updated Coal Sector Action Plan
- U.S. underground mines reported 2011 GHG emissions
- US EPA is funding on-going assessments, studies, and data collection efforts in China, Kazakhstan, Poland, Mongolia, India, Ukraine, Russia, and Turkey
- US EPA Coalbed Methane Outreach Program held its 2012 CMM Conference in conjunction with MINExpo in Las Vegas, Nevada, USA in September 2012

■ Vietnam

- Recently began participating actively in the Coal Subcommittee
- Working on overcoming barriers
- Gas is only drained from one mine and not utilized from any coal mines

