



METHANE TO MARKETS PARTNERSHIP COAL SUBCOMMITTEE MEETING

7th Session of the Coal Subcommittee
1 November 2007
China World Hotel
Beijing, China

MEETING MINUTES

Summary

The Coal Subcommittee held its seventh session on 1 November 2007 in Beijing, China, on the final day of the Methane to Markets Partnership Expo. The meeting focused on Partner countries' coal mine methane (CMM) related activities, Partner countries' and Project Network members' experiences at the Expo, and a discussion regarding the subcommittee's post-Expo activities.

Opening Remarks and Introductions

The Coal Subcommittee's three co-chairs presided over the meeting: Dr. Pamela Franklin, team leader of the Coalbed Methane Outreach Program (CMOP) at the U.S. Environmental Protection Agency (U.S. EPA); Dr. Subrata Chaudhuri, chairman and managing director of the Central Mine Planning and Design Institute Limited; and Mr. Huang Shengchu, president of the China Coal Information Institute (CCII). The co-chairs opened the meeting at 11:00 a.m. Attendees included Methane to Markets Partner country delegates, Project Network members, and Administrative Support Group (ASG) staff. A list of delegates and attendees is included as Annex 1.

Dr. Franklin opened the meeting by thanking everyone for attending.

In his welcoming remarks, Dr. Chaudhuri stated that CMM project development still suffers from a number of implementation barriers including: lack of technology between developed and developing countries; the need for bankable high-quality feasibility reports to assist with project development; and the need for improved carbon financial markets. Dr. Chaudhuri expressed appreciation for the Steering Committee's feedback to the Subcommittees. Finally, he stated that he will be retiring from his position at CMPDI and as Subcommittee Co-chair. He thanked everyone from the Partner countries for their hard work.

Mr. Huang Shengchu thanked everyone who organized the Expo and the Expo speakers for their excellent presentations. Mr. Huang felt the Expo was extremely successful, and he was pleased that the Expo press conference attracted the attention of the Chinese national media.

Following introductions of all meeting attendees, the meeting agenda was officially adopted with no questions or comments. The final adopted agenda is included as Annex 2.

Updates From Partners

Australia

Ms. Samantha Scott of Australia's Government Department of Industry, Tourism and Resources (DITR) outlined Australia's activities in the CMM sector, including an overview of the country's coal mining industry, which is the world's largest coal exporter (worth AUS\$21.8 billion in 2006 and 2007).

The Australian government recently announced two new initiatives aimed at reducing CMM emissions. The first, announced in May 2007, is an AUS\$18.5-million program called the Australian Coal Mine Methane Reduction Program, which is designed to reduce CMM emissions by 4.5 million tonnes from 2008 through 2012. Under this new program, a number of different CMM projects are being developed, including four CMM projects that are supported by Australia's Greenhouse Gas Abatement Program. The second initiative, slated to become active in 2012, is a domestic cap and trade program for carbon emissions, which could drastically improve the funding available for CMM projects in the future.

Finally, Ms. Scott stated that the Australian government is currently in an election cycle and is therefore under caretaker status until national elections are held on November 24, 2007. Under caretaker status, the normal business of government continues, but Australia cannot enter into any commitments or undertakings.

China

Mr. Liu Wenge of CCII outlined China's activities in facilitating the Expo and promoting CMM project development. China hosted, facilitated, and promoted the Expo. China also developed 10 project opportunity posters, which included five CMM power generation projects, three ventilation air methane (VAM) utilization projects, and two CMM purification and direct use (town gas) projects.

In addition, China is heavily promoting CMM capture and use opportunities in the country. However, there are a number of barriers still hindering CMM development, such as lack of adequate technology or pilot projects demonstrating different CMM technologies, lack of clarity on CMM regulatory and ownership issues, and lack of local support and easily available financing for CMM project development.

China is addressing these barriers by implementing a number of programs, such as testing horizontal long borehole drilling, modifying regulations to improve gas ownership and generate incentives for CMM project development, and working with coal mine owners to improve CMM project profitability.

India

Dr. Chaudhuri of CMPDI updated the meeting attendees on India's recent work in the CMM sector. India has been working to establish a coal mine information clearinghouse with U.S. EPA. India has also identified five coal fields for CMM capture and use projects, which would use 150 billion cubic meters (m³) of methane gas. India will hold a meeting soon with interested parties to further develop this project. India is continuing its work on pre-draining open cast mines and is hoping to demonstrate this technique at a coal mine by drilling down to 318 meters and removing the gas. This pre-draining demonstration project could capture 38 million m³ of methane per day, halting the emission of 27 million metric tons of carbon dioxide equivalent (MTCO₂Eq) per year into the atmosphere.

Italy

Mr. Fabrizio Pisanu of Carbosulcis stated that using CMM for power production and to reduce GHG emissions is beginning to become more accepted in Italy. Italy is undertaking research related to CMM and coal mining in two areas: analyzing the methods for extracting CMM and then injecting and storing carbon dioxide in deep coal beds, and using VAM and CMM emissions to generate power in Sardinia mines. Mr. Pisanu felt the Expo was very helpful for furthering these research efforts.

Japan

Mr. Kenji Iida of Japan's New Energy and Industrial Technology Organization (NEDO) provided an overview of NEDO and its role in promoting CMM recovery and use. NEDO is the country's largest public management organization, promoting research and development of environmentally beneficial energy technologies. In 2007, NEDO has a budget of \$2 billion and has over 1,000 employees. For the Expo, NEDO was involved in the planning and organization of the conference from its early stages. In addition, NEDO gave travel support for five individuals from a number of different nations to attend this conference as well as financial assistance for the collection and presentation CMM technical data at the Expo. Finally, NEDO facilitated the exchange of information regarding CMM project development between Japan's Project Network as well as promoting international project development by sharing information on underground coal technology with China, Indonesia, and Vietnam.

México

Mr. Romon Carlos Torres Flores of Mexico's Secretariat for Environment and Natural Resources (SEMARNAT) thanked the ASG and CCII for their hard work on the Expo and thanked NEDO for assisting Mexico with travel support to the Expo.

He then summarized Mexico's involvement in CMM project development. Back in 2006, Mexico's government began changing the legal ownership structure and rules of CMM in coal mines, allowing CMM project developers to own CMM gas even if a different individual owns the coal mine itself. After a year and a half, this new ownership law will finally be implemented and should make the development of CMM recovery and use projects much more attractive in Mexico.

Mr. Alfredo Abraham Cabrera, the sub-secretary of mining for the State of Coahuila, Mexico, gave a short statement thanking the Expo organizers for their work putting together the conference. In addition, he said that Coahuila, Mexico, is the only state in Mexico that produces coal (approximately 50 million tonnes per year), and the state government is very interested in promoting CMM recovery and use projects.

The third member of the Mexican delegation, Mr. Lorenzo González Merla of Altos Hornos de Mexico (AHMSA), a company extracting 60 percent of the coal in Coahuila, stated that once the new Mexican CMM law is implemented, AHMSA will work with state and federal officials to implement a CMM project in the state of Coahuila that will reduce GHG emissions by an estimated 600 MMTCO₂Eq per year. The project will most likely rely on VAM utilization technologies due to the very low concentration of methane at the mine.

Mr. Merla suggested that the Coal Mine Subcommittee continue facilitating and assisting VAM technology and coal mine safety research efforts. An additional research or facilitation topic could include ways of utilizing CMM by industries that are not currently doing so, such as the steel industry.

Nigeria

Mr. Solomon Adesanya of Nigeria's Federal Ministry of Environment stated that he was very pleased to be present at the Expo, especially since Nigeria is an OPEC member and the only African country represented at the Expo. For the Expo, Nigeria showcased two potential CMM projects as flyers that were posted in the Expo exhibition hall. Mr. Adesanya stated that Nigeria faces a number of project implementation barriers, such as lack of technology and lack of access to funding sources, but that the government is working to overcome these barriers.

Mr. Adesanya introduced Dr. Olubunmi Ogunsola, who outlined some of the Nigerian government's steps for addressing these issues. Dr. Ogunsola stated that Nigerian coal production is currently sporadic but will increase overtime in the future because the Nigerian government is privatizing the coal mining industry. In 2000, 86.8 million m³ of methane was emitted, and this number is bound to increase as the coal sector becomes privatized. The Nigerian government is working to improve coal mining operations and CMM recovery and use through joint ventures with private companies from Poland and South Africa. Nigeria is also working on a pre-feasibility study, funded by U.S. EPA, that involves reviewing in-country coal mines where demonstration projects could be build for draining and using CMM to produce power.

Finally, Dr. Ogunsola thanked U.S. EPA for the opportunity to attend the Expo and for the travel and pre-feasibility study support. Dr. Ogunsola stated that she learned a great deal at the Expo and this knowledge will help future efforts to mitigate these project implementation barriers in the future.

Poland

Mr. Jacek Skiba of Poland's Central Mining Institute described Poland's recent CMM activities. In the last five years, several projects focusing on effective use of CMM were presented the Central Mining Institute and are now either operational or being completed. In order to learn more about VAM technology, a representative from Poland traveled to Australia and visited BHP Billiton's West Cliff VAM Project site to review the project's technology first-hand. The Central Mining Institute will perform a pre-feasibility study analyzing the potential for a potential VAM utilization project in Poland and is seeking assistance from U.S. EPA to help facilitate the pre-feasibility study.

Mr. Skiba continued by outlining future activities that will overcome barriers to CMM project development in Poland. Two of these activities include: 1) a new law currently being written in conjunction with Poland's Ministry of Economy and Poland's Department of Energy to facilitate CMM project development, and 2) Poland's Department of Energy, whose department head attended the Expo, will establish a working group to outline incentives for CMM development as a green-energy resource. In addition, Poland will soon hold elections, and the change in government could foster additional interest in Poland's CMM resources as an environmentally friendly fuel source for energy generation.

Mr. Skiba also extended an invitation for all Subcommittee members and Project Network members to attend a workshop in Poland on the 27 — 28 February 2008. The conference is an annual event that will focus on the new trends in CMM recovery and use. More information will be announced on the Methane to Markets Partnership Web site.

Russian Federation

Mr. Vladimir Litvak of the Siberian Coal Energy Company (SUEK) thanked all of the Expo sponsors, participants, and organizers for putting on a successful and important event. In addition, Mr. Litvak stated that SUEK was very pleased to sponsor the Russian booth at the Expo.

The Russian government recently passed laws regarding methane venting from coal mines, but these new measures have not promoted the adoption of CMM capture and use projects in the country. There is renewed interest in CMM project development in Russia to increase mine safety and as part of the Kyoto protocol, but there are still a number of legal and ownership barriers remaining. Mr. Litvak strongly supports the work of the Coal Subcommittee to help the Russian oversight agencies and Russian legislature identify these barriers in a targeted and methodical way.

Mr. Litvak reviewed a number of CMM projects, such as the Russian posters featured in the Expo. He stated that Russia will promote CMM project development in the near future and is in the process of passing two laws: 1) a renewable energy law listing CMM as a green fuel, and 2) an energy balance law requiring Russia to develop 100 to 150 gigawatts of CMM-based power over the next year or two.

Ukraine

Mr. Boris Gryadushchyy of the Ministry of Coal Industry stated that Ukraine featured three of its coal mines as Expo posters and a fourth mine as a flyer. A few years ago, Ukraine extracted 700,000 tonnes of coal per day and used approximately 65 percent of the captured methane (around 2 billion m³), but the country is not currently utilizing those levels of CMM.

Ukraine is very interested in developing its methane resources further and has been undertaking studies to improve the efficiency of degasifying coal mines. In addition, Ukraine implemented a demonstration project at a coal mine that tested a unique method of borehole drilling, which was used to improve the Kalina mine's methane extraction efficiency and significantly improve the mine's safety. The project is currently only using 10 to 15 percent of the available methane from the Kalina mine. Ukraine still has some barriers to CMM project development, such as political instability, which has impacted some of the degasification studies. Finally, Ukrainian companies are also improving their coal mine degasification infrastructure by installing remotely controlled degasification equipment and processes.

United States

Ms. Barbora Jemelkova of U.S. EPA summarized the support and work U.S. EPA performed in preparing for the Expo. This work included gathering data; developing and printing 19 CMM project opportunity posters and flyers; sponsoring travel for seven Project Network members from four different countries to attend the Expo; and facilitating and organizing the Expo in conjunction with CCII.

In 2007, U.S. EPA awarded 28 grants totaling over \$3 million to support project development across all four sectors of the Methane to Markets Partnership. These projects will be implemented in 11 different countries.

Finally, U.S. EPA hosted a CMM conference in September 2007 in St. Louis, Missouri, which focused on policy and technical issues of CMM project development in the United States and included two site visits to active projects to recover and use methane from abandoned coal mines in the Illinois basin.

European Commission

Mr. Thomas Schneider discussed the current work of the European Commission, which is in negotiations with Russian and Ukrainian private sector for VAM project research.

The commission is also producing a white paper on climate change strategy for Europe, covering the next 13 years (until 2020). This white paper will include both CO₂ and non-CO₂ emission reduction policies and devise ways for the European Commission to meet its emission reduction targets. Some

recommendations included in the white book are stepping up technology research for CMM projects and introducing a market-based methane trading scheme.

Updates From Other Organizations

Dr. Franklin invited the United Nations Economic Commission for Europe (UNECE) to update the Subcommittee on the organization's current activities.

UNECE

Mr. Clark Talkington reviewed the current status of UNECE's efforts to promote CMM projects and the Methane to Markets Partnership Expo. For the Expo, the United Nations supported the travel expenses of three coal industry members from two countries.

Other UNECE work related to CMM includes developing a glossary of CMM terms from all countries with coal mines. UNECE has prepared a draft glossary, and a task force will complete this project. The ultimate goal of this effort is to develop an understanding of diverse terminology across different countries, improving communication and project implementation. Mr. Talkington will meet with the task force to solicit input on the glossary from various Project Network members and Partner countries.

Next, Mr. Talkington outlined UNECE's to develop a summary of different countries' laws that inadvertently create perverse incentives toward mine safety. This information is intended to promote alternative legislation in various countries to improve mine safety and promote infrastructure upgrades and project development, including CMM recovery and use projects. UNECE will send out a survey requesting country-specific legal and regulatory information. To improve the survey, Mr. Talkington is soliciting input from UNECE's Ad Hoc Group of Experts, and he plans to request the Coal Mine Subcommittee and various Project Network members to review the survey and suggest modifications.

Finally, UNECE is assisting Poland with a CMM workshop, scheduled for 27 – 28 February 2008. UNECE is assisting in developing the workshop and is requesting input from various sources such as the Coal Mine Subcommittee. The UNECE will continue to work with U.S. EPA and the Polish government to facilitate the conference.

Feedback Regarding the Expo

Dr. Franklin opened the floor to the Project Network to receive feedback on the Expo.

- Mr. Lee Schultz of the Project Network (USA) stated that while covering project finance at the Expo is important, he also felt that the next Expo should evaluate country-specific requirements or rules for project development. For example, a Chinese law states that any CMM project in China must use at least 50 percent Chinese technology. Mr. Schultz thought that an outline of country-by-country project development requirements and opportunities would be extremely useful for the Project Network.
- Ms. Barbora Jemelkova of U.S. EPA shared the views of the U.S. private sector by saying that the booths were an excellent resource for CMM business networking. In addition, the project opportunity posters were very helpful for understanding these opportunities in various countries and that these posters will promote project development after the Expo's completion.
- Mr. Gryadushchyy of Ukraine wondered if the Coal Subcommittee could create a bureau of scientific research to promote the communication and safety issues between scientists and mine

owners and operators. Mr. Gryadushchyy stated that the conference was great, and he learned many new things from the various presentations and talking to very knowledgeable individuals attending the conference.

- Dr. Franklin responded to Mr. Gryadushchyy that a scientific panel might be out of the purview of the Methane to Markets Partnership. *NOTE: This issue has been a topic of discussion by the UNECE Ad Hoc Group of Experts on Coal Mine Methane.*
- Mr. Guo of Australia thought that an increase in the technical content of the Expo would have been useful. There were a wide range of technical issues for the development and use of VAM technologies that were not addressed. If another Expo is planned in the future, he suggests frank discussions centered on specific technical issues. These technical issues and talks could be organized to follow the value chain of CMM capture and use projects—from drainage (beginning) to electrical power generation (end).
- Dr. Chaudhuri stated that for the next Expo technical workshops, the Subcommittee should develop a strong platform of technical work and knowledge sharing based on the various aspects of CMM development. This knowledge-sharing platform could be structured like a pyramid, with the Subcommittee developing two or three white papers per topic and asking outside experts to present on each topic as well. The pyramid would include the following topics: geology (base of the pyramid), technology and equipment, case studies of specific projects, financing, and barriers to project development (top of pyramid). Mr. Pisanu of Italy supported this idea.
- Mr. Pisanu commented that the Expo presentations often did not have the same level of detail regarding CMM technical, financial, or policy issues. Some of the presentations were very detailed, while others were much more general, and the level of detail did not always match the level of expertise in the audience. To alleviate this problem for the next Expo, Mr. Pisanu suggests dividing up the audience into different focus groups (e.g., technical, financial, project development), so the audience could have a better understanding of the material, and presenters could delve deeper into their chosen topic of discussion.
- Ms. Samantha Scott of Australia reported on the feedback she received from Australian private industry who participated in the Expo. The companies really appreciated the booths and would pursue CMM business opportunities generated at the Expo over the coming days. Ms. Scott also suggested that the Expo should be held every two to three years and not annually. She suggested that the next Expo should be held in a location close to actual CMM projects or coal mines. Finally, she stated that the value of this Expo will not be known for many months, and the Coal Mine Subcommittee must follow up with the Project Network to get a true sense of the Expo's worth.
- Dr. Shi Su of CSIRO wondered if Methane to Markets could set up a research program for the creation and innovation of VAM projects. This idea would be an excellent method for improving the adoption of near-commercial technologies that are currently not cost effective.
 - Dr. Franklin responded that, while a research program of this type is an excellent idea, the Methane to Markets Partnership does not have the mandate or the budget to perform research of that scale.
- Mr. Ming Yang of the International Energy Agency commented that he hopes that there will be another Expo in the future and found the project opportunity posters an excellent resource. He also made several suggestions including: holding the next Expo at a location near coal mines,

especially in China, since the distance to Beijing was a cost barrier for some Chinese coal mine owners; increasing the number of coal mining companies represented in the Expo booths by reaching out to more coal mine owners; and focusing more on site-specific technology and project implementation as well as discussing ways to improve CMM technology design and transferability to different coal mining sites.

- Dr. Ogunsola stated that in general, she was very happy with the Expo but suggested that, in the future, the Expo should have a uniform theme across the four sectors. The Expo organizers would provide each presenter with the topic and some background information so that the talks would be more focused and stay within the designated Expo themes.

Implementing the Steering Committee's Recommendations

Dr. Franklin opened the floor to discuss the Steering Committee's recommendations for the Coal Mine Subcommittee, which focused on three separate topics: 1) improving communication; 2) adopting a country-specific approach to project development; and 3) involving the Project Network in Subcommittee activities.

Improving Communication

Dr. Chaudhuri suggested that the Subcommittee publish information bulletins to share important information and current events between Partner countries and the Project Network, similar to the *Methane International* publication, but keep a coal-specific focus and cover more technical issues. Dr. Chaudhuri suggested that bulletin topics include different resource assessment techniques, methane emission calculations, project development guidelines and project system procedures, as well as financial issues like securing carbon credits under the Kyoto Protocol. The purpose of the bulletin would not only be to share information, but also to help standardized important CMM-related guidelines, such as estimating methane emissions from coal mines. The Subcommittee could rely on universities and science organizations, like Commonwealth Scientific and Industrial Research Organization (CSIRO), for assistance in developing these bulletins.

Both Dr. Franklin and Dr. Huang thought this was a good idea and recommended that a Partner country volunteer to take the lead to produce these bulletins.

Adopting a Country-Specific Approach to Project Development

Dr. Franklin then requested comments on the Steering Committee's recommendation to focus on country-specific actions instead of the coal-sector approach. She asked if the country-specific approach were reasonable for the Subcommittee. If so, the Subcommittee should develop multiple country-specific action plans (e.g., technical, financial, and regulatory needs for each country) and identify what actions would be most effective in each country.

- Ms. Xu Mingzhu of the China Clean Development Mechanism Fund (Ministry of Finance, China) stated that many of the challenges faced by each country are quite similar, especially for Clean Development Mechanism (CDM) projects under the Kyoto Protocol. Often, countries face similar policy issues, technology gaps, and financial needs for CDM project development. She suggested that the Subcommittee focus on three things to best capitalize on a country-specific approach: 1) develop a CDM information center where countries can access resources for CMM projects that will qualify for CDM financing; 2) narrow the focus on specific barriers and issues at the local level to help directly implement CMM projects; and 3) assist governments in reducing the barriers to project implementation by suggesting improvements to CMM policies and regulations.

- Dr. Ogunsola (Nigeria) and Ms. Jemelkova (USA) both expressed support for the country-specific approach. Dr. Ogunsola gave the example of that Nigeria is lacking experienced CMM project development workers, and a workshop to train individuals in the Nigerian coal mine industry would be a cost-efficient way of addressing one of Nigeria’s key barriers. Ms. Jemelkova stated that the United States is prepared to work on this new approach and work with UNECE on country-specific barriers to project development. Ms. Jemelkova suggested that in order for this effort to be successful, each country must be prepared to describe in detail their country’s project implementation barriers and submit in a timely manner.
- Mr. Talkington made the following comments: 1) the country-specific approach is exactly what UNECE’s clearinghouse and survey is intended to address—the legal and regulatory barriers impeding CMM project development; 2) this country-specific effort—especially identifying all the financial, legal, and technical barriers to CMM project development for each country in the Partnership—is a very extensive and resource-intensive undertaking, so it is important to use work that other organizations have already developed (like UNECE); and 3) because this new country-specific approach will be very expensive, multiple countries must contribute financially including developed and developing countries. Mr. Talkington went on to say that it is risky to rely on only one organization as the sole source of funding for any long-term project such as this country-specific approach (i.e., the organization’s funding priorities might change after an election, jeopardizing the project’s success).

Dr. Franklin summarized the discussion by noting that there was general support for the country-specific approach to the Subcommittee’s future work. The next logical step appears to be for the Subcommittee (facilitated by a task force) to work with UNECE on developing a template for country-specific barriers to project development. She emphasized that the Subcommittee should not “reinvent the wheel” on this issue and instead build upon other organizations’ previous work.

Involving the Project Network in Subcommittee Activities

Dr. Franklin requested suggestions for involving more of the Project Network in Subcommittee activities.

- Mr. Iida had three ideas for getting Project Network members more active in the Subcommittee:
 - 1) The Coal Subcommittee should create a survey to ask the 300 Project Network members to: a) evaluate in detail the usefulness of past Coal Subcommittee initiatives, actions, and information sharing materials; b) elaborate on their expectations and needs for the Coal Subcommittee’s future work. The Coal Subcommittee should use the results of this survey to guide its work in the future.
 - 2) The Coal Subcommittee should generate a detailed report outlining the Subcommittee’s work from the creation of Methane to Markets to the Beijing Expo. The Subcommittee should share this report with all Project Network members by posting it on the Methane to Markets Web site. *NOTE: This information will be captured in the 2008 Methane to Markets Partnership Accomplishment Report. The ASG will request information from each Subcommittee.*
 - 3) The Coal Subcommittee should attend international coal-related meetings to communicate the Subcommittee’s activities and expand the Project Network (e.g., Asia-Pacific Economic Cooperation’s (APEC) Clean Fossil Energy Seminar).

- Ms. Jemelkova suggested the Subcommittee publicly recognize individual Project Network members for their work with the Subcommittee as well as for implementing innovative CMM recovery and use projects.

Location Suggestions for Next Coal Mine Subcommittee Meeting

As the last item for the day, Dr. Franklin opened the floor for individuals to suggest a location for the next Coal Mine Subcommittee meeting, ideally to be held the first half of 2008. Mr. Pisanu suggested that the next Coal Mine Subcommittee meeting be held in Sardinia, Italy.

Dr. Franklin thanked everyone for attending the meeting and officially closed the meeting at 3:30 p.m.

Annex 1 – Attendee List



Methane to Markets

Australia

Samantha Scott*

Assistant Manager
Australian Government Department of
Industry, Tourism and Resources
GPO Box 9839 ACT 2601
Canberra, Australia
Tel: +61 2 6213 7888
Fax: +61 2 6213 7654
E-mail: samantha.scott@industry.gov.au

Hua Guo

Research Program Leader – Mining, Science
and Engineering
CSIRO
Division of Exploration and Mining
Tel: +61 7 33 274 608
Fax: +61 7 33 274 455
E-mail: Hua.Guo@csiro.au

Shi Su

CSIRO Exploration & Mining
1 Technology Court
Pullenvale
Brisbane, QLD 4069
Australia
+61 7 3327 4679
Fax: +61 7 3327 4455
E-mail: shi.su@csiro.au

China

Huang Shengchu (Co-Chair)*

President
China Coal Information Institute
35 Shoayaoju, Chaoyang District
Beijing 100029, ACT
China
Tel: +86 10 8465 7818
Fax: +86 10 8465 7806
E-mail: huangsc@coalinfo.net.cn

Liu Wenge*

Director
China Coal Information Institute
35 Shoayaoju, Chaoyang District
Beijing 100029, ACT
China
Tel: +86 10 8465 7806
Fax: +86 10 8465 7806
E-mail: liuwenge@coalinfo.net.cn

Boni Jiang

Project Manager
Guizhou CMM Recovery and Utilization
Initiative
B Dong Qunlou 1st Floor
Keji Dasha Jinyang Gaoxinqu
Guiyang, Guizhou, 550022 P.R.
China
Tel: +86 851 799 0187
Fax: +86 851 799 0141
E-mail: bjiang@gzcmm.org

Xu Mingzhu

China CDM Fund
Ministry of Finance
Tel: +86 138 109 067 81
E-mail: kafka733@gmail.com

Hu Yuhong

Deputy Director General
State Administration of Work Safety
China National Coal Association
21 Hpingli Beijie
Beijing 100713, China
Tel: +86 10 644 64591
Fax: +86 10 642 37410
E-mail: huyh@chinasafety.gov.cn

Marshall Wu

Director of Corporate Affairs
Asian American Gas, Inc.
503, Tower A1, Wanda Plaza, 93 Jianguo
Road, Chaoyang District
Beijing, 100022
China

* Subcommittee delegate

Annex 1 – Attendee List

+86 10 5820 8088
Fax: +86 10 5820 8329
E-mail:
marshall.wu@asianamericangas.com

Germany

Stefan Lechtenböhmer
Deputy Director
Wuppertal Institute for Climate,
Environment and Energy
Döppersberg 19
42103 Wuppertal
P.O. Box 100480
42004 Wuppertal
Germany
Tel: +49 202 2492 216
Fax: +49 202 2492 198
E-mail:
stefan.lechtenboehmer@wupperinst.org

India

Subrata Chaudhuri (Co-Chair)*
Chairman/Managing Director
Central Mine Planning & Design Institute
Ltd.
Gondwana Place, Kanke Road
Ranchi, Jharkhand - India
Tel: +91 0651 223 0001/2
Fax: +91 0651 223 0003
E-mail: cmd@cmpdi.co.in

Pradeep Kumar
Consultant – Coal Related Projects
Reliance Industries Limited
5th Floor, Sudio Complex
Near Gota Cross Roads, S.G. Highway,
Ahmedabad-3824821
Gujarat, India
Tel: +91 79 660 63543
Fax: +91 79 660 63599
E-mail: pradeep.s.kumar@zmail.ril.com

Italy

Giuseppe Deriu*
Chief Executive Officer
Carbosulcis
Miniera Monte Sinni

Cortoghiana, 09010
Tel: +39 0781 4922
Fax: +39 0781 492 2400
E-mail: Carbo.deriu@tiscali.it

Fabrizio Pisanu
Head Research & Development
Carbosulcis Spa
Miniera Monte Sinni
Cortoghiana, 09010
Italy
Tel: +39 781 4922497
Fax: +39 781 4922400
E-mail: carbo@tiscali.it

Japan

Kenji Iida*
Coal Projects Department
New Energy and Industrial Technology
Development Organization (NEDO)
Tel : +81-44-520-5290
Fax : +81-44-520-5292
E-mail: iidaknj@nedo.go.jp

Kenji Kamesato
Marubeni Corporation
Tel: +81 3 3282 2620
E-mail: kamesato-k@marubeni.com

Mexico

Ramón Carlos Torres Flores*
Energy and Mining General Director
Ministry of the Env. and Natural Resources
Blvd. Adolfo Ruiz Cortines 4209 Piso 4
Fraccionamiento Jardines en la Montaña
Delegacion Tlalpan, C.P. 14210
Mexico, Distrito Federal - Mexico
Tel: +52 55 56 28 07 37
Fax: +52 55 56 28 07 58
E-mail: ramon.torres@semarnat.gob.mx

Alfredo Abraham Cabrera
Sub-Secretary of Mining, State of Coahuila
Perif. Luis Echeverria Alvarez 1560
Edificio Torre Saltillo, piso 10
Col. Guanajuato Ote., CP 25286
Saltillo, Coahuila, Mexico
Tel: +52 (844) 439 49 42

* Subcommittee delegate

Annex 1 – Attendee List

E-mail:

mineriyenergia@sefomec-coahuila.gov.mx

Lorenzo González Merla

Vice President of Environmental Quality
Altos Hornos de México (AHMSA)
Apartado Postal 121
25770 Monclova, Coah. México
Tel: +52 (866) 649 30 46
E-mail: lgonzalex@gan.com.mx

Nigeria

Solomon Adesanya*

Deputy Director
Federal Ministry of Environment
14 Aguiyi Ironsi Street
Maitama, Abuja - Nigeria
Tel: +23 4 9 413 89 49
Fax: +23 4 9 413 89 49
E-mail: muyiwaad@yahoo.com

Poland

Jacek Skiba*

Senior Specialist, M. Sc. Eng
Central Mining Institute of Katowice (GIG)
ul. Podleska 72
43-190 Mikotów - Poland
Tel: +48 32 324 66 03
Fax: +48 32 202 87 45
E-mail: jskiba@gig.katowice.pl

Russian Federation

Vladimir Litvak

Head Power Project Finance and New
Power Projects
Siberian Coal Energy Company (SUEK)
litakum@msk.suek.ru

Mr. Oleg Tailakov

Director
Uglemetan
21, Rukavishnikov Street Kemerovo,
650610 – Russian Federation
Tel: +7 (384 2) 281366
Fax: +7 (384 2) 259366
E-mail: tailakov@uglemetan.ru

Sweden

Richard Mattus

Business Manager
Energy & Process Systems
MEGTEC Systems AB
Theres Svenssons
Gata 10
41755 Göteborg - Sweden
Tel: + 46 31-65 78 19
Fax: + 46 31-22 83 19
E-mail: rmattus@megtec.se

Ukraine

Boris Gryadushchyy

Director Science and Technology
Ministry of Coal Industry of Ukraine
7, Teatralny Avenue
Donetsk 83055, Ukraine
Tel: +38 062 338 1282
Fax: +38 062 337 2633
E-mail: mail@niigm.dn.ua

United Kingdom

Matthew Hill

Harworth Power Ltd
Harworth Park
Blyth Road
Doncaster, South Yorkshire DN11 8DB
United Kingdom
Tel: +44 0 1302 755097
Fax: +44 0 1302 752420
E-mail: mhill@harworthpower.com

Petr Hemza

Head of Geological Services & Safety
Green Gas International
12 Petersham Road
Richmond, London TW10 6UW
United Kingdom
+44 20 86149590
Fax: +44 20 89483536
E-mail: fawn.glen@greengas.net

United States

Pamela Franklin (Co-Chair)*

* Subcommittee delegate

Annex 1 – Attendee List

Team Leader Coalbed Methane Outreach
Program, Climate Change Division
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW (6202J)
Washington, DC 20460
USA
Tel: +1 202 343 9476
Fax: +1 202 343 2202
E-mail: franklin.pamela@epa.gov

Barbora Jemelkova*
Coalbed Methane Outreach Program,
Climate Change Division
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW (6202J)
Washington, DC 20460
USA
Tel: +1 202 343 9899
Fax: +1 202 343 2202
E-mail: Jemelkova.Barbora@epa.gov

Satya Harpalani
Chair and Professor
College of Engineering
Southern Illinois University
Carbondale, Illinois 62901
USA
Tel: +1 618 453 7918
Fax: +1 618 453 7455
E-mail: satya@engr.siu.edu

Zdwin Lee
Chadbourne & Parke LLP
Tel: +86 10 653 088 46
E-mail: lee@chadbourne.com

Olayinka Ogunsola
U.S. Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585
USA
Tel: +1 202 586 6743
Fax: +1 202 586 6221
E-mail: olayinka.ogunsola@hq.doe.gov

Olubunmi Ogunsola
President
TEMEC
P.O. Box 1072
Woodbridge, VA 22195
USA

Tel: +1 703 583 5647
Fax: +1 703 583 5647
E-mail: president@temec5.com

David Olsen
Senior Associate
Technical & Management Services
One West 3rd Street - Suite 1400
Tulsa, OK 74103-3519
USA
Tel: +1 918 699 2045
Fax: +1 918 699 2048
E-mail: david.olsen@netl.doe.gov

Raymond Pilcher
President
Raven Ridge Resources, Inc.
645 26 Road
Grand Junction, CO 81505 – USA
Tel: +1 970 245 4088
Fax: +1 970 245 2514
E-mail: pilcher@ravenridge.com

David Ren
Asian American Gas, Inc.
[Bear-hb@tom.com](mailto: Bear-hb@tom.com)
Tel: +1 380 135 7121

David Ross
Senior Vice President
SCS Engineers
3900 Kilroy Airport Way - Suite 100
Long Beach, CA 90806
USA
Tel: +1 562 426 9544
Fax: +1 562 426 9175
E-mail: dross@scsengineers.com

Miguel Spada
Regional Manager
Waukesha Engine, Dresser, Inc.
Room 2404, Capital Mansion, 6 Xinyuannan
Road
Chaoyang District, Beijing China 10004
Tel: +86 10 8486 2440
Fax: +86 10 8486 2445
E-mail: miguel.spada@waukeshaengine.dresser.com

Lee Schultz
Environmental Programs Manager

* Subcommittee delegate

Annex 1 – Attendee List

BCS Incorporated
5550 Sterrett Place – Suite 306
Columbia, MD 21044
USA
Tel: +1 410 997 7778
Fax: +1 410 997 7669
E-mail: schultz@bcs-hq.com

International Organisations

European Commission

Thomas H. A. Schneider
Directorate-General for Energy and
Transport
Unit C3 - Coal and Oil, Market Observatory
Office: DM 24-6/25
European Commission
B-1040 Brussels - Belgium
Tel: +32 2 29 86236
Fax: +32 2 29 64337
E-Mail: Thomas.Schneider@ec.europa.eu

International Energy Agency

Ming Yang
Energy Technology Economist, Energy
Technology Policy Division
9, rue de la Federation
75739 Paris Cedex 15
France
Tel: +33 (0) 1 40 57 67 33
Fax: +33 (0) 1 40 57 67 59
E-mail: ming.yang@iea.org

United Nations Economic Commission for Europe

Clark Talkington
Sustainable Energy Division
UN Economic Commission for Europe
Rm 349 Palais des Nations
CH-1211 Geneva 10
Switzerland
Tel: +41 22 91 72671
Fax: +41 22 91 70038
E-mail: clark.talkington@unece.org

Other

Methane to Markets Partnership ASG

Jeffrey Clark
Climate Policy Analyst
Eastern Research Group, Inc.
2300 Wilson Boulevard, Suite 350
Arlington, VA 22201
USA
Tel: +1 703 841 0554
Fax: +1 703 841 1440
E-mail: jeff.clark@erg.com

Annex 2 – Final Coal Mine Subcommittee Agenda

METHANE TO MARKETS PARTNERSHIP COAL SUBCOMMITTEE MEETING

1 November 2007

Beijing, China



Final Agenda

8:00 AM	Continental Breakfast
9:00 AM	Plenary Session: Report Out From Steering Committee
10:30 AM	Coffee break
11:00 AM	<i>Coal Subcommittee meeting begins</i> Welcome (Subcommittee co-chairs and vice chair)
11:10 AM	Brief introduction of all meeting participants
11:20 AM	Adoption of agenda
11:30 AM	Questions for Administrative Support Group (ASG)
11:45 AM	General updates from countries regarding activities and feedback from Expo [TO BE CONTINUED DURING WORKING LUNCH SESSION] <i>Countries expected to participate in this discussion if present:</i> <ul style="list-style-type: none">• <i>Australia</i>• <i>Argentina</i>• <i>China</i>• <i>Germany</i>• <i>India</i>• <i>Italy</i>• <i>Japan</i>• <i>Mexico</i>• <i>Nigeria</i>• <i>Poland</i>• <i>Russia</i>• <i>Ukraine</i>• <i>United Kingdom</i>• <i>United States</i>
12:00 PM – 1:30 PM	<i>Working lunch in meeting space</i>

Annex 2 – Final Coal Mine Subcommittee Agenda

12:30 PM	<i>Country updates (continued during lunch in meeting space)</i>
1:30 PM	Open discussion for Project Network members regarding outcomes from the Expo and implementing Steering Committee's recommendations
2:00 PM	Open discussion covering possible post-Expo activities, including the following: <ul style="list-style-type: none">• <i>Addressing barriers to project implementation</i><ul style="list-style-type: none">○ Updating each country's profile, specifically citing project implementation barriers○ Creating of country-specific strategies to increase CMM project development• <i>Improving communication with Project Network and coal mining industry to solicit broader input for the Partnership</i>• <i>Capitalizing on Expo contacts and lessons learned to incorporate more business and financial interests into the Partnership</i>• <i>Receiving an update from UNECE on progress evaluating CMM terminology</i>
2:30 PM	Coffee break
3:00 PM	Continuation of discussion of post-Expo activities and incorporation into Action Plan
3:45 PM	Discussion of possible dates and venues for next Subcommittee meeting
4:00 PM	Adjourn