

**METHANE TO MARKETS PARTNERSHIP  
COAL SUBCOMMITTEE MEETING**

---

5th Session of the Coal Subcommittee  
Brisbane, Queensland, Australia  
6 October 2006

**Meeting Minutes**

**Summary**

The fifth session of the Coal Mine Methane Subcommittee was held on 6 October 2006 in Brisbane, Queensland, Australia. During this meeting, delegates heard from Partner countries that have submitted project opportunity templates, received a status and planning update on the Partnership Expo, discussed format and session ideas for the sector-specific technical agenda, and reviewed activities under the existing Subcommittee Action Plan.

At the request of the Australian delegation and agreement by all attendees, this meeting was dedicated to the thirteen miners that lost their lives in the 20 September 2006, explosion at the Zasyadko coal mine in eastern Ukraine.

**Opening Remarks and Introductions**

Co-Chairs Ms. Pamela Franklin of the United States and Mr. Subrata Chaudhuri of India, along with Acting Vice Chair Mr. Liu Wenge (acting for Mr. Huang Shengchu, who was unable to attend) of China, opened the meeting at 9:00 a.m. on 6 October 2006. The meeting was attended by Partner country delegates, Project Network members, and staff from the Methane to Markets Administrative Support Group (ASG). A list of delegates and attendees is included as Annex 1 to these minutes.

Dr. Pamela Franklin welcomed everyone to Brisbane and expressed her delight to see some new faces around the table, as she looked forward to the potential for new and expanded ideas. She also indicated pleasure in the number of participants that attended the technical workshop during the two days prior to the meeting. Based on feedback she'd received, everyone found the activity to be very useful and appreciated the opportunity to share ideas and suggestions. Dr. Chaudhuri also welcomed participants and expressed gratitude to those countries that have already provided project opportunity templates. He also emphasized the upcoming Expo as the main focus for the day's meeting. Mr. Wenge with the China Coal Information Institute (CCII) stated that China is proud to host the Expo and indicated CCII has been working with the ASG to seek out facilities and begin addressing other logistical issues.

Dr. Franklin indicated that although the meeting was only one day in duration, there were many activities and topics to cover to prepare for the coming year. She explained that the meeting's primary focus was to discuss the Partnership Expo to be held in late 2007. Dr. Franklin reviewed the Subcommittee meeting's agenda (see Annex 2), which included the following discussion areas:

- 1) Presentation/Discussion of Country-Specific Project Opportunities
- 2) Partnership Expo Update/Planning Issues
- 3) Partnership Expo Coal Sector Technical Agenda
- 4) Coal Subcommittee Action Plan Update

She noted that the observer delegation from South Africa had requested an opportunity to provide an overview on its activities related to methane capture and use. She sought agenda approval from participants and hearing no objections, added this activity to the agenda and proceeded with the meeting.

Each of the attendees had an opportunity to introduce themselves and provide a little background on either their country's or company's (for Project Network members) interest in coal mine methane (CMM). Following introductions, Dr. Franklin directed participants to the first agenda topic.

### **Presentation/Discussion of Country-Specific Project Opportunity Templates**

Dr. Franklin provided background on the development of the project opportunity template, which was based on a similar UNECE form as well as Project Idea Notes and feedback from Partners. Several countries had prepared project templates in advance of this meeting. Each country was provided an opportunity to present a brief summary highlighting the key aspects of their project opportunities.

#### ***China***

Mr. Wenge reviewed two templates submitted by China, one a power generation project using ventilation air methane (VAM) from the Huainan Panyi Coal Mine, and one a power generation project from Hebi No. 6 coal mine. No decisions have been made regarding these projects and funding for the projects has not been secured. The Vocsidizer technology for oxidation of ventilation air methane developed by MEGTEC Systems will likely be used. Mr. Wenge described the Chinese locations and proximity to local municipalities (e.g., within 1.0 to 1.5 hours drive). For the second site, a prefeasibility study is necessary to obtain additional information for analysis. Mr. Wenge stated that some of the difficulties encountered in completing the template and moving the project forward include finding all of the information requested on the project template form. He wondered if the template could be simplified.

Dr. Franklin acknowledge the difficulty and complexity of the information requested on the templates. She asked if China had any other projects and/or sites that might be eligible for development. Mr. Wenge said yes, but indicated they need much more information in order to complete the templates. John Karas with Australia's Department of Industry, Tourism and Resources (DITR) asked some of the development banks and firms present if the information contained in the templates was sufficient to begin evaluating the potential for the various projects. Marc Stuart with EcoSecurities said yes, and added that he did not have the expectation that every field would be filled in. He added that partial information was fine and provided a good start for firms and countries to work together.

#### ***India***

Mr. Pradeep Kumar with India's Central Mine Planning and Design Institute (CMPDI) presented a project from India that involves open cast (surface) mines at the Singrauli coalfields in the Moher sub-basin. He explained that open cast mines represent 85 percent of the coal mines in India, versus only 15 percent underground mines. Given this, traditional CMM opportunities at underground mines are limited. He also expressed difficulty filling out the form as it is not geared to open cast mines. Mr. Kumar indicated the project is mostly conceptual and therefore, some of the information might be missing. He said if this initial data and level of information makes sense, he can prepare templates for additional conceptual projects.

Mr. Kumar continued by explaining if projects are expanded to open cast mines, the Moher Sub-Basin is very promising (see "CMM Project in Moher Sub-Basin" presentation slides). He reviewed some details of the site (e.g., location, geological features). However, much of the information required for the template was not collected when initial studies were conducted 15-20 years ago. Mr. Kumar

acknowledged the methane potential is low when compared to potential China projects. He continued by reviewing the emissions volume and further details for the project. The information contained in the template provides an objective proposal, and the timing (i.e., 5 years) could be compressed if funding and a project developer could be identified. The 2011 proposed start date could similarly be moved up and the project initiated earlier. Mr. Kumar indicated that certain assumptions could be refined based on further studies. He emphasized again the project presented is merely conceptual so it was difficult to calculate potential for error plus they lack the necessary expertise. He reviewed the anticipated steps perceived to bring this project to fruition (e.g., feasibility study, capital outlay).

Mr. Kumar asked for EcoSecurities' opinion on open cast mine methane projects. Mr. Stuart responded by providing an overview of a Colombian project. He explained that CMM projects will not be eligible for carbon credits until the coal is extracted (e.g., not as soon as the gas is drained). Future credits might be a problem given the end of the Kyoto Protocol regime in 2012. Mr. Stuart added that firms also have differing risk tolerance that colors their project evaluation.

Dr. Franklin inquired whether, given the high price tag for data collection, countries should wait. Dr. Chaudhuri responded that India needs technical expertise rather than funding. Mr. Modi added that for the mines with poor quality coal and even low volume, methane gas is still present and should be captured for use. He added that it would be beneficial to all if these projects were taken up to provide a learning experience.

Mr. Kumar reiterated the need to explore options for open cast mines. Dr. Chaudhuri echoed the need to extend Methane to Markets project opportunities to open cast mines. They both called for modifying and extending the template's application for open cast mines. Dr. Franklin thanked the Indian delegation for its presentation and held it up as a good example for how to present potential projects.

### *Nigeria*

Mr. Solomon Adesanya extended gratitude to Dr. Franklin for her service as co-chair, Japan's New Energy and Industrial Technology Development Organization (NEDO) for its sponsorship funding, and Jack Seigel with Energy Resources International, Inc. for his technical expertise in developing and completing Nigeria's project opportunity template. Mr. Adesanya began his oral presentation by providing background information (e.g., location/proximity, gas volume) on the Ogboyoga coal mine project and apologized for lack of additional information. He explained that technical assistance and funding would be necessary in order to ascertain all of the data required for the template.

Mr. Adesanya highlighted the policy issues associated with CMM capture and use in Nigeria: for this mine, there is a 20/80 percent split between public/private interests, respectively. He added that required resources do not necessarily equate to a funding split: the road is currently paved and this existing infrastructure could be viewed as the 20 percent private-sector contribution toward project development. He explained that a formal Memorandum of Understanding (MOU) might be required to proceed, and encouraged the subcommittee participants to consider policy issues as they move forward with project identification and development. He again reiterated the need for more research and additional data needs to complete the template would require more comprehensive studies. If these data could be identified, he stated this project might be ripe for development in time for the Expo next year.

Mr. Kumar asked if the mine were active. Mr. Adesanya indicated that it is active, but the coal is being extracted illegally: the government seeks to remove the squatters and replace them with legitimate project developers and investors. Mr. Modi reiterated that where there is coal, there is gas and that all projects should be evaluated on potential no matter how big or small.

## *Russia*

Mr. Giorgiy Karkashadze presented an overview of the gob methane recovery and utilization project developed by the Moscow State Mining University (MSMU) for the Kuzbass branch of the State Institution on Mine Restructuring (see “Drilling, Equipment and Operation of Degassing Wells Aimed at Gob Methane Recovery and Utilization: The First Stage” presentation for complete details). The templates submitted by Russia include information on two mines located within the Kuznetsk Coal Basin near Tomsk, Siberia: the Capitalnaya mine began operation in 1938 but was abandoned in 1998 and the Osynnikovskaya mine begun its operation in 1945 and continues today. Mr. Karkashadze provided specific details for the Capitalnaya mine, such as: number, depth and thickness of coal seams; mining method, and average coal production. He indicated liquidation coal reserves amounted to approximately 600 million tonnes with an additional 150 million tonnes of potential reserve of rich or cooking quality coal. He further explained the drainage systems applied to both mines: dry in the case of Capitalnaya and wet for Osynnikovskaya. Mr. Karkashadze reviewed data on water inflows of the perm adjournment of the Capitalnaya mine and also the annual methane emissions from both mines, emphasizing that Capitalnaya produces approximately 110 cubic meters of ventilation air methane that is not currently captured or used. He added that relative emission at the Capitalnaya mine when it was abandoned in 1998 equaled approximately 43 cubic meters per tonne of coal.

Dr. Franklin thanked the Russian delegation for its presentation and asked if participants had any questions regarding their projects. Mr. Shindo asked what type of project support might be required. Mr. Karkashadze responded that support is primarily two-fold: the need for political resolution on the issue of ownership rights for the gas, as well as financial resources. Dr. Franklin inquired if any other support might be necessary. Mr. Karkashadze indicated there is ample technical expertise and the project could proceed with funding. Mr. Modi requested clarification on the information provided in Section 8.13 of the template. Mr. Karkashadze responded in terms of the gas content, this is a truly unique project because the Capitalnaya mine was shut down using a dry method so the results provided in the template would have been realized if the mining operations had continued. Mr. Stuart asked how much capital (i.e., funding) was being sought and also if under Moscow law, would the investors be allowed to stay involved once funding was secured. Mr. Karkashadze said drilling new holes to extract the gas had been estimated at \$1 million and he added that the key point is not who were involved, but how (i.e., policy). In relation to the recent tragedies, he continued by saying it would be important to solidify a partnership and support for an international relationship, particularly for this site. He also indicated this would be a big first in Russia. Nicholas Duplessis with Biothermica Technologies Inc. asked about the status of joint implementation projects in Russia. Mr. Karkashadze said he had no information on updating or extending existing projects beyond the Kyoto sunset in 2012, but invited interested parties to work with the MSMU to gain access to the policy makers.

## *Ukraine*

Mr. Igor Antypov provided an overview on the present situation in Ukraine and reviewed the project templates submitted. He explained there are currently 120 mines operating that yield 85-87 million tonnes per year. However, this translates to 8 million cubic meters of gas, of which only 4 percent is pure methane. Mr. Antypov indicated there are a few Ukraine projects under the Kyoto Protocol, and he provided further details on a project financed by the government. He stated while it is not a large project, it is interesting given its unique characteristics (e.g., 5 million cubic meters of gas, 100 percent utilization equating to 25 metric tonnes of CO<sub>2</sub>Eq). Mr. Antypov emphasized the need for technical and financial support to bring additional Ukraine projects to fruition, although they are currently working with German and Austrian companies to expand technical expertise. He also alluded to political instability but added he hopes it will improve following the summer elections.

Mr. Modi asked for clarification on the duration period (i.e., 2008 - 2012) listed under Section 12.6 in the template. Mr. Antypov explained that is result of the Kyoto sunset date. Dr. Franklin inquired if there might be similar projects in Ukraine to explore and present as project opportunities. Mr. Antypov explained those presented were government or state-owned mines, but there are several privately-owned mines as well such as the Komsomolets Donbassa Mine operated by System Capital Management (SCM), which received \$500 million UD (\$100 million USD) for its project and also Austria's Coal Mine Gas to Energy Project using GE's Jenbacher engines at the A.F. Sasyadko Coal Mine which is expected to generate 66 megawatts. Mr. Antypov said he will prepare and submit additional templates to reflect other project opportunities in Ukraine.

Mr. Karas asked if Ukraine had or would consider other turbines engine manufacturers such as Caterpillar or Westinghouse as options, and if they had initiated talks with these companies or were waiting until the Expo to present idea to other vendors. Mr. Antypov responded they have made general technical presentations to several vendors, primarily in Germany and Austria, but that he did not feel ready to discuss specific project with vendors yet. He also asked if the subcommittee members had any recommendations on the best way to put together other project descriptions.

Dr. Franklin interjected that the subcommittee might discuss and determine the optimum way to present projects later today, particularly in anticipation of the project Expo, but she also indicated that no descriptions will be dismissed regardless of level of completion. She further hopes to move all the ones presented today forward and make sure they are in the best shape for the Expo. Mr. Justin Baguley with the Australian Greenhouse Gas Office asked what type of support Methane to Markets might be able to provide to help ensure completeness. Dr. Franklin explained while there is no large pot of money available to assist Partners, the purpose of the Partnership is to facilitate technical and financial support from vendors and developers/investors. She added that subcommittee members are encouraged to work collectively and within their countries to advance this goal. Erin Birgfeld with the ASG took the opportunity to announce forthcoming U.S. Environmental Protection Agency grants totaling \$3 million (USD) for project development across all Methane to Markets-targeted sectors. Specific details will be provided to Partners shortly.

Mr. Ken Yabe from the World Bank commented broadly on Sections 8.0 and 9.0 of the template, dealing with methane emissions and estimated greenhouse gas emissions reductions. He suggested providing more years of information or emissions data for future years, which are more important to the Bank than past years' data. Dr. Franklin agreed that completeness appeared to be an issue for most countries but that historical data could be helpful in establishing a baseline or credibility for possible future emissions reductions. Mr. Yabe questioned whether question 14.6 had been inadvertently placed in the questionnaire (asking whether the project conformed to the World Bank's social and environmental safeguard requirements). Dr. Franklin indicated that question 14.6 had been intentionally included in the questionnaire and that it would provide useful information if it could be answered, but as with any other question, it could be left blank if the respondent did not know the answer. Mr. Yabe echoed the need to expand the existing methodology (currently limited to underground mines) to evaluate emissions from open cast mines and adding that option to the templates. He indicated that the World Bank might be able to help advance that effort.

Before moving on to other issues, Dr. Franklin thanked the participants that presented project opportunities and asked if any other countries were planning to submit templates. Mr. Karas of Australia responded that Australia is engaged in communication with ComEnergy to develop and prepare write-ups for potential projects in China and India.

There was considerable discussion about the project opportunity template forms themselves, specifically their length. Mr. Baguley of Australia asked if it might be possible to develop a separate concept or

preliminary form for projects that might not have a lot of existing information rather than having to submit the entire template. Dr. Franklin explained that the U.S. EPA worked with its contractor, Raven Ridge Resources, to develop the form. Initially, they considered having two forms—one short and simple, and another longer form—but decided against it due to complexity. Hideo Shindo of Japan-NEDO said he recognizes that the template might not be sufficient if significant information is missing, but he found the supporting presentation very helpful and encouraged Partners to prepare a brief slide show as an addendum to the template. He also emphasized that location and quality of methane is very important to developers so that information should be prominently featured. He, too, echoed Mr. Yabe's comments to modify the template to include open cast mines. Following on Mr. Shindo's remarks, Mr. Adesanya asked what is the bottom line (i.e., critical information) that developers seek in order to make a project attractive. Mr. Kumar and Mr. Modi added their concerns that since existing Sections 8.0 and 9.0 do not apply to open cast mines, stating "not applicable" makes the project description look unattractive. Mr. Antypov encouraged the subcommittee to consider using a shorter form, indicating it took too long to fill out Section 8 and perhaps only 3-5 years of information might be sufficient. He also added it might be easier to understand when accompanied by short descriptions and drawing (similar to those provided in the presentations). Dr. Franklin acknowledges participants' requests to make the templates easier to fill out and agreed that open cast mines should be included. She also addressed concerns raised the need to focus on future project emissions versus historic emissions, but stated her understanding that developers are interested in historic volumes as well. Mr. Stuart asked if a one-paragraph description of the project could be provided up front that succinctly presents the number of wells, location or proximity to major cities, and the volume of gas produced or anticipated (again, similar to the presentations). He encouraged the subcommittee not to shorten the form but instead consider adding a cover page with this brief description. The Russian delegation concurred that the form should not be shortened because it provides a comprehensive overview of the project when all information is available. Mr. Karas agreed with the idea for adding a descriptive paragraph especially highlighting up-front a country's objectives (e.g., obtain technical expertise, identify appropriate technology, secure funding) might also help to frame project needs for the Expo. Mr. Shindo suggested that presentations be attached to the template and agreed with the idea for a cover sheet to provide critical project highlights. Dr. Franklin agreed with this sentiment. Ms. Birgfeld said the Partnership Administrative Support Group (ASG) is currently developing a Project Tracking Database and the forthcoming online system will have a field highlighting these critical details (e.g., brief paragraph). She passed around an illustration of a "beta screen" to show the type of information that might be included in the project tracking database. She also indicated that comprehensive project opportunity templates could be provided as downloadable files if further information is desired. Mr. Yabe asked if some fields within the template—as well as the project tracking database—could be marked as required versus optional. Dr. Franklin thanked the participants for their comments and encouraged everyone to forward any additional thoughts that would be taken into consideration.

### **Partnership Expo Update/Planning Issues**

Ms. Erin Birgfeld of the ASG began by expressing her pleasure in the extensive discussion and anticipation for the Partnership Expo. She gave a brief presentation (see "Partnership Expo Update" slides) including a brief overview of the Methane to Markets Partnership for the benefit of new participants. She announced that Agriculture is now a full-fledged subcommittee (following the Steering Committee's approval in Buenos Aires) and will hold its first meeting in November in the United Kingdom. There are more than 350 Project Network members, and Germany has joined as the 18<sup>th</sup> Partner.

A majority of Ms. Birgfeld's presentation focused on the Partnership Expo, particularly as it relates to the goals and objectives for the event (i.e., capacity building). She likened the event to matchmaking or "dating" as it will provide an opportunity for developers, financiers, and vendors to meet with Partners that have potential projects. The Expo will have a conference component comprised of sector-specific

session developed by the subcommittees. The Expo also will provide an opportunity to highlight the Partnership's accomplishments. She revealed the tentative dates and logistics (i.e., 29 October - 1 November 2007 at the China World Hotel in Beijing) and thanked Mr. Wenge for all his efforts helping to identify possible facilities and coordinate with the Chinese hosts. Ms. Birgfeld explained that an Expo Task Force has been working over several months and meeting via conference call to advance the planning (e.g., developing marketing materials and outreach strategies). She reviewed the draft skeleton agenda that was provided in attendees' packets (see Annex 3) and asked if there might be additional small-scale CMM training that might be parallel those planned by the Landfill Subcommittee on Day 1. She also asked participants to think about cross-cutting issues (such as finance) that might be featured on Day 2. Ms. Birgfeld explained it will be the responsibility of each subcommittee to identify sessions and speakers for the day-and-a-half sector-specific portion of the Expo. Lastly, she said subcommittees would meet on the last day following the Steering Committee meeting and closing plenary.

Ms. Birgfeld outlined how the Expo might be organized, stating each country would be provided complimentary booth space to highlight technologies, projects, and successes. She indicated the Coal and Landfill Subcommittees, in particular, would have dedicated corridors for project opportunities or poster sessions similar to the presentations provided earlier. Project Network members and other organizing entities would have the opportunity to pay sponsorship fees for booth space. Ms. Birgfeld said these sponsorship fees would help offset Expo costs (excluding travel/hotel) for approximately 100 attendees who otherwise might not be able to attend (e.g., site managers). The ASG reviewed the sponsorship structure for Carbon Expo events to help determine appropriate levels but encouraged the meeting participants to review the details more closely and provide feedback on the sponsorship cost levels. Ms. Birgfeld stated they expect approximately 500 total Expo attendees.

Ms. Birgfeld reviewed the charge to the Subcommittees. She indicated that the Coal Subcommittee is "ahead of the game" since the countries have already begun identifying potential projects. As next steps, she asked the Coal Subcommittee to continue its involvement in the Expo Task Force, work to identify session topics and speakers, market the Expo and sponsorship opportunities to coal sector technology vendors and project developers, and prepare additional project templates. She also reminded participants that the ASG is developing a Project Tracking Database that will help organize and feature projects for the Expo. Lastly, she announced the Steering Committee would meet in mid-December and reviewed topics that will be discussed (e.g., Partnership status and accomplishments, what more needs to be done, rules for joining the Steering Committee, and Subcommittee progress reports).

Other announcements from the ASG included the U.S. EPA Grant solicitation and a request for Partners to send information to the ASG for distribution and posting on the Methane to Markets Web site. Ms. Birgfeld explained recent changes to the ASG structure: there is now 2 full-time EPA staff supplemented by 5 ERG staff (one for each of the subcommittees and an additional person that jointly supports the Steering Committee and Partnership Expo Task Force). She then opened the discussion to questions. Mr. Stuart asked if the Partnership Expo might conflict with or overlap with the Carbon Expo events, particularly Carbon Expo Asia. Ms. Birgfeld said the ASG has been trying to coordinate the Carbon Expo organizers, but they have not made a decision regarding a 2007 event. The ASG will continue to coordinate with Carbon Expo / Carbon Expo Asia organizers. South African representatives asked how non-Partner countries might be able to participate in the Expo. Ms. Birgfeld responded she had not yet given it much consideration but at a minimum, they could sponsor a booth. In reference to the draft skeleton agenda, Mr. Wenge asked if the subcommittee meetings could be moved before the official closing. Ms. Birgfeld said she would take his suggestion back to the Task Force. Mr. Baguley asked how many sponsors were needed to offset costs for 100 attendees. Ms. Birgfeld responded that the cost scale (i.e., levels) assumed a minimum of 50 sponsors, but she hoped for 100. Mr. Shindo asked if there might be opportunities to hold more sessions. Ms. Birgfeld said that due to space constraints at the hotel, there were not but perhaps the coal sector could add training on Day 1. Mr. Karas inquired if the Expo would

include participants from the ministerial level. Ms. Birgfeld indicate the ASG is awaiting approval from the Chinese hosts and will then put that question before the Steering Committee in mid-December. Mr. Karas also asked if the Task Force had considered increasing sponsorship (e.g., 25 percent more) for non-Project Network members as an incentive to join. He also asked if there would be a registration fee for the officials that are required to attend. Ms. Birgfeld explained there would be costs associated with the Expo (e.g., \$400 USD/day for food), some of which cannot be covered by contract funds and these, too, she hoped could be offset by sponsorships. Dr. Chaudhuri asked what all was included or covered in sponsorship fees and available size/space for booths. Ms. Birgfeld responded that construction (e.g., structure, set-up) was included in the cost and while meeting space was limited, there was ample exhibit space. She did indicate that complimentary country booths would likely be smaller than the sponsored spaces, although Partners could pay for a bigger space if they chose. Dr. Franklin asked the Project Network members present if the proposed sponsorship levels were appropriate and several responded affirmatively.

### ***Brainstorming about Project Showcasing***

Dr. Franklin asked for ideas and suggestions for showcasing CMM projects at the Expo. She also asked for comments on how best to feature or present the project opportunities. She reminded attendees of the concept of a CMM “row” of projects and posters sessions introduced during Ms. Birgfeld’s presentation and requested comments. Mr. Stuart said it was a good idea, as long as the space was sized accordingly to look full and appealing to developers. He also voiced support for a minimal amount of information and instead suggested emphasis on visual appeal versus paper in accordance with standardized content (e.g., size and layout for graphics). Mr. Karas interjected that project templates should not be the primary source of information distributed from booths and expressed the need to make them “glossy” and user-friendly. He also voiced his thoughts on the country and vendor booths, and wondered if they might be organized by technologies such as drainage, drilling, or VAM so as to help people find projects that interest them most. Dr. Franklin indicated that internal ASG discussions have focused on designing multiple ways for people to hear and learn about specific projects. Ms. Birgfeld added they have discussed the need for color-coded floor maps to help direct attendees. Dr. Chaudhuri added the map should indicate what type of information is provided (e.g., project, technology). Mr. Shindo asked if the organizers envisioned “mini” commercials or advertisements for the project opportunities and inquired how the corridor concept would apply to all sectors. Dr. Franklin confirmed that projects would be showcased appropriately for developers. Ms. Birgfeld explained that the country booths would provide an opportunity to showcase technologies and projects across all sectors within that country, and the sector-specific booths would provide a second opportunity to showcase specific technologies and projects. Mr. Shindo asked if there might be a “coal headquarters” booth organized by the subcommittee and Dr. Franklin agreed to explore the idea. Mr. Duplessis emphasized the need to ensure both the country and sector-specific booths have the same information (i.e., overlap) and Dr. Franklin reiterated the need for good floor maps.

Lee Schultz with BCS Incorporated inquired about timing and whether projects discussed earlier would be held up until the Expo or if they could start now—in other words, priming the project development pump. Dr. Franklin responded that, ideally, the existing project templates as well as the forthcoming project tracking database would serve as outreach to start developing interest—and possible progress—in advance. Richard Mattus with MEGTEC suggested establishing key dates or milestones (e.g., 4-6 months prior to Expo) for project information to be submitted and compiled in a catalog. Mr. Baguley inquired as to the best way to display the information and stressed the need to tie it to specific technology to make sensible connections. Dr. Franklin indicated that, based on previous comments, information and quality standards (e.g., brief description, map of location, photos) will be developed to ensure consistency. Mr. Baguley also asked what level of information is required for prospective investors to make a commitment. Mr. Modi commented on the need to emphasize the quantity and quality of gas available indicating that



“where there is coal, there is gas.” Mr. Modi also asked about other countries with available methane capture and use opportunities and whether they could join Methane to Markets. Ms. Birgfeld explained the process for joining the Partnership (i.e., request letter, confirmed after 60 days without objection from existing Partners). Mr. Modi continued by stating that Indonesia is the only large emitter that is not currently a member and perhaps all Partners should encourage them to join in advance of the Expo.

Mr. Stuart inquired that if developing countries and countries with economies in transition are preparing project development opportunities, what might the developed countries such as the United States bring to the Expo. Dr. Franklin indicated that while the United States will not showcase projects, she anticipates it will mostly share information on its domestic programs (e.g., Coalbed Methane Outreach Program) and applied technologies. Mr. Karas concurred that Australia, too, will showcase demonstration projects and service providers. Ms. Birgfeld added that she expects the United States will promote technology transfer and expertise that could be applied to other Partners’ projects.

### **Partnership Expo Coal Sector Technical Agenda**

Dr. Franklin turned the discussion toward the sector-specific portion of the Expo, asking for ideas and suggestions regarding format as well as potential session topics and speakers. South African representatives indicated regulatory issues, especially ownership of the gas, would be of interest to them. Dr. Franklin asked if 30 minutes was an appropriate timeframe for each presentation. Mr. Stuart recommended shorter presentations with better moderation to encourage engagement among panelists and the audience. Mr. Baguley agreed and stressed the need to avoid having the same people give presentations. Dr. Franklin referred to a past workshop where panelists provided very brief presentations (e.g., 2-3 minutes), and then the moderator asked specific leading questions to further discussion on specific issues before opening it up to questions from the audience. Mr. Duplessis agreed that that format was effective. Mr. Mattus added his endorsement for panel discussions. Mr. Schultz emphasized that the panels would need to be well-orchestrated to avoid people merely asking what is needed for projects to move forward. Dr. Franklin asked if the format should be theme-driven and Mr. Schultz responded themes could be too generalized and the format should be needs-based. Mr. Modi recommended featuring case studies to demonstrate various technologies, explain how financing was secured, and relay practical, hands-on experience (versus conceptual ideas). The Russian delegation provided agreement with the process suggested so far, and added that additional meeting time might be set aside for developers to discuss specific project details with individual countries. Mr. Karas agreed and recommended the information at the booths could indicate when sessions on specific project would take place. He also stressed the need to link projects to specific technologies. Dr. Franklin explained that U.S. EPA’s Landfill Methane Outreach Program does something similar during its Project Expo—overview information (e.g., template) is available in a kiosk and short presentations are given throughout the associated conference.

Dr. Franklin asked if there were additional session topics or ideas besides regulatory/ownership issues, case studies, or lessons learned. Ms. Birgfeld asked if any of these might be cross-cutting issues for the Partnership as a whole but Mr. Baguley objected, stating several countries handle resource- or energy-related issues differently. Russia agreed and interjected that it would also support a CMM-exclusive financing session. Mr. Baguley inquired if the World Bank would be willing to share its experience with CMM capture and use projects and Mr. Stuart added that other financiers would benefit from that insight as well.

Mr. Karas asked if there would be a feedback mechanism to gauge investor interest to explain why some projects were not selected for development, either one-on-one with prospective developers or as a group. He envisioned if countries had the opportunity to identify missing information while still in Beijing, they might be able to obtain the data or improve their presentation. Ms. Kirsten Jaglo with the U.S. Department of State indicated a lot of the decision-making comes down to how financiers and project

developers rank risk, which is unlikely to change with additional information. Mr. Stuart further explained the described vetting process was not sophisticated enough (e.g., provide assurances for proprietary or confidential business information) and entities would most likely not share insight in a public arena. Ms. Birgfeld described the Knowledge Mart appointments used at Carbon Expo, which provides a one-on-one opportunity to meet with financiers (for 15 minute blocks of time) and learn why certain project elements might not be desirable (e.g., risky). Mr. Baguley asked if the development banks are expected to have booths at which this information might be disclosed. Ms. Birgfeld said yes, but the exhibit area tends to be busy and the Knowledge Mart is more private (people must sign up in advance).

Dr. Franklin asked about the preferred format for soliciting speakers— a call for papers or hand selections. Mr. Modi suggested a hybrid approach, since subcommittee members are already aware of several speakers that might be good but a call for papers or abstracts might reveal some additional options. Mr. Baguley commented that in one case, the speakers drive the agenda (i.e., call for papers) versus attracting speakers for a specialized agenda (requires previous knowledge of expertise). Mr. Stuart interjected that a call for papers is typically perceived as an academic exercise, which might not be desired. Dr. Franklin asked for volunteers, in addition to her, to serve on a task force to address this issue and move the sector-specific agenda forward. Ms. Samantha Scott and Ms. Vera Krisko-Jowe from Australia and Mr. Shindo agreed to serve.

### **South Africa Presentation**

Before turning attention to subcommittee action plan update, Dr. Franklin welcomed the South African colleagues and invited them to share information on their Methane to Markets-related activities. Dr. Tony Surridge provided an overview of the energy flows (i.e., supply and demand) within South Africa and explained that while a majority of their natural gas is imported from Mozambique, coal serves as the primary in-country fuel for electricity generation. He indicated that coal will continue to dominate the national energy market for the next few decades, but there is growing need to diversify into new or renewable energies. Dr. Surridge reviewed locations of CBM reserves in the northeast (particularly flaring operations near Sasol) and extending into Botswana, where work is currently being done to determine its true potential. He also added there is a well-developed pipeline infrastructure around Johannesburg that could support diversification and gas transport. Dr. Surridge stated that CBM is a regional resource that impacts many jurisdictions. He also provided an overview of the current status for capture and use activities for natural and landfill gas. Dr. Surridge also indicated that South Africa has embarked on CoalTech2020, which is an effort similar to Australia's Coal21 initiative.

Following the presentation, Mr. Kumar asked whether South Africa were undertaking coal gasification. Dr. Surridge stated there is a pilot study to start a power station next year. Output is anticipated at 20 million joules/kilogram using radiator versus convector heat. Dr. Franklin inquired whether South Africa has active CMM drainage. Dr. Surridge responded no, that the coal is not very gassy where most of the power stations (and subsequent extraction) takes place. He did indicate, however, that the northern seams are gassier and drainage is being considered.

### **Coal Subcommittee Action Plan Update**

#### ***Technologies Database***

Mr. Karas provided an update on the technologies database developed by Australia and circulated at the May 2006 meeting in Tuscaloosa. He indicated that feedback has been received from Japan (Mr. Shindo circulated an addendum that he provided) and the United States, as well as from the Project Network. Mr. Karas is currently working to incorporate those comments and then the ASG will re-post the technologies

database to the Methane to Markets Web site by the end of October for final review and comment. Barring no further change, the final database will be available for distribution by early November.

### ***International Project Database***

Dr. Franklin provided a status update on the International CMM Recovery and Utilization Project Database. She explained that U.S. EPA's Coalbed Methane Outreach Program (CMOP) had undertaken the task to assemble a comprehensive database on CMM project from various sources at the request of the Coal Subcommittee. Once completed, the database will serve as a source of general information and will contain information on general and technical details such as physical characteristics, methane drainage, and contacts. She also reviewed the database features (i.e., transparent, controlled data entry, public access), and revealed the data could be sorted by various fields (e.g., country, region, mine name, status) and include information on closed and active mines. Her presentation (see "The International Coal Mine Methane Recovery and Utilization Database" slides) included a beta image of the proposed home page and Dr. Franklin stated that flags would indicate countries with existing projects, rather than the Methane to Markets Partners. There also would be a query function (i.e., "?") that connects to a glossary of terms for download or reference. She provided an overview of how project information might appear on screen and stated that red or bold font will be used to indicate required fields. She anticipates the database will be available for public view on the methane to Markets Web site by the end of 2006. She also discussed future enhancement envisioned for the database, including password access, a more robust print and/or search function, and the ability to click on the flag icon from the home page to obtain that country's information. Mr. Shindo inquired about the quality assurance/quality control mechanisms that might be in place. Dr. Franklin said the U.S.EPA went directly to each country to check and on the accuracy of information obtained but insisted the information is only as good as the response (i.e., in some case, no confirmation was received). Dr. Chaudhuri suggested adding a "last updated" date stamp field and Dr. Franklin said she would check with her colleagues to determine if that might be possible.

### ***Uniform Technology Standards Analysis***

Dr. Franklin reviewed the topic of uniform standardization that was raised at the 2005 Geneva subcommittee meeting. Mr. Clark Talkington of the UNECE (who was unable to attend the Brisbane meeting) provided a memorandum (see Annex 4) that outlines recommendation based on a UNECE survey. Mr. Talkington's memo states that the UNECE survey clearly indicated agreement on the need for uniform technology standards, but also revealed disagreement on the definitions. The UNECE will continue to pursue this topic and report back at a future meeting.

### ***Feedback on Flaring Memo***

Dr. Franklin reminded meeting attendees about the flaring memo developed by Lee Schultz and Karl Schultz that was distributed at the Tuscaloosa meeting. In essence, the memo discusses when it might be appropriate to flare methane for carbon credits. While the memo does not specifically endorse flaring as the final end use, it does lay out a conceptual framework and defend flaring as an interim step. Lee Schultz states he has received minimal comments so far and asked participants to share any additional views. Mr. Baguley said he felt the memo was concise and well-written, and provided added clarification for incentive to flare rather than vent gas to the atmosphere—particularly at demonstration projects prior to ultimate capture and use. Mr. Schultz indicated it was their intent to show a hierarchy of phases with flaring being just one of them. Mr. Stuart requested the opportunity to circulate the memo internally at EcoSecurities and asked if Mr. Schultz had considered sharing with the International Emissions Trading Association (IETA). Mr. Karas raised the point that the purpose of the Methane to Markets Partnership is to market methane capture and use opportunities and flaring wastes a valuable energy source. Mr. Schultz responded that flaring was merely suggested as an interim option—and was definitely better than venting—during project development. Mr. Stuart concurred and added that as the natural progression

toward building better capture and use markets continues under Methane to Markets, there exist the need to stop venting at the very least. Dr. Franklin thanked Mr. Schultz for his effort and encouraged Mr. Stuart to vet the paper through additional channels, but indicated her discomfort with endorsing the memo outright—especially from the U.S. government perspective. P.R. Mandel, an adviser to the India Ministry of Coal, indicated that India has been flaring much of its methane, but hopes to undertake more VAM applications. Mr. Mattus and Mr. Kumar both added comments on the need to demonstrate long-term availability of gas for flaring technologies to be efficient. Dr. Franklin said she would be happy to post the flaring memo (with modifications based on today's input) as an issue paper only and without endorsement from the Coal Subcommittee.

### ***Global Overview Status***

Dr. Franklin provided a status updated on the global overview of world-wide CMM activities, which is nearing finalization. Thirty-two coal-producing countries have been profiled and several summary tables have been developed and will be posted on the Methane to Markets website.

### ***Regulatory Overview profiles status***

Dr. Franklin provided an update on the status of the regulatory overview profiles that are intended to be created for each Methane to Market Partner country. The results from country surveys and expert reviews have been assembled as two regulatory overview papers: one for the United States and one for other countries. Dr. Franklin indicated that there is still a great deal of information missing for the profiles for many countries. These draft regulatory overviews will be posted to the methane to Markets Web site for review and comment. The ASG will send an e-mail once available online and provide a deadline for submitting comments.

### ***Next Subcommittee Meeting***

Dr. Franklin encouraged participants to think ahead to next subcommittee meeting and potential dates. She indicated that UNECE had offered to host the subcommittee at its facility to coincide with meetings of coal experts scheduled on 13-14 March 2007. Dr. Franklin asked attendees which might be a better date: Monday, 12 March, or Thursday, 15 March 2007. She noted that UNECE's translation and interpretation services would only be available on the 12th. Mr. Stuart interjected that Point Carbon's Carbon Market Insights 2007 meeting will be held on 13-15 March in Copenhagen, Denmark, so the 12<sup>th</sup> might be a better date if participants would like to attend the Point Carbon event. Dr. Franklin thanked him for this insight and reminded subcommittee members that a Monday meeting would require weekend travel. Based on no objections being raised, she proposed that the next meeting be held on Monday, 12 March 2007. Dr. Franklin will follow up with UNECE to confirm the availability of this date and will send an e-mail ballot to the Subcommittee delegates to select the final date.

Ms. Birgfeld reminded the co- and vice-chairs that the Subcommittees will be required to provide a status report at the upcoming Steering Committee. Dr. Franklin will talk with the other chairs to determine next steps for developing that report.

### ***Upcoming Coal-Related Meetings***

Dr. Franklin announced there will be a technical workshop sponsored by GE Jenbacher in cooperation with UNECE to address utilization of low quality methane on 6-7 June 2007, in Kitsbuehl, Austria. The ASG will see that this venue is added to the Methane to Markets Web site.

Mr. Wenge mentioned the 2006 International Workshop on Coalbed Methane/Coal Mine Methane to be held in Beijing, China on 17-18 October 2006 (information on this event is currently provided on the Methane to Markets Web site).

### **Conclusions and Next Steps**

Dr. Franklin reviewed the key discussion points and outlined the following next steps for the Coal Subcommittee:

- # Revise the project opportunity template to incorporate open cast mines and indicate required (versus optional) fields of information.
- # Countries will continue to evaluate project opportunities and submit templates.
- # The Task Force established to develop the coal sector-specific technical agenda for the Partnership Expo will convene a conference call to kick-off its activities.
- # Once finalized, the Methane to Markets Project Tracking Database and separate international CMM database will be posted to the Web site for review and comment by subcommittee members.

Dr. Franklin thanked everyone for their participation and extended her wishes for safe travel. Mr. Shindo expressed his appreciation to Dr. Franklin for leading the meeting.

The meeting was adjourned at 4:30 p.m.



## Methane to Markets Partnership Coal Subcommittee Meeting

Marriott Brisbane  
Brisbane, Australia  
6 October 2006

### Delegates

#### AUSTRALIA

**John Karas**

Manager  
Department of Industry, Tourism and Resources  
GPO Box 9839  
Canberra City, ACT 2601  
Australia  
+61 2 6213 7815  
Fax: +61 2 6213 7654  
Email: john.karas@industry.gov.au

**Samantha Scott**

Assistant Manager  
Department of Industry, Tourism & Resources  
Level 4, 51 Allara Street  
Canberra, ACT 2612  
Australia  
+61262137888  
Fax: +61262137654  
Email: samantha.scott@industry.gov.au

#### CHINA, PEOPLE'S REPUBLIC OF

**\*Liu Wenge** (*Vice Chair*)

Acting Director  
China Coal Information Institute  
35 Shaoyaoju Road, Chaoyang District  
Beijing 100029  
P.R.China  
+86 10 84657806  
Fax: +86 10 84657806  
Email: liuwenge@coalinfo.net.cn

#### INDIA

**Subrata Chaudhuri** (*Co-Chair*)

Chairman - Cum Managing Director  
Central Mine Planning and Design Institute, Ltd.  
Gondwana Place  
Kanke Road  
Ranchi, Jharkhand 8334008  
India  
+91 651-2230001  
+91 651-2230002  
Fax: +91 651-2231447  
Fax: +91 651-2232249  
Email: cmd@cmpdi.co.in

**P.R.Mandal**

Adviser (Projects)  
Ministry of Coal  
Room No. 309-A  
Shastri Bhawan  
Dr. Rajendra Prasad Road  
New Delhi 110 001  
India  
+91 11 23386347  
Fax: +91 11 23387738  
Email: mandal\_pr@rediffmail.com

## INDIA (CON'T)

### **Pradeep Kumar Modi**

General Manager (Project Engineering)  
NTPC Limited  
Engineering Office Complex  
Sector 24  
Noida, Uttarpradesh 201301  
India  
+ 91-120-2410218  
Fax: + 91-120-2410361  
Email: pkmodi1@yahoo.co.in

## JAPAN

### **\*Hideo Shindo**

Chief Representative of Washington DC Office  
New Energy and Industrial Technology Development  
Organization  
2000 L Street, NW – Suite 605  
Washington, DC 20036  
USA  
+1 202 822 9298  
Fax: +1 202 822 9289  
Email: shindo@nedodc.org

## NIGERIA

### **Solomon Adesanya**

Federal Ministry of Environment  
14, Aguiyi Ironsi Street  
Maitama  
Abuja, Federal Capital Territory  
Nigeria  
+234 9 413 8949  
Fax: +234 9 413 8949  
Email: muyiwaad@yahoo.com

## RUSSIAN FEDERATION

### **\*Karkashadze Giorgiy**

Doctor  
Moscow State Mining University  
Leninsky Prospect, dom 6  
Moscow 119991  
Russia  
+7 095 2369454  
Fax: +7 095 2376488  
Email: karkash@msmu.ru

### **\*Slastunov Sergey**

Pro-Rector  
Moscow State Mining University  
Leninsky Prospect, dom 6  
Moscow 119991  
Russia  
+7 095 2369481  
Fax: +7095 2376488  
Email: karkash@msmu.ru

## UKRAINE

**Igor Antypov**

Donetsk State University of Management  
Postysheva st. 105-33  
Donetsk 83000  
Ukraine  
+380 62 333 79 14  
Fax: +380 62 381 45 14  
Email: [iantypov@ukr.net](mailto:iantypov@ukr.net)

## UNITED STATES

**Pamela Franklin** *(Co-Chair)*

Co-Chair Methane to Markets Coal Subcommittee  
Team Leader Coalbed Methane Outreach Program  
Climate Change Division  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue NW (6202J)  
Washington, DC 20460  
United States  
+1 202 343 9476  
Email: [franklin.pamela@epa.gov](mailto:franklin.pamela@epa.gov)



# Additional Attendees

## AUSTRALIA

### **Justin Baguley**

Australian Greenhouse Office  
GPO Box 787  
Canberra, ACT 2601  
Australia  
+61 02 6274 1838  
Fax: +61 02 6274 1439  
Email: [justin.baguley@deh.gov.au](mailto:justin.baguley@deh.gov.au)

### **\*Warren Goon**

Regional Sales Manager  
Caterpillar  
1 Caterpillar Drive  
Tullamarine, Victoria 3043  
Australia  
+61 3 9953 9519  
Fax: +61 3 9338 9021  
Email: [wgoon@cat.com](mailto:wgoon@cat.com)

### **Vera Krisko-Jowe**

Assistant Manager  
Department of Industry Tourism and Resources  
GPO Box 9839  
Canberra City, ACT 2601  
Australia  
+61 2 6213 1500  
Fax: +61 2 6213 7654  
Email: [vera.krisko-jowe@industry.gov.au](mailto:vera.krisko-jowe@industry.gov.au)

## CANADA

### **\*Nicolas Duplessis**

Director of Development  
Biothermica Technologies Inc.  
426 Sherbrooke Est  
Montréal H2L 1J6  
Canada  
+1 514 488 3881  
Fax: +1 514 488 3125  
Email: [nicolas.duplessis@biothermica.com](mailto:nicolas.duplessis@biothermica.com)

## GERMANY

### **Ralph Schlueter**

Dipl.-Geol.  
DMT, Exploration & Geosurvey  
Am Technologiepark 1  
Essen 45307  
Germany  
+49 201 172 1952  
Fax: +49 201 172 1971  
Email: [ralph.schlueter@dmtd.de](mailto:ralph.schlueter@dmtd.de)

## INDIA

### **Pradeep Kumar**

Central Mine Planning and Design Institute  
Gondwana Place, Kanke Road,  
Ranchi, Jharkhand 834008  
India  
+91 0651 2230011  
Fax: +910651 2231447  
Email: [gmcmbm@cmpdi.co.in](mailto:gmcmbm@cmpdi.co.in)

**\*Project Network Member**

## SOUTH AFRICA

### **Robin Hounsome**

CSIR  
PO Box 91230  
Auckland Park 2006  
South Africa  
+27 31 2422355  
Email: rhounsom@csir.co.za

### **Sizwe Excellent Madondo**

Central Energy Fund (CEF) (Pty) Ltd  
P.O. Box 786141, Sandton  
Johannesburg, Gauteng 2146  
South Africa  
+27 11280 0341  
Fax: +27 11 280 0351  
Email: sizwem@cef.org.za

### **Rose Thembi Ntlou**

Dept Minerals and Energy  
Private Bag X59  
Pretoria 0001  
South Africa  
+27/12/317 8567  
Fax: +27/12/320 1982  
Email: rose.ntlou@dme.gov.za

### **Anthony David Surridge**

Dept Minerals and Energy  
Private Bag X59  
Pretoria 0001  
South Africa  
+27/12/317 8204  
Fax: +27/12/320 1982  
Email: tony.surridge@dme.gov.za

## SWEDEN

### **\*Richard Mattus**

Business Manager  
MEGTEC  
Theres Svenssons Gata 10  
Gothenburg SE-417 55  
Sweden  
+46 705 22 66 19  
Fax: +46 31 22 83 19  
Email: rmattus@megtec.se

## UNITED STATES

### **Erin Birgfeld**

Head, Administrative Support Group  
Methane to Markets Partnership  
c/o U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue (6207J)  
Washington, DC 20460  
USA  
+1 202 343 9079  
Fax: +1 202 343 2202  
Email: birgfeld.erin@epa.gov

### **Renxian Hong**

Excel Engineering, Inc.  
5475 Peoria St., Bldg 2, Unit H  
Denver, CO 80239  
USA  
+1 303 574-0353  
Fax: +1 303 574-0360  
E-mail: excelengus@aol.com

### **Kirsten Jaglo**

Science and Technology Officer  
U.S. Department of State  
2201 C Street NW – Room 2480  
Washington, DC 20520  
USA  
+1 202 736 7092  
Fax: +1 202 647 0191  
Email: jaglokr@state.gov

### **\*Brooke Robel**

Senior Environmental Analyst  
Eastern Research Group, Inc.  
2200 Wilson Boulevard – Suite 400  
Arlington, Virginia 22201  
USA  
+1 703 841 0533  
Fax: +1 703 841 1440  
Email: brooke.robelt@erg.com

**\*Natalie Ross**

Communication Analyst II  
BCS Incorporated  
5550 Sterrett Place – Suite 306  
Columbia, MD 21044  
USA  
+1 410 997 7778  
Fax: +1 410 997 7669  
Email: [nross@bcs-hq.com](mailto:nross@bcs-hq.com)

**\*Lee Schultz**

Environmental Programs Manager  
BCS Incorporated  
5550 Sterrett Place – Suite 306  
Columbia, MD 21044  
USA  
+1 410 997 7778  
Fax: +1 410 997 7669  
Email: [lschultz@bcs-hq.com](mailto:lschultz@bcs-hq.com)

**\*Jack Siegel**

President, Technology and Markets Group  
Energy Resources International, Inc  
1015 18th Street, NW, Suite 650  
Washington, DC 20036  
USA  
+1 202 785 8833  
Fax: 202 785 8834  
Email: [siegel@energyresources.com](mailto:siegel@energyresources.com)

**\*Marc Stuart**

Director  
EcoSecurities, Ltd.  
The Harvard Square Building  
Second Floor  
206 West Bonita Avenue  
Claremont, California 91711  
USA  
+1 909 621-1358  
Fax: +1 909 621-7438  
E-mail: [marc@ecosecurities.com](mailto:marc@ecosecurities.com)

**\*Kentaro Yabe**

Senior Environmental Specialist, Carbon Finance  
Unit  
The World Bank  
1818 H Street, NW  
Washington, DC 20433  
USA  
+1 202 473 2928  
Fax: +1 202 522 7432  
Email: [kyabe1@worldbank.org](mailto:kyabe1@worldbank.org)

**David Zhou**

Executive Manager  
Excel Engineering, Inc.  
5475 Peoria St., Bldg 2, Unit H  
Denver, Colorado 80239  
USA  
+1 303 574-0353  
Fax: +1 303 574-0360  
E-mail: [excelengus@aol.com](mailto:excelengus@aol.com)



**Methane to Markets Coal Subcommittee Meeting  
Friday 6 October 2006  
Brisbane, Australia**

**FINAL AGENDA**

- |                         |   |
|-------------------------|---|
| <b>8:30 – 9:00 AM</b>   | Registration  |
| <b>9:00 – 9:15 AM</b>   | Welcome and introductions (Co-chairs / Vice Chair), review of Steering Committee charge to subcommittees (Pamela Franklin, US EPA)  |
| <b>9:15 – 9:20 AM</b>   | Adoption of the Agenda  |
| <b>9:20 – 10:30 AM</b>  | Presentation / Discussion of Country-Specific Project Opportunities ( <i>countries expected to participate: China, India, Nigeria, Russia, Ukraine</i> )<br><br>Brief status report from each country (10 minutes per country): <ul style="list-style-type: none"><li>• Number of projects identified / number of templates prepared</li><li>• Highlight of project types / location</li><li>• Questions / issues with completing project template form</li><li>• Identify assistance needed to complete / vet / review</li><li>• Identify next steps</li></ul> |
| <b>10:30 – 10:45 AM</b> | Break   |
| <b>10:45 – 11:30 AM</b> | Presentation / Discussion of Country-Specific Project Opportunities ( <i>continued</i> )  |
| <b>11:30 – 11:55 AM</b> | Partnership Expo Update / Planning Issues (ASG) <ul style="list-style-type: none"><li>• Overview</li><li>• Event dates / location</li></ul>   |
| <b>12:00 NOON</b>       | Lunch   |
| <b>1:30 – 2:30 PM</b>   | Partnership Expo Update / Planning Issues ( <i>continued</i> ) <ul style="list-style-type: none"><li>• Status of project database</li><li>• Brainstorming about project showcasing at Expo</li></ul>  |
| <b>2:30 – 2:45 PM</b>   | Break   |
| <b>2:45 – 3:45 PM</b>   | Partnership Expo Coal Sector Technical Agenda (Co-Chairs) <ul style="list-style-type: none"><li>• Form a task force to move forward</li><li>• Brainstorm about topics, potential speakers, agenda for forum</li></ul>   |

- over -

**3:45 – 4:30 PM**

Coal Subcommittee Action Plan update

- Update / feedback on technologies database (John Karas, Australia)
- Update on international project database (Pamela Franklin, US EPA)
- Update on uniform technology standards analysis (UNECE paper)
- Feedback on flaring memo written (Lee Schultz, BCS Incorporated)
- Workshop in Austria, June 2007 (Pamela Franklin, US EPA)
- Global overview status (Pamela Franklin, US EPA)
- Suggestions for next meeting location (Pamela Franklin, US EPA)
  - Geneva, March 2007

**4:30 – 5:00 PM**

Conclusions / next steps

**5:00 PM**

Adjourn

**Methane to Markets Partnership Expo – Draft Skeleton Agenda**

Draft for Review Only – Updated Oct 5, 2006

Day 1

- Morning - Training Workshops / Expo Booth Set Up
- Afternoon - Opening Plenary / High Level Policy Talks / Country Statements and Announcements
- Evening - Opening Ceremony of Exhibit Hall by High Level Policy makers  
Opportunity for PN members to make press announcements

Day 2

- Morning - Plenary Session on cross cutting issues (e.g., finance) – are there others?  
  
Lunch in Exhibit Hall
- Afternoon - 4 Sector-specific Policy and Technical Tracks to run concurrently  
Steering Committee Meeting

Day 3

- Morning - Sector-specific Policy and Technical Tracks (*continued*)  
Steering Committee Meeting  
  
Lunch in Exhibit Hall
- Afternoon - Sector-specific Policy and Technical Tracks (*continued*)

Day 4

- 9:00-10:30 Closing Plenary  
Report out from Sector Tracks and Steering Committee on key decisions and Charge to Subcommittee
- 11:00 – 3:00 Subcommittee meetings

Details on Expo / Booth Set Up

- Each Partner country will be given a booth free of charge. The booth can be used to promote the activities that the country is doing under M2M... e.g. promoting specific project opportunities, technologies, successes, case studies etc...
- Project Network members and the general public can purchase booth space as a part of the sponsorship package.
- A very large booth or a long corridor will be allotted for posters of coal mine project opportunities -- Site managers or others who can discuss the specifics of a project are encouraged to attend and interact with technology providers and/or financiers etc...

- High quality project opportunities can be highlighted between sessions of these meetings – a quick powerpoint snapshot of the project, key parameters and the person to contact to discuss further.

#### Other Issues

Sponsorship fees will be calibrated so that the proceeds can cover 100 attendees free of charge.

Subcommittees will have some input on those that are given free attendance – focus on site managers and developing country representation.

#### Suggested Sponsorship Packages Are:

Bronze – \$1,625 USD (6 sqm booth and additional services, sponsorship)

Silver – \$2,700 USD (9 sqm booth and additional services, sponsorship)

Gold – \$ 4,300 USD (15 sqm booth and additional services, sponsorship)

Platinum – \$ 7,000 USD (25 sqm booth and additional services, sponsorship)

**UPDATE ON UNIFORMITY OF STANDARDS  
for the  
Methane to Markets Coal Technical Subcommittee  
6 October 2006  
Brisbane, Queensland  
Australia**

Clark Talkington, United Nations Economic Commission for Europe (UNECE)

To Members of the Subcommittee and Project Network Members:

I will be unable to attend the Subcommittee meeting and request that this update on Item #5 of the Subcommittee's Action Plan, Uniformity of Technical Standards and Terminology, be delivered to the participants.

**RECOMMENDATIONS**

Based on the results of the UNECE survey of members of its Ad Hoc Group of Experts on CMM and the M2M coal Project Network (see more information below), there is a clear preference for uniformity standards among experts around the globe and in different sectors of the industry. However, over 20% of respondents disagreed with the proposed definitions. As a result, the UNECE will make this a formal component of its program of work for the Ad Hoc Group of Experts on CMM in 2007, and will convene a small informal working group prior at the March 2007 meeting of the Group of Experts in Geneva to address the matter in greater depth. The working group will report to the Group of Experts and the Methane to Markets Coal Subcommittee.

While there is general agreement on the benefit of uniform terminology, I expect that reaching agreement will be challenging due to the fact that some countries have formalized specific terminology in legal and regulatory frameworks while in other countries the terms are used "de facto" and it could be difficult to change habits. Still, given the response we received, I believe an attempt is a worthwhile endeavor. At a minimum, we could create voluntary terms/definitions and create a matrix mapping the various terms used worldwide against the voluntary terms/definitions and also against each other.

A more significant challenge will be developing uniform technical standards. The UNECE questionnaire did not ask about the need or benefit of uniform technical standards. I believe this should be discussed in greater detail at the Subcommittee meeting, and the Subcommittee should make a realistic assessment of whether this is achievable. My personal view is that I believe this will be very difficult and is probably not a viable pursuit. While the benefits of single technical standards would create global market efficiencies, likely enhance technology deployment and transfer, and result in greater investment, the time, resources, and political difficulties are probably too great in the near term. On upstream technical standards, are countries truly ready to modify their existing regulations that have been developed over considerable length of time and suited for their specific needs? Downstream technical standards may be more amendable to this activity but again, every country and, even regional jurisdictions within countries, have specific standards that will be difficult to change.



## SUMMARY OF EFFORT THUS FAR

As part of its work program under the UNECE's Ad Hoc Group of Experts on Coal Mine Methane, the UNECE delivered a questionnaire to members of the Group of Experts and the Methane to Markets Project Network in December 2005 and March 2005. We received 83 responses. Four questions focused on consistency of terminology and definitions for methane from coal seams. We did not seek responses on the need for uniformity of technical standards.

The questions were:

- Necessity of universal (ie., global) definitions for methane in coal seams (rank 1 to 5 with 1-Very Important and 5-Not Important)
- Do you think the proposed definitions (below) are accurate and acceptable? Yes or No
  - In your country, are terms such as "Coal Associated Gas," "Coalbed Methane," "Coal Mine Methane," "Coal Seam Gas," used in legislation or regulations thus requiring their use as a matter of law or are they adopted terms commonly used by industry and government officials?
- Other comments.

We received the following responses:

- Necessity of universal (ie., global) definitions for methane in coal seams (rank 1 to 5 with 1-Very Important and 5-Not Important)
  - o Average Score
    - All Respondents: 1.85
    - Developed Economies: 1.88
    - Transition Economies: 1.93
    - Developing Economies: 1.41
    - Research/NGOS: 2.07
    - Government: 1.81
    - Consultancy: 2.00
    - Coal Company: 1.78
    - Project Developer/Investor: 1.70
- Do you think the proposed definitions are accurate and acceptable? Yes or No
  - o All Respondents
    - Yes: 56
    - No: 19
    - No Response: 8
  - o Developed Economies:
    - Yes: 33
    - No: 9
    - No Response: 1
  - o Transition Economies:
    - Yes: 16
    - No: 9
    - No Response: 7
  - o Developing Economies:
    - Yes: 7
    - No: 1
    - No Response: 0
- In your country, are terms such as "Coal Associated Gas," "Coalbed Methane," "Coal Mine Methane," "Coal Seam Gas," used in legislation or regulations thus requiring their use as a matter of law or are they adopted terms commonly used by industry and government officials?

This question was too confusing and we received differing responses within countries.