

Global Methane Initiative 2nd Steering Committee Meeting 12-14 March 2013 Vancouver, Canada

FINAL MINUTES

Summary of Key Discussion Points and Conclusions

The Second Session of the Global Methane Initiative (GMI) Steering Committee met in Vancouver, British Columbia, Canada on 12-14 March 2013. Twelve GMI Partners were represented by official Steering Committee delegates at the meeting, including: Argentina, Australia, Canada, China, European Commission, Finland, Germany, India, Japan, Mexico, Poland, and the United States. A representative from Mongolia also participated as an observer.

During its deliberations, the Steering Committee heard country statements and updates on Subcommittee progress, and discussed:

- Status of GMI Country Action Plans
- GMI's Relationship with the Climate and Clean Air Coalition (CCAC)
- Financing Methane Projects and Funding Methane Activities
- Mechanisms to Increase Sector Subcommittee Engagement
- Status of GMI Outreach and Communications

The following sections provide more details of the meeting discussions.

Introduction

Ms. Janet McCabe, Deputy Assistant administrator of the U.S. Environmental Protection Agency (U.S. EPA) Office of Air and Radiation (OAR), opened the meeting at 2:45 PM. She explained Gina McCarthy, OAR Assistant Administrator, was unable to attend Methane Expo 2013 due to domestic issues but had sent her wishes for a productive meeting. Ms. McCabe indicated the agenda (see <u>Appendix A</u>) was available in the participants' folders and asked if there were any suggestion or changes. Hearing none, the agenda was adopted and she continued by saying it was nice to come together during this period to share experiences and success stories. She added the Expo comprised an important program regarding the issues and challenges facing many Partners and hoped the speakers would provide solutions. She thanked Canada for hosting Methane Expo 2013—and in particular, Environment Canada for supporting Expo organization—noting the event thus far has been well run.

Ms. McCabe opened the floor to participant introductions (see <u>Appendix B</u> for Attendee List). Following introductions, she outlined Expo components for the coming days, including project- and sector-specific technical and policy sessions as well as an exhibit hall featuring technology and services providers and project opportunities and success story posters.

Meeting Goals

Ms. McCabe turned participant attention to the <u>"Meeting Goals" slide</u> containing specific activities and reviewed the topic discussions, which included:

- Completion of <u>GMI Country Action Plans</u>.
- <u>GMI's relationship with CCAC</u>, including opportunities for cooperation and support.
- <u>Financing issues and leveraged funding</u>.
- <u>Future meetings</u>, including Steering Committee and subcommittees.

- <u>Subcommittee progress reports</u> (i.e., <u>Agriculture</u>, <u>Coal Mines</u>, <u>Municipal Solid Waste [MSW]</u>, <u>Oil and</u> <u>Gas</u>, and <u>Wastewater</u>).
- Possibility to task the ASG, Partners, and subcommittees with follow-up over the coming year, particularly as it relates to <u>outreach and communications</u>.

Country Updates

Ms. McCabe encouraged participants to provide a brief update regarding the current methane situation within their countries. The following Partners provided updates: <u>Argentina</u>, <u>Australia</u>, <u>Canada</u>, <u>China</u>, <u>European</u> <u>Commission</u>, <u>Finland</u>, <u>Germany</u>, <u>India</u>, <u>Japan</u>, <u>Mexico</u>, <u>Mongolia</u>, <u>Poland</u>, and the <u>United States</u>.

Argentina

Mr. Alvaro Zopatti with the Secretariat of Environment and Sustainable Development opened <u>Argentina's</u> <u>country update</u> by indicating methane comprises 35 percent of Argentina's greenhouse gas (GHG) emissions, primarily from the agriculture and municipal solid waste (MSW) sectors. He also noted there has been intensification within the agriculture sector and they are currently compiling new data. He pointed to several success stories that have emerged from university and other research projects as well as other advance research focused less on technology and industry and more on pilot project implementation.

Mr. Zopatti stated an underlying weakness in Argentina's GHG policy stems from a diverse framework that varies from province to province in absence of federal policy. Waste management falls under the purview of the Ministry of Environment, with an emphasis on landfills that started 5 years ago. The World Bank's country partnership strategy has been supporting various programs, with its main purpose at the provincial level (e.g., in Rosario, one-third of the city's total organic waste is now composted). Argentina is now transitioning its focus to small cities and towns.

Mr. Zopatti noted there is huge potential for continued research on methane reduction. He indicated several new studies are underway, including communications and seeking improvement for new numbers to replace existing, older data particularly as it relates to MSW, wastewater, and the agriculture sectors. He added the United Nations Environment Programme (UNEP) has been supporting research on technological needs for the different sectors and anticipates publishing its results in the coming months.

Argentina's climate change policies comprise a set of actions among ministries; again, with emphasis on MSW and agriculture sectors, which are setting new targets. He noted challenges currently faced include integration and financing for both local and provincial capacity building, given the lack of resources and defined responsibility (e.g., difference between institutional and technological expertise).

At the conclusion of Mr. Zopatti's comments, one of the Chinese representatives congratulated Argentina on its efforts to reduce methane emissions and asked for clarification of its 35 percent methane of total GHGs. Mr. Zopatti indicated MSW and agriculture account for approximately 85 percent of total methane emissions, with some contribution from the oil and gas sector (the rest regards to fugitive emissions from the oil and gas industries). Ms. Marlene Sieck from the German Federal Environment Agency commented she was glad to hear Mr. Zopatti mention the difference between capacity building (i.e., expertise) and technology (e.g., equipment) because it truly reflects the current situation in several countries.

Australia

Mr. Bruce Murphy with the Department of Resources, Energy and Tourism stated he was pleased to be in Vancouver—a favorite city among Australians—and thanked the Canadian hosts. He indicated much has happened since the October 2011 update in Krakow, Poland. In particular, Australia was implementing its Clean Energy Future Plan, which had placed a price on carbon emissions on 1 July 2012. This started with a fixed price of \$23 per ton of carbon dioxide equivalent (CO_2E) and increases by 2.5 percent per year until it transitions to a

cap-and-trade scheme in 2015. The scheme places obligations on 300 of the largest emitters and this represents two-thirds of Australia's emissions. He commented that in 2015, the scheme will be linked with the European Union Emissions Trading Scheme (EUETS). Mr. Murphy noted that revenue raised from the scheme will go to supporting households, businesses, and industry to adjust to the carbon price and to support development and deployment of climate friendly land activities, energy efficiency, renewable energy, and low emissions technologies. He also noted the scheme's implementation is going well, with a recent survey showing that businesses are becoming increasingly comfortable with the carbon price.

The Clean Energy Future Plan also contains two programs to address GHG emissions within the agriculture sector. The Carbon Farming Futures (CFF) program helps to improve management practices in the land sector towards emissions reduction and improved productivity through advances in emissions reduction technologies and techniques. One of the program's key components—the Action on the Ground program—helps farmers and land managers undertake on-farm trials of emission abatement technologies, practices, and management strategies. The aim is to reduce agricultural GHG emissions (i.e., methane and nitrous oxide [N₂O]) or sequester carbon in soil while maintaining or enhancing productivity. To date, the program has invested in 59 projects involving more than 400 farmers and land managers. The Carbon Farming Initiative (CFI) encourages farmers and land managers to reduce their methane and N₂O emissions using approved methodologies. Methodologies are being developed by the Australian Government as well as by private enterprises and industry groups. As of 7 March 2013, eight methodologies that involve the reduction of methane emissions have been approved and cover the capture and combustion of methane generated from livestock manure, capture and combustion of landfill gas, and early season savanna burning. By participating in the CFI, farmers and land managers can generate carbon credits that can then be sold to individuals or businesses to "offset" their own emissions.

In the oil and gas sector, Australia implemented the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009, which requires oil and gas developers active in Australian offshore waters to seek regulatory approval of an environment plan. This plan requires the maintenance of a quantitative record of emissions and discharges and routine reporting of these emissions. Mr. Murphy also noted that the Gorgon project is on track to commence in 2015, with an anticipated reduction of between 3 and 4 million tons of CO_2 per year, making it the world's largest Carbon Capture and Storage project.

The Clean Energy Future plan also includes a program to address methane emissions from coal mining. The Coal Mining Abatement Technology Support Package (CMATSP) complements the coal industry's own efforts to develop safe abatement related technologies and processes to address fugitive methane emissions from coal mining. Increased industry interest was generated by the September 2012 coal mine methane (CMM) workshop in Sydney held alongside a GMI Coal Sub-committee meted and demonstrated the benefits of being a GMI Partner. Ms. Pamela Franklin with U.S. EPA asked how much support had been provided to the Australian coal sector under CMATSP. Mr. Murphy said the funding comprised \$70 million over 5 years, with matching funding from industry.

Canada

Mr. Franck Portalupi with Environment Canada welcomed everyone to Vancouver and commented it had been a long journey to get to the Expo, but worth the results. He provided <u>Canada's country update</u>, noting Canada's GMI participation is driven by multilateral initiatives and providing support in developing countries to ensure action. He explained Environment Canada is supporting a number of projects in Mexico, for example, in the waste (e.g., technical design for the Cancun landfill) and oil and gas sectors (e.g., PEMEX).

Mr. Portalupi continued by explaining Canada's Fast Start program, which has infused \$1.2 billion over the years in three priority areas: adaptation by the poorest and most vulnerable populations, clean energy, and forests and agriculture. He also described Environment Canada's involvement in Nationally Appropriate Mitigation Actions (NAMAs) to address LFG, oil and gas, and low carbon housing. In the waste sector, Canada is developing waste management approaches in Columbia and Chile, a landfill design project similar to Cancun in the Dominican Republic, and a national biodigestion strategy with Mexico's Secretariat for Environment and Natural Resources (SEMARNAT). Within the oil and gas sector, Canada—via the Petroleum Technology Alliance of Canada (PTAC)—is working with Ecopetrol in Columbia as well as PEMEX in Mexico.

Regarding its relationship with CCAC, Canada is a founding member, has contributed \$3 million to the trust fund, and sits on the CCAC Steering Committee. Canada also is co-leading the MSW Initiative development with the United States, and is working on the new Agriculture Initiative still under development.

Mr. Zbigniew Kamienski with Poland's Ministry of Economy asked about Canada's in-country methane emission reductions. Mr. Portalupi explained efforts he described have more of an international focus, noting that domestic efforts are underway through the climate change office at the subcommittee level (e.g., Natural Resources Canada for oil and gas, Agri-Canada for agriculture).

Mr. Guoshun Sun with China's Ministry of Foreign Affairs acknowledged Canada's international efforts, especially in developing countries in Latin America, within the last 3 years. He commented on the \$1.2 billion set aside to cooperate with other countries, and asked how much might be dedicated to reduce methane emissions. Mr. Portalupi referred to Canada's efforts to reduce GHGs also help to address climate adaptation, noting they've made a 5-year investment with a 20-year repayment period. He continued by saying Canada felt it needed to work more closely with banks to fund projects, which will be a greater focus as they move into the second phase. He encouraged other developing countries to submit proposals, particularly as they relate to NAMAs and CCAC (i.e., making additional financial contributions).

China

Mr. Zhen Sun with the National Development and Reform Commission (NDRC) indicated his China country update would approach emission reductions from more of a cross-cutting perspective rather than by sector. He indicated China's policies for methane control are not as well developed as those for CO_2 , although he noted methane policies are more sophisticated than CO_2 as well as for more diverse industries (e.g., GMI sectors). He stated China is moving toward a domestic carbon emission trading scheme (ETS) that will create national policy suitable for all sectors, including coal mining. He commented he and his colleagues have come to the Expo to learn how to prepare policies to better control methane.

Mr. Zhen Sun continued by explaining China's integrated policy for cross-cutting financial support (e.g., farmsized to household-scale biogas moving to large- and medium-scale projects to treat manure and recover/use biogas). He indicated safety is China's primary motivator for controlling methane from the coal mining sector, noting several mines now experience the benefits of using methane for energy. He added there is also a tax break or subsidy for using coalbed methane (CBM) to produce electricity. Mr. Zhen Sun explained Chinese policy to encourage the agriculture sector's participation in demonstration projects to help identify methane emission reduction potential (e.g., using different varietals of straw to reduce livestock emissions). He added that farmers are testing soil to reduce fertilizers, and also striving to improve soil conservation while reducing fertilizers. This effort includes technology development as well as capacity building to promote better methods. He also noted several businesses and local governments are engaged in an international technology exchange to reduce methane emissions from the waste sector.

China's Mr. Guoshun Sun added to his colleague's remarks, emphasizing that while China attaches great importance to CBM recovery for safety purposes, it also produces great investment opportunity. He likewise commented on China's biogas use in the country-side to help improve the rural quality of life. He closed by saying China seeks greater cooperation in the MSW sector.

Mr. Zhen Sun lastly added that China will be seeking policy advice regarding wastewater treatment and raising water quality standards. He re-emphasized that China approaches CO_2 from a top-down perspective, whereas they view methane reduction opportunities on a sector-by-sector or more so, project-by-project basis.

Australia's Mr. Murphy asked how long the coal subsidies have been in use. Mr. Guoshun Sun stated CBM recovery has long been underway; while he wasn't aware of the exact data, he noted he would get and provide it

to Australia. He noted in the meantime, these subsidies have been widely used to support in-town heating adjacent to the mines.

Mr. Pauli Mäkelä with Finland's Ministry of Foreign Affairs thanked China for its update and noted it appeared there were great chances to remodel China's situation and include renewables in its policies. Mr. Zhen Sun stated China is ready to add renewables, but there is a need to push reform of non-renewable pricing to reflect the actual situation (e.g., life-cycle costs). He added that in some cases, non-renewables are still cheaper, which impedes greater renewable development and use.

Mr. Kunihiko Shimada with Japan's Ministry of the Environment commented he was impressed with China's efforts to promote the use of CBM for electricity generation versus the coal itself. He also asked for more detail regarding the subsidies. Mr. Zhen Sun explained there has been 1.2 RMB in support, which equates to approximately 0.25 RMB per one kilowatt hour (kWh) of electricity. He added that China's resource tax is not levied on CBM.

Finland

Mr. Mäkelä provided <u>Finland's country update</u>.¹ As a new Steering Committee representative, he commented that despite Finland's economy and highly educated population, they still had many of the same environmental problems of other countries. He referenced the 2009 Foresight report on long-term climate and energy policy as impetus for change, and noted there's a new report forthcoming. He provided an overview of the climate causes and effects (e.g., global challenge, setting a good example) as well as global GHGs (e.g., methane accounts for 14 percent worldwide). He noted Finland's emissions are decreasing and have even fallen below 1990 baseline levels. One-third of the Finland's emissions can be attributed to waste treatment and animal husbandry. He explained Finland's involvement in Kyoto and noted energy matters more in Finland given the arctic weather. He pointed to the decline in methane emissions as quite evident, although it is not the case in agriculture (e.g., neutral) and industrial sectors (i.e., increasing). He added the waste sector comprises 3 percent of Finland's GHGs. Mr. Mäkelä explained an association has prepared a report on targets and plans for transitioning to a renewable approach for methane. The report was issued in 2012 and recommends utilization of up to 40 percent renewable methane by 2015, with increasing percents per year through 2020. Finland is also collaborating with Estonia to utilize liquefied natural gas (LNG).

Mr. Mäkelä also explained Finland's footprint, noting economy and environment as primary influences as well as decoupling social issues such as standard of living and well-being. He also addressed other factors influence everyday choices (e.g., five spokes) and shared a historic photo showing a 1943 truck powered by biogas.

One of the China representatives sought clarification on whether Finland's 2011 6 percent methane is below the Kyoto target, and how it relates to the European Union (EU) request of 8 percent below 1990 levels. Mr. Mäkelä explained he omitted EU efforts and shared additional information on Finland's binding targets, which equate to 16 percent reductions by 2020. Germany's Ms. Sieck commented on burden sharing between countries and suggested it be based on ease and ability. She noted, for example, that East Germany's economic breakdown made it easier based on the situation and then they began to work toward targets.

Mr. Henry Ferland with the GMI Administrative Support Group (ASG) commented on various countries' outreach efforts (e.g., Canada) and examples of bi-lateral efforts to share expertise, asking if Finland had been engaged in outreach. Mr. Mäkelä responded affirmatively, stating Finland has conducted significant outreach and will provide examples to the ASG.

¹ Finland forwarded an updated version of the presentation they provided at the Steering Committee to provide additional information related to funding.

Germany

Ms. Sieck opened her country update by explaining Germany's decline in methane emissions, from 5 million metric tons in 1990 to 2.2 million in 2010. She noted these drops stem primarily from the waste and wastewater sector following Germany's ban for untreated waste from landfills, which resulted in a massive drop in emissions from landfills. She continued that further reductions will occur and the Environment Agency works on a scenario towards a carbon neutral society in 2050. She added there will be an October 2013 conference on this topic and would provide more details to the ASG.

Regarding Germany's international efforts, she described the 2008 International Climate Initiative that created 325 projects through December 2012 that were funded with more than 800 million Euros. The initiative includes other donors, and now comprises 60 international partners (http://www.bmu-klimaschutzinitiative.de/en/news). Germany views NAMA development and implementation as an important part of any future global agreement and is working in several initiatives to advance these plans. She also explained Germany has launched the NAMA Facility together with the United Kingdom's Department of Climate Change to help fund low carbon projects (e.g., sustainable housing in Mexico), with KFW Bank as implementing partner. Germany is also active in the Partnership for Market Readiness together with World Bank and other partners. Germany provides technology transfer with a focus on GHG reduction. Lastly, she stated Germany participates in the CCAC.

She inquired of her Steering Committee peers if they, too, saw perhaps too much overlap between GMI and CCAC, and would be looking to her colleagues to know how to differentiate and to avoid duplication of work. She closed by saying she hoped for better cooperation between the earlier described initiatives to reduce GHG emissions and GMI, and looked forward to the week's discussions.

China's Mr. Guoshun Sun thanked Germany for its update and acknowledged its in-country efforts as well as those with developing countries. He expressed he was encouraged to hear Germany had contributed toward—and will continue to fund—projects. He emphasized the support is much needed and appreciated, and hoped similar efforts will continue under the Clean Development Mechanism (CDM). Ms. Sieck pointed to the installation of the Green Climate Fund, noting a major point is how to allocate money and the need for legitimate projects that will yield change or results. Ms. McCabe interjected this is what GMI is all about and might be able to help identify projects.

Finland's Mr. Mäkelä asked about the change from nuclear energy and the future of renewables in Germany. Ms. Sieck explained Japan's tsunami and resulting nuclear power plant failure was the motive for this decision and that growing amounts of renewable energy are available. She indicated Germany has shut down eight nuclear plants but there is no lack of power. She noted policy is impacted by questions of grid security and the ability to produce significant amounts of power, while noting it might not always be where it's needed (e.g., transmission issues and storage capacity).

India

Mr. D.N. Prasad with the Ministry of Coal noted India is one of GMI's founding Partners and places a high priority on methane reductions, particularly from its industrial and commercial sectors. He indicated India's Ministry of Coal is especially grateful for U.S. EPA's support and the coal sector's policy development has taken significant steps forward. With the development of several CBM coal blocks in recent years, India has the potential to reduce methane emissions by nearly 0.3 million cubic meters (m³) per day. Mr. Prasad added there are opportunities within the oil and gas sector as well, as India's reliance on natural gas intensifies. He also noted overall climate change issues have also shown improvement, with a greater emphasis on energy efficiency from an associated government bureau.

Japan

Mr. Shimada opened <u>Japan's country update</u> by explaining methane comprises only 1.5 percent of Japan's GHGs given the country's domestic situation (e.g., incineration = zero percent from waste, no leakages from oil and

gas). He turned attention to Japan's push toward modeling to get a better sense of where emissions—and therefore, opportunities—exist for international cooperation. He provided an overview of global CO_2 and methane observations from Japan's GHGs Observing SATellite (GOSAT) and emphasized there are available channels to monitor other gases. Japan is also interested in increasing the number of sites (i.e., monitoring locations), since the satellite circles the Earth every three days or 72 hours. Because emissions are now more visible, the data will help improve climate predications. Mr. Shimada described a series of slides that reveal actual observations and show how CO_2 uncertainty flux can be reduced—thereby, increasing accuracy—and demonstrated GOSAT's animation capabilities. During the next phase, Japan hopes to further improve accuracy, which might lead to additional societal benefits (e.g., reduced leakage, increased safety). He also provided an overview of anticipated phases 3 and 4 (i.e., contributing to global measurement, reporting, and verification [MRV] system; long-term, space-based GHG monitoring).

Mr. Shimada transitioned his update to describe Japan's climate policies, noting they are not part of Kyoto II. He did indicate, however, that two months ago Japan's Joint Crediting Mechanism (JCM) entered an agreement with Mongolia to perform MRV studies and within the coming weeks, it is anticipated Ethiopia and Kenya will follow. Japan has pledged and appropriated \$2.5 million per year over the next 5 years to revise its Sound Material-Cycle Society Plan and its Waste Management and Public Cleansing law. Japan is particularly active on electronics equipment recycling based on its GMI participation and CCAC involvement.

Mr. Shimada closed his presentation by encouraging any developing country partners interested in international collaboration with Japan to contact him directly.

Mr. Ferland with the ASG asked if Japan's JCM included methane. Mr. Shimada indicated the JCM will be broader than the previous CDM, so yes, and it can also be further tailored by the two participating countries. Mr. Andrew Eil with the U.S. State Department thanked Japan for its GOSAT contributions, which are strongly supported by GMI and CCAC. He then asked if Japan's low methane emissions are historic or the result of climate policy. Mr. Shimada explained methane emissions have always been historically low and since 1990, most of Japan's 1.5 percent methane have stemmed predominantly from rice cultivation and enteric fermentation so further reductions will be dependent on changes to feed and/or other changes in order to reduce emissions further.

Poland's Mr. Kamienski asked if the GOSAT might be able to detect leakage from coal and oil and gas extraction. Mr. Shimada responded affirmatively, and also noted that countries can obtain the GOSAT emissions data for free.

Mexico

Mr. Cesar R. Chavez from SEMARNAT provided <u>Mexico's country update</u>, he indicated some changes in climate change policy accordingly with the recent administration new approaches. He stated that Mexico has completed its Fourth United Nations Framework Convention on Climate Change (UNFCCC) National Communication as a non-Annex I country as well as its latest GHG inventory and a national waste diagnostic. In response to a comment by Finland, he noted that Mexico is trying to approach joint policies regarding economy, environment, and energy issues (see "Agriculture" discussion below).

In the oil and gas sector, Mr. Chavez indicated PEMEX, Mexico's state-owned company, is working with U.S. EPA and Environment Canada in order to mitigate fugitive emissions. He added that these issues will allow Mexico to move forward with Oil and Gas Subcommittee efforts, but will also influence PEMEX policies and activities.

From agriculture perspective, he noted more than 300 biodigesters have been built, which are all equipped for electricity generation. Approximately 1.37 million metric tons of carbon dioxide equivalent (MMTCO₂E) have been reduced, mostly from pork and beef farms. Mexico is currently working to develop a handbook to emphasize the importance of working together environment and energy in agricultural issues.

Within the coal sector, production has kept the same pace but recent safety issues might increase attention on methane reduction opportunities. He continued by saying that wastewater was an emerging sector, but Mexico is already advancing its efforts by serving as the subcommittee chair.

Lastly, in the waste sector, Mr. Chavez indicated several activities in this field. The National Infrastructure Fund included biogas management within the type of projects they support; four biogas projects are already producing electricity, which is being used either for public lighting; the subway operations or, like in the case of Aguascalientes in a car factory. Since abatement had been added to GMI's purview, flaring has been installed at several landfills to reduce atmospheric emissions. A 2012 best practices handbook has been completed, and a Spanish company recently won a bid to develop and install a LFG project at the Mexico City landfill.

Mongolia

Mr. Ochirsukh Badarch with the Mongolian Nature and Environment Consortium attended the Steering Committee's first day as an observer, and provide a brief update on Mongolia's GMI activities. He indicated the primary issue within Mongolia stems from coal mining and the need for government to pay more attention to CMM/CBM recovery and use. He noted Mongolia has conducted several resource assessments and prepared a report under the auspice of GMI to help better understand its situation. He explained the report is the first stage of Mongolia's efforts, with the next stage(s) to include promoting potential efforts and technical development opportunities for CBM. He explained the government is only thinking about selling the coal, and missing out on the opportunity to recover and use the methane gas.

Poland

Mr. Kamienski extended his gratitude to all the participants in the October 2011 Krakow meeting and expressed how pleased they were by such active participation. He continued <u>Poland's country update</u> by outlining selected activities in the MSW sector, including a significant increase in LFG projects. He commented they have developed a handbook on best practices they hope to translate so it can be helpful to other countries. He also noted they have assembled a LFGE consortium to further promote new, effective solutions.

Within the coal sector, Mr. Kamienski indicated Poland has increased the volume of its methane use, up to 70 percent of captured methane with an ultimate goal of 100 percent. He reviewed current recommendations including better methane usage, modifying the government support system to reflect its renewable components, and increasing the use of VAM. He also provided an overview of various coal projects in Poland, including a report on gassy mines and ongoing feasibility studies.

For an agriculture perspective, Mr. Kamienski stated sustainability is a priority in addition to its strategy to reduce GHGs. He reported the number of biogas plants has increased from 14 to 31 plants in recent years, and also noted the progress of other agriculture-related developments.

Regarding Poland's action plan, Mr. Kamienski commented it will be compiled by important actors within all sectors, and serve as an important element that will complement Poland's national climate plan.

United States

Ms. Pamela Franklin with U.S. EPA thanked the Canadian hosts and commented on Vancouver's beauty. She opened the <u>U.S. country update</u> by revealing the U.S. GHG profile, of which methane comprises 8 percent. She noted there are several domestic government-industry voluntary partnerships since 1993-1994 that provide incentives to reduce methane emissions. She transitioned to discuss recent U.S. regulatory efforts that include air quality impacts on the oil and gas sector (with methane emission reductions as a co-benefit) as well as New Source Performance Standards that will affect the largest landfills in the United States. She also indicted that GHG Reporting Program data will be helpful in informing in future proficiency. Ms. Franklin pointed to an interactive map that allows users to identify emissions within their region.

Ms. Franklin also provided an overview of U.S. EPA's involvement in GMI, explaining the intra-agency efforts among six agencies. She noted the U.G. government had appropriated approximately \$75 million toward GMI through 2012, which has been additionally leveraged by in-kind contributions from other Partners and the Project Network. She also reviewed actual on-the-ground projects performed by U.S. EPA in developing countries, and pointed to the ability to track activities through the GMI Customer Relations Management (CRM) database that shows where funds have been invested as well as a more accurate pipeline of actual projects versus potential opportunities.

Ms. Franklin explained the United States has prepared and circulated its working draft GMI Country Action Plan, and she was gratified to hear other Partners are also working on their plans. She emphasized the United States sought to keep its plan succinct and short. She also described U.S. participation in the CCAC, indicating they are very engaged and excited about the emerging initiatives (e.g., MSW efforts in 10 cities). Ms. Franklin closed her presentation by emphasizing how CCAC can be viewed as a complement to GMI, and the opportunities to create synergies to work together.

Status of GMI Country Action Plans

Ms. McCabe expressed intention to pick up on several Partners comments regarding action plans and wished to continue and expand that discussion. Mr. Ferland provided a <u>Status of GMI Country Action Plans presentation</u> to summarize the accompanying <u>GMI Country Action Plan white paper</u> as well as the <u>draft United States Country</u> <u>Action Plan</u>. He, too, expressed he was excited to hear what others are doing.

By way of background, Mr. Ferland explained the concept of an "action plan" has undergone a number of reiterations, starting as sector action plans (i.e., key issues in which the subcommittees would engage) to countrylevel action plans to outline over-arching needs (i.e., broad, but still informative). In developing its Country Action Plan guidance, the ASG assembled four questions to address key areas related to GMI participation:

- 1. In-country objectives and priorities
- 2. Current methane project development/mitigation activities
- 3. Assistance sought by developing countries (or available from developed countries)
- 4. Additional information, accomplishments, or successes

Mr. Ferland described the current status of action plans (e.g., received from Australia, European Commission, and United States), recognizing elusive tasks and acknowledging various challenges. He also noted the low percentage of completed country-specific sector plans. In analyzing possible impediments to greater completion of action plans, the ASG came up with a short but not exhaustive list of issues, including: multi-jurisdictional issues, action plan "fatigue" (or overlap with other efforts), and need to get back to basics (e.g., what is the intent of action plans, challenges encountered). He noted some of the challenges expressed by Partners include where to start. Mr. Ferland emphasized the Country Action Plans were intended to be extremely flexible (e.g., outward versus inward, non-jurisdictional, non-binding). He also noted Partners might view an entire Country Action Plan as too daunting; they should focus on completing sector plans as a minimal step forward. He also said Partners could take section or chapters of existing documents (e.g., national strategies) and rename /post them as their action plan. If creating a NAMA is a country's priority, he indicated that could be the country's "plan."

While on the topic of NAMAs, Mr. Ferland pointed to the Canadian example and how Columbia could use the "methane" chapter as its plan. He re-iterated that both Canada and Japan have offered assistance to developing countries interested in developing NAMAs. He noted another counterpart to GMI Country Action Plans might be CCAC action planning and any resulting documentation since both will likely be an ongoing process to achieve information sharing.

To close his overview, Mr. Ferland summarized the issues for Steering Committee consideration and discussion, including:

- Charging subcommittees with continuing to support/assist Partners with development/implementation of sector action plans (i.e., non- or multi-jurisdictional) and overarching GMI Country Action Plans.
- Tasking the ASG with tracking/communication action plan completion to avoid duplication.
- Tasking the ASG with revising the action plan guidance (i.e., is the existing guidance too constraining? Is the name "Action Plan" constrictive?) and/or encouraging linkages to existing climate plans (e.g., multi-use/purpose documents).

Steering Chair Ms. McCabe thanked Mr. Ferland for teeing up the discussion and also informed participants they would have time the next day to ensure complete discussions. She reiterated the key issues for consideration, including: challenges to developing action plans, potential barriers and solutions, and possible word-smithing. She then opened the floor to questions.

Mexico's Mr. Chavez indicated in their case, Mexico already had an overarching National Program for Climate Change that serves as its overall strategy, which includes specific actions and/or goals over 5 years. He also noted they had been unable to begin work on a GMI-specific action plan under the previous administration. He now anticipates taking bits from its existing national plan and re-iterated his previous comments about coupling environment and energy within the agriculture sector to help define where they currently stand.

Australia's Mr. Murphy commented that as he is new to GMI, he will be looking to the ASG overview to guide him. He agreed with Mexico's comment that methane goals tend to be captured in an overarching environmental strategy and agreed that existing documents could be used to develop a country action plan. He also stated he felt the ASG adequately answered the multi-jurisdictional challenges he faces (i.e., action plans are broader than his department's purview).

Poland's Mr. Kamienski noted his government will be transforming Ministry of Economy policy more toward methane use and/or a lower emission economy beyond the pure environmental benefits. He asked about the inclusion of binding commitments within the GMI action plans. Mr. Ferland emphasized that all GMI activity is voluntary and the Polish action plan would merely provide direction (not requirements) for further actions. He added the ASG might be able to insert some language in the revised action plan guidance to emphasize non-prescriptive elements. He noted the ASG would be open to suggestions on how to "construct" an action plan. As previously indicated, the ASG is also open to calling the document something other than "action plan." Ms. McCabe acknowledged the specific contributions from Partner Countries as they go through the action plan development process.

China's Mr. Guoshun Sun commented while it was useful to note progress on one hand, the action plan shouldn't be too burdensome. He stated countries have enough opportunities to develop similar documents that serve the same purpose (e.g., Mexico's National Plan and/or UNFCCC Communications, Bali NAMAs) so perhaps the ASG could provide direction on which components could comprise or be put toward an action plan. He suggested the ASG conduct a workshop or seminar on elements what they would like to see in the action plans so Partners might realize something already exists and they simply need to put a new cover on it.

Canada's Mr. Portalupi acknowledged China's comments and explained when action plan language was incorporated into the GMI Terms of Reference in October 2010, the CCAC and Bali NAMAs did not exist. He continued by saying Canada has the same jurisdictional issues as Australia and also needs to refine its purposes for GMI-specific actions in absence of funding (e.g., NAMAs to be funded as the ultimate goal). He also noted the good discussion around the table, but reminded participants that it should be up to the individual countries. He stated the ASG needs to do a better job explaining the linkages with CCAC and NAMAs, why an action plan is truly needed, and how action planning will help lead to financial schemes (e.g., moving from project development to funding). In particular, he addressed creating synergies to advance planned actions for funding and developing action plans to reduce emissions.

Finland's Mr. Mäkelä echoed Canada's experience is similar to that of his country, noting there are many ways to examine emissions from various sectors. He also stated it was important to report the impact of government

polices over the coming years. He has nothing against the draft guidance and/or the use of action plans by other countries, and he sees how the U.S. action plan might be useful, but the activity is not useful to Finland. Mr. Eil with the U.S. State Department interjected it might be useful to see where countries stand. He emphasized that action plans were intended to be flexible to the circumstances within each country. He added the Steering Committee only meets once a year and Expos are held about every 3 years so the action plan serves to provide an overview of a Partner's situation between updates. He also saw the action plans as opportunities to catalyze funding. He absolutely agreed they should be assembled in coordination with other initiatives (e.g., CCAC, NAMAs) to leverage resources. He re-iterated the ASG didn't intend for action plans to be burdensome and could draw from existing documents, with perhaps some amount of input to customize for GMI.

India's Mr. Prasad echoed China's comment on UNFCCC communications and also emphasized the non-binding component of the proposed action plans. Argentina indicated they do not currently have a national methane approach but instead have sector plans, given its multi-jurisdictional issues. Argentina's Mr. Zopatti also noted there are several ongoing initiatives and it takes time to get the various Ministries' support. In recent months, the concept of NAMAs is gaining in popularity and they hope to use potential funding as an incentive. As far as the terms "action plan," Mr. Zopatti wondered if the something less prescriptive such as "working document" could be substituted to also give the sense of evolution and non-binding status.

The United States' Ms. Franklin echoed Canada's comment regarding GMI's purpose to reduce methane emissions—not create plans—but also sees the benefits of having a plan to help direct future actions (and possible funding). She also acknowledged China's comment about repackaging existing documents (e.g., UNFCCC Communications) but suggested calling out the specific nuggets about methane versus posting an entire 100+ page report. She also noted opportunities to help each other and build on other's actions. She added that plans should not get in the way of actual work and as Argentina eluded, the group should not let words get in the way (e.g., "plan" might be prohibitive).

Mr. Ferland asked if the ASG's interpretation (e.g., multi-jurisdictional issues was on track. Mexico's Mr. Chavez said yes, it was a very good overview and noted there might not be a need to publish a new document but some countries might benefit from adjusted guidance. He also reiterated the need to understand potential linkages with other initiatives.

Steering Chair Ms. McCabe interjected emerging themes regarding action plans:

- Flexible, non-binding
- Value by country-to-country
- No need to reinvent the wheel, reflect awareness how the world has moved on since 2010 (e.g., NAMAs)

She asked if a summary or list of advantages these plans might be beneficial, while emphasizing not all will apply to every country but perhaps at least one might resonate. She wondered if they should task the ASG with taking another look at the guidance to identify additional ways to emphasize maximum flexibility, ability to tailor plans, and how to take advantage of existing resources.

Australia's Mr. Murphy expressed the usefulness of the discussion to better understand and also justify action plan development to senior management. China's Mr. Guoshun Sun commented on the name and the need to better reflect it contains information on methane mitigation. It should also take into account existing information and use relevant portions regardless of source (e.g., UNFCCC Communications).

Ms. McCabe indicated this might be a good stopping point for the day and encouraged participants to think about additional suggestions overnight, noting there would be time the next day to reflect on discussions and how to capture more of what gets said so it could be shared with the rest of the Partnership.

Canada's Mr. Portalupi announced the Expo opening reception immediately followed that day's adjournment and would take place in the main ballroom.

The first day was adjourned.

DAY TWO

Following the Opening Plenary session, Ms. McCabe welcomed participants back and asked newly joining delegates to introduce themselves. She announced guest speakers Kaveh Zahedi with UNEP and Brice Quesnel with the World Bank would go into greater detail and answer any questions that might have arisen from the morning's session. She also noted she would be departing the next morning and the United States' Ms. Franklin would take over as Chair on Day Three. She thanked the participants in advance for the great opportunity to learn more about their GMI experiences and looked forward to the forthcoming day's discussions.

Before opening the discussions, she asked the European Commission to provide an update given their absence the previous day.

European Commission

Ms. Marion Wilde opened her update by providing an overview of the European Commission (EC), stating there are currently 27 member countries and Croatia will become a new member in July 2013. The European Union (EU) has achieved a 30 percent reduction in methane emissions since 1990. The EC's GMI involvement to date has primarily comprised efforts in the Coal and Oil and Gas subcommittees, with an expansion to landfills and agriculture in 2012, noting the main sources of methane among the EU member countries comprise agriculture (50 percent of total methane emissions) and waste (31 percent). The coal sector is a minor source of methane emissions with 5 percent, and is expected to decline over the next decades caused by increased recovery and use of methane and the phasing out of state aid for coal mines by 2018. Similar efforts to use associated gas are anticipated in oil and gas, which accounts for 8 to 9 percent of the EU's total methane emissions.

Ms. Wilde explained the EC's main GMI objective was regular cooperation with the private sector via the Project Network as well as developing climate change strategy through a leadership forum. She was also encouraging all EU member states to join GMI and become more involved. She informed participants the EC is working on a GMI Country Action Plan, which will be titled as "EC Global Methane Reduction Actions." She indicated this document will reveal mechanisms for coordination among members, but also will show the value of international cooperation with such partners of the GMI, GGFR, etc. The EU tackles methane emissions together with other GHG emissions through the Climate and Energy Policy, in particular the Emissions Trading System (ETS) and environmental legislation like the Clean Air Policy and the Industry Emissions Directive. There are forthcoming EU Directives that will impact all sectors and sector-specific legislation like the new Oil Offshore Safety Directive. She closed by saying she would work closely with the EU member states to combine activities in GMI Partner Countries.

GMI's Relationship with Climate and Clean Air Coalition (CCAC)

Ms. McCabe started the discussion by inviting UNEP's Mr. Zahedi to expand on the morning's session.

Mr. Zahedi opened his comments by stating it was important to remember the coalition was born out of opportunity to act on mature science that surrounds short-lived climate pollutants (SLCPs) and their influence on climate change and human health. The coalition also takes into consideration SLCP impacts on a broad array of long-range benefits as well as the near-term. He noted the CCAC was not intended to replace GMI and was envisioned to complement the Initiative's efforts, particularly since the coalition also focuses on CO₂. As a result of the Maldives Ministry, the world began to see the difference of SLCPs and the near-term need to complement longer-term efforts to reduce CO₂. The CCAC promotes measures that make big differences and impacts on global warming, with emphasis on cost negative and available technologies. There are numerous opportunities for joint action and collaboration. Like GMI, the coalition is country-led and voluntary, with the founding partners comprised of six countries and the UNEP. The CCAC was founded to raise awareness of SLCPs and the need for new, diverse actions. Since its inception, experts have continued to fine tune the science and add clarification. In the first year, the coalition has grown from the six to 60 partners, including 30 countries and 30 non-state

organizations with interest across all SLCPs (e.g., methane, black carbon, and hydrofluorocarbons [HFCs]). The coalition is structured as a high-level assembly with ministers serving as delegates, which has led to swift and significant success given the ministerial-level engagement and decision-making.

Mr. Zahedi explained the coalition also includes a Scientific Advisory Panel that relies on the most recent GHG data and is rooted in science, and the UNEP serves as the coalition's secretariat. The coalition's work is currently divided into seven initiatives including: MSW, Oil and Gas, Black Carbon from Diesel, Black Carbon from Brick Production, HFCs Growth, and cross-cutting issues such as action planning (e.g., what falls under SLCPs) and finance, with MSW and Oil and Gas being the most important to GMI. There are two emerging initiatives regarding regional assessments and cook stoves, as it relates to black carbon.

Mr. Zahedi noted opportunities to look at existing mechanisms within GMI, despite CCAC's broader reach across more SLCPs. The only requirement to participate in the CCAC is a commitment to take [non-binding] action. Each partner is responsible for demonstrating action by participating in CCAC initiatives and/or working groups. He closed by stating again the CCAC secretariat is happy to exchange thoughts on how to work collaboratively with GMI.

David Turk with the U.S. State Department thanked Mr. Zahedi for his encompassing summary and stressed the breadth of CCAC (i.e., beyond GMI) and the potential nature for cooperation. He continued by noting that GMI Partner Countries are putting forth high-level input (e.g., Poland's ministerial-level meeting, Japan's financial contribution, Nigeria chairing the CCAC working group, Russia's pending membership). He emphasized the coalition is action-oriented and ambitious, but reminded the Steering Committee of its broader focus on SLCPs and the associated—as well as localized—climate benefits (e.g., air quality, health) that might be achieved beyond emission reductions. He added the coalition's key strength stems from its collaborations and multi-laterally supportive structure that work in real world terms (e.g., in-country) with global results.

Ms. Monica Shimamura thanked Mr. Zahedi for his thorough overview and noted he would skip the background elements of the <u>GMI's Relationship with CCAC white paper</u> and accompanying <u>CCAC presentation</u>. Ms. Shimamura moved to summarize the MSW Initiative, which focuses on both methane and black carbon from a holistic approach (e.g., proper waste management, eliminating organics) with a purpose of deploying technical assistance to cities. She also provided an overview of the Oil and Gas Initiative, which focuses on vented, leaked, and flared methane with involvement from high-level ministries and private companies. She noted that both initiatives were initially conceived by GMI, but are broader than GMI.

Ms. Shimamura touched briefly on the concept of SLCP action planning and the emerging Agriculture Initiative and financing issues. She discussed similarities (e.g., both voluntary, non-binding international public-private partnerships) and emphasized the main goal of both CCAC's and GMI's efforts is to reduce methane, but also pointed to the differences given CCAC's broader focus (e.g., includes black carbon and HFCs) and GMI's older, historic perspective. Ms. Shimamura explained the coalition benefits from GMI's established mechanisms and it goes both ways as the CCAC continues to attract new stakeholders (e.g., mayors, oil and gas companies) that previously might not have been aware of GMI. CCAC's existence also provides opportunities to leverage in-kind resources.

Ms. Shimamura introduced three areas for future collaboration:

- Existing methane-related initiatives (e.g., MSW, Oil and Gas)
- Potential new initiatives (e.g., Agriculture, financing)
- SLCPS action planning

She added there might be additional ad-hoc opportunities to broaden and strengthen GMI beyond the traditional subcommittees, without the need to have a formal commitment. In closing, Ms. Shimamura reviewed the items for the Steering Committee's consideration as:

- Areas of mutual collaboration to benefit both organizations and respective partners of each effort.
- Ways to strengthen information flow and sharing between GMI and CCAC about relevant methanerelated activities.

Ms. McCabe opened the floor to questions and comments. Mexico's Mr. Chavez asked how the two groups might approach managing similar—or same—projects, since he viewed both as action-oriented and didn't see a difference (e.g., both address MSW and Oil and Gas issues). He noted the previous Landfill Subcommittee focused predominantly on LFG, but with the expansion to "MSW" in name/purview to encompass organics and biodigestion, he saw overlap. He suggested to avoid confusion, it should be promoted that CCAC is focused on the research while GMI is more focused on the project development (e.g., technology, capacity building). Mr. Chavez also inquired about competing for the same resource allocation (e.g., who gets what) and again stated it will be a matter of definition.

Japan's Mr. Shimada thanked Mr. Zahedi and Ms. Shimamura for their overviews and expressed Japan's appreciation for both GMI and CCAC. He then sought to address Mexico's comment and concerns with overlap between the two partnerships. He noted that Japan has provided \$2.5 million per year to CCAC, but it might be a GMI project (i.e., more mature, shovel-ready) that receives the funding.

Poland's Mr. Kamienski also expressed problems identifying differences between the two in the realm of methane. He did admit that despite similarities in structure, there was significant difference in the frequency of meetings (e.g., GMI Steering Committee about once a year versus three to four high-level CCAC working group meetings per year) and emphasized the difficulty to effect change through GMI via e-mail exchanges between meetings. He indicated, however, that he viewed GMI as going beyond pure environmental issues, given its focus on methane recovery and use for energy, and also felt GMI was more systematic. He suggested the Steering Committee should discuss the benefits of mutual efforts as well as how to manage dual projects. He also noted GMI does not analyze the cost benefits associated with emissions reductions and perhaps this was an area CCAC might fill.

China's Mr. Guoshun Sun also thanked the presenters for their introduction, and noted the two efforts are different in principle; therefore, China views and supports both efforts individually. He suggested the Steering Committee should seek synergies rather than try to define differences since the two program were not intended to compete. He reminded participants that while CCAC might encompass methane, it is not its primary focus as is with GMI. The ultimate objective of both efforts is to help members reduce methane emissions and he sees no problem sharing information and resources. Mr. Guoshun Sun did, however, have a specific question regarding CCAC and the cooling effect of black carbon and volcanic dust. Mr. Zahedi offered to share a UNEP report on appropriate findings. In an effort to further resolve/clarify confusion, Mr. Guoshun Sun asked if GMI country action plans would incorporate emerging CCAC efforts. Mr. Ferland respond that based on previous discussion, it sounded as if Partners agreed one action plan would fit all so efforts developed under CCAC (or NAMAs) could be repackaged for GMI (i.e., no need for a separate plan).

Germany's Ms. Sieck also commented on the overlap and resources, saying CCAC is more time-consuming given volume of documents and number of meetings. She noted she would discuss with colleagues in Berlin how to proceed and cooperate fully, particularly as it relates to the KFW Bank and GIZ. She wondered about opportunities to combine efforts to be more powerful and indicated other questions remain regarding the multiple initiatives, as NAMAs are also broader than CCAC (i.e., encompass all GHGs).

United States' Mr. Turk interjected on the terrific discussion and again reminded participants that CCAC is broader than GMI, thereby justifying the need for both efforts. He also acknowledged China's insightful comment on sharing information and resources and expressed hope they would soon join CCAC. He provided additional justification for both programs in the form of process or flow, noting that GMI conceived the MSW and Oil and Gas Initiatives—which do have attributes of both efforts—but the CCAC is able to build greater momentum given its high-level backing and funding capabilities. He also noted CCAC goes beyond international partnership among countries (such as GMI) and provides the Scientific Advisory Panel to help guide decisions. He sees the process as a scaling-up approach, whereby GMI develops and implements the projects while CCAC helps to advance policy.

Mr. Turk noted the value added from CCAC in the MSW and Oil and Gas Initiatives that currently does not exist for other sectors (e.g., coal mines, wastewater) so there is a need to keep both efforts. He noted the relevance of Germany's comment by focusing on intra-agency cooperation since the U.S. State Department, U.S. EPA, and U.S. Department of Energy are involved in both efforts but might have different priorities under each program.

Japan's Mr. Shimada suggested it might be necessary to convene a brief meeting (e.g., teleconference) to help explain the differences and/or overlaps to the remaining GMI partnership. He reiterated Mr. Turk's comment regarding excellent discussion and encouraged the delegates to make the wisest decision moving forward.

Canada's Mr. Portalupi also suggested avoiding digging into differences but instead encouraged attendees to focus on synergies (e.g., improving emissions data, advancing technical information). He noted the 10 cities selected for the MSW Initiatives were selected based on past work and helps complement—not compete with—GMI's efforts to deploy technology. He also stated much of the conceptual work on waste NAMAs was derived in Stockholm, separate from both GMI and CCAC efforts. He was encouraged that what is currently being done might lead to new partnerships and interjected a soccer analogy about now having "two strikers on the field" (to win the game). He emphasized focusing on what it will take to win (i.e., reduce emissions) and encouraged attendees to think about the tremendous opportunities to work together. He expressed his view of GMI as the project "nuts and bolts" with CCAC as the mechanism to provide funding.

The EC's Ms. Wilde asked about the number of CCAC partners versus GMI, noting it wasn't entirely duplicative but there were several countries participating in both efforts. Like Canada, she viewed it as a doubling (versus duplication) of efforts. She also noted she sees more duplication between the Oil and Gas Initiative and the World Bank's Global Gas Flaring Reduction (GGFR) Partnership, but again finds benefits to both given the safety issues associated with offshore production (not addressed by CCAC) and other worldwide implications beyond venting, leaking, and flaring.

Mexico's Mr. Chavez said he was okay with seeking cooperation, but still sought definitions of GMI and CCAC as they apply to methane. He also questioned what CCAC will support (e.g., just cities?) and whether its coverage was as broad as GMI (i.e., country-wide). He noted this was particularly important in Latin America. India's Mr. Prasad indicated it was not just a question of focus, but which effort addressed the most dangerous pollution with affordable technology in the near-term. Finland's Mr. Mäkelä admitted he was no GMI or CCAC expert and while he sees the potential for overlap, he felt the problem could be avoided through cooperation to avoid duplication. He noted both organizations should not reduce or replace each other's critical work on climate change.

UNEP's Mr. Zahedi thanked the participants for all their constructive comments. He noted UNEP does not have all the answers but CCAC is prepared and willing to work together. He affirmed that CCAC is not a replacement for UNFCCC (i.e., not a climate instrument) nor is it a strict financing mechanism (e.g., will look at how to shape investment[s] that others make). He emphasized CCAC is focused on policies (e.g., diesel program) that he hopes will lead to wide-scale changes. He noted, however, it is not easy to organize ministerial-level meetings and there are frequent changes with personnel (e.g., recent changes within Mexico's administration). He said they were encouraged by the success of GMI's practice for sharing information and conducting joint meetings. He also noted that in both instances, the greatest resources are the Partners. He also stated joint CCAC/GMI investments and projects might help both programs get over the hump of development barriers.

Regarding the climate science, Mr. Zahedi indicated it is not finished but is constantly evolving. He said they have found SLCPs have a higher GWP than originally estimated, particularly when it comes to heating associated with black carbon versus the perceived preventative cooling (i.e., pure climate). He also noted no global health issues (e.g., ozone-associated death) were taken into consideration, which often comprise the most convincing arguments. He emphasized the overall climate argument is a work in progress, stating the one degree increase could impact millions of lives and result in a big level change.

Argentina's Mr. Zopatti commented new initiatives appear every few years to fill space, and it can be difficult to follow but he also sees how it might be possible to overcome overlap through coordination. From a developing country perspective, he noted if GMI was absorbed by CCAC, Argentina might not be able to support the latter. He stated Argentina would support, however, a transfusion of policy into GMI (versus relying solely on CCAC).

Steering Chair Ms. McCabe thanked everyone for their comments and sought to recap the consensus and suggest next steps. Based on the discussion, she gathered Partners felt both efforts could co-exist and GMI might be able to achieve more by cooperating with CCAC (i.e., learn from each other). She also noted opportunities to leverage CCAC resources such as the Scientific Advisory Panel and funding. She pointed to four emerging themes:

- Coordinate and share information (i.e., continue apprising GMI member of CCAC activities).
- Put systems in place to increase frequency of GMI meetings (e.g., mid-year Steering Committee teleconference) and encourage subcommittee participation in CCAC's Agriculture, MSW, and Oil and Gas Initiatives.
- Hold joint GMI/CCAC meetings (e.g., GMI Steering Committee with CCAC Working Group, GMI MSW Subcommittee with CCAC MSW Initiative meetings).
- Conduct joint GMI/CCAC projects by sharing resources.

She tasked the ASG to flesh out details, make suggestions for next steps, and report back to the Steering Committee in six months.

Financing Methane Projects and Funding Methane Activities

Ms. McCabe opened this discussion by noting the unique opportunity to have Mr. Quesnel from the World Bank to answer any questions that arise. Mr. Ferland provided an overview—via the <u>Financing Methane Projects and</u> <u>Funding Methane Activities white paper</u> and accompanying <u>Financing presentation</u> of the situation that currently exists within GMI. By way of background, he noted GMI had been more focused on capacity building and technology transfer versus actual project development in the absence of a centralized fund from which project financing can be provided. He also reviewed the ASG's previous research into possible funding mechanisms, only to find there was still no way to establish and/or tap a centralized fund within GMI itself.

With the launch of CCAC, the World Bank issued a solicitation for a Methane Finance Study Group (MFSG) to explore "pay-for-performance" options for project development. Mr. Ferland noted the group met here at the Expo (for which Mr. Quesnel will provide an update) and which the U.S. State Department is funding. The MFSG has been looking at a range of mechanisms, as well as possible barriers and solutions and how to make a case for project funding in the absence of CDM. The final MFSG report is anticipated by April 2013.

Mr. Ferland provided an overview of CCAC efforts as they relate to funding, particularly the process for activities and stakeholder engagement. He noted the funding process is still being defined and this might present an opportunity for GMI to engage CCAC for mutual benefit (e.g., joint projects, synergies).

To help leverage resources, GMI and CCAC could conduct join meetings as suggested by Ms. McCabe. Joint meetings might allow both groups to take advantage of multiple funding streams, similar to the opportunity to leverage U.S. EPA and Environment Canada resources by holding CCAC meetings at the GMI Expo.

In closing, Mr. Ferland outlined the items for Steering Committee consideration including:

- Encouraging Partners to include information on bilateral funding assistance in their action plans
- Tasking the ASG to review MFSG report and provide summary results
- Pursuing more active CCAC engagement
- Indentifying leveraging opportunities (e.g., joint meetings as previously discussed)
- Leveraging funds for direct methane reduction projects

Mr. Quesnel provided additional detail regarding each of the elements Mr. Ferland outlined. He clarified while the World Bank is facilitating the MFSG, it will not be a WB report. It is the group's mandate to look at mechanisms for resource-based methane (e.g., CDM). He noted there are a series of mechanisms offering a bridge between shovel-ready projects and available funding currently available:

- Output-based aid, including pilots for waste management.
- Carbon markets, which are policy-based and sector-wide (this might lead to future market mechanisms similar to UNFCCC). There is still lot of work to be done in this area, however, including analysis and determining how to scale up such activity.
- CDM infrastructure (e.g., methodologies, protocols) using public resources despite carbon market construction could be paired with an option for carbon pricing (i.e., lowest cost, greater result).

The report is anticipated to be delivered to the G8 by the end of March (for public distribution in April). The G8 will still need to ensure next steps as well as how to stimulate interest and generate financing.

Ms. McCabe asked for input from the Partner Countries based on their experience. Japan's Mr. Shimada commented on the lack of a centralized GMI fund and wondered how the Initiative currently covers project costs. He also inquired if GMI was exploring a new or existing fund such as the World Bank and/or CCAC. He lastly expressed concern that given the voluntary nature of GMI and CCAC, how either effort will be able to set carbon market targets to generate credits.

United States' Mr. Eil thanked Mr. Quesnel and the ASG for helping Partners understand the weighty challenge of financing and how to take a potential project over the line. He noted there are approximately 1,200 CDM projects that yield 850 MMTCO₂E in emissions reductions, while GMI projects have reduced emissions by 150 MMTCO₂E; therefore, GMI projects are on par. He also acknowledged the tremendous work that has been put forth by GMI to identify project opportunities (e.g., Expo posters). He encouraged everyone to think how to draw links between potential projects and financiers/developers more tightly to increase funding.

Mr. Laurence Blandford with Environment Canada indicated the NAMA issue reaches beyond the carbon market and noted developers might need to choose how to finance (i.e., if carbon market, it would be up to the purchaser). He continued by saying Canada would like to see treatment of the project pipeline not as potential offsets but as contributions to emission reductions. He also commented on the lack of a centralized CCAC funding mechanism (i.e., overarching umbrella) and noted money might only be available at the sector level for specific initiatives (e.g., MSW, brick production). He said the idea for a financial strategy should be transformational and while project funding might be catalyzed from CCAC, he hoped that complementary funding from other sources could be added. He closed by saying he viewed the forthcoming G8 report as a roadmap for navigating the finance issue.

China's Mr. Guoshun Sun indicated all those in the room see the importance of greater funding and felt they could encourage Partner governments to attach more prominence to project development and financing options (e.g., in-kind assistance, bi-lateral cooperation). He also recommended greater information sharing among or with developers through the World Bank or other channels. This feeds into the need to promote increased communication, particularly as it relates to achievements.

China's Mr. Zhen Sun stated admittedly that governments should be more involved, noting China had conducted a brief survey of it regions under a previous U.S. EPA grant with the objective to learn how to improve procedures and make wiser use of limited funds. He also noted it was important to use World Bank procedures to influence or change country policy toward funding and that it is not enough to pay for performance (i.e., can't save the carbon market). Mr. Guoshun Sun added to that last comment by noting in the absence of CDM funding for more projects, it might be possible to step-up contributions as in-kind assistance.

EC's Ms. Wilde asked if the G8 report will guide World Bank procedures, to which Mr. Quesnel responded it will be dependent on the report's recommendations as well as World Bank resources. He also noted there might be a future G8 request to determine what the World Bank might be able to achieve with existing mechanisms.

India's Mr. Prasad asked who might be the recipients of identified funding. Mr. Quesnel said it would depend on the avenue (e.g., output-based approaches might be targeted toward governments). United States' Mr. Eil stressed the importance of looking at activities beyond reviving the carbon market. He noted the plenary session the next morning would provide another opportunity to engage financiers. He also stated it was encouraging to hear information on export development banks working under the purview of CCAC, but he felt there were still opportunities to cooperate with the private sector as well as government.

Canada's Mr. Blandford acknowledged NDRC's comment on the World Bank element of intra-country agencies to make funding requests. He also noted that banks' shareholders might be able to help identify projects and GMI should look into how to reach out and invite them to participate. He said having a well-defined financial strategy could also advance efforts and wondered what GMI/CCAC could do with the forthcoming G8 report, suggesting the group(s) could bring back input or feedback to help development future World Bank action. He recognized this might also require an awareness raising process and encouraged utilizing existing connections between agencies.

China's Mr. Guoshun Sun stated the need to bring Steering Committee attention to the shrinking CDM funding as an urgent issue. In China, for example, the coal sector generated 11.4 billion m³, of which 3.8 billion m³ or one-third has been recovered and utilized through CDM projects. He emphasized there is significant remaining potential. He indicated that financing (or securing funding) is not the only problem, but lack of technology and/or technical assistance. He thought rather than bringing more attention to the financing issue, the partners should encourage attention be paid to potential methane reductions and benefits for the private sector to cooperate (e.g., profits).

Steering Chair Ms. McCabe interjected that as a new participant, she viewed GMI more as a capacity-building vehicle versus funding mechanism and noted that with hundreds of shove-ready projects simply awaiting funding, the Initiatives should view that as success. In other words, it is not GMI's job to implement the projects but rather to help identify and prep them for funding. She asked of attendees "what does that say about GMI's capabilities," and whether it's the expertise to help prioritize projects and its other strengths to build upon, or does GMI want to switch gears and seek greater funding mechanisms? Mexico's Mr. Chavez acknowledged China's comment on the shrinking CDM system and the long, drawn-out process to get funding. He encouraged GMI that whatever action they choose, do not produce the same or bureaucratic and inefficient mechanism (i.e., avoid repeating poor models).

Ms. McCabe and Mr. Quesnel both thanked the attendees for their thoughtful and insightful comments. Mr. Quesnel also clarified that none of the MFSG proposals will suggest trying to revive the carbon market. Instead, emphasis would be placed on trying to link project development with sustainability and make that connection. As previously noted, if someone is interested in pursuing something similar to the CDM, it will fall to the purchaser.

To wrap up discussion, Ms. McCabe reviewed the items for Steering Committee decisions:

- Encouraging Partners to include information on bilateral funding assistance in their country action plans
- Tasking the ASG to review MFSG report and provide summary results
- Pursuing more active CCAC engagement
- Indentifying leveraging opportunities (e.g., joint meetings as previously discussed)
- Leveraging funds for direct methane reduction projects

Regarding #1, the United States' Ms. Franklin said they would support the activity, either through action plans (or whatever the document might be called) and/or seek to minimize duplication with existing efforts (e.g., national plans, NAMAs). Ms. McCabe suggested tasking the ASG to update the GMI Country Action Plan guidance to

reflect the discussion. Ms. Franklin also suggested the ASG could provide immediate outreach (e.g., broadcast email) to get the word out regarding time-sensitive RFQs and other opportunities that might be included in country action plans between Steering Committee updates. Based on the draft U.S. Country Action Plan, China's Mr. Guoshun Sun asked if countries should provide a list of potential or ready projects to encourage bi-lateral support from developed countries in developing countries, to which Mr. Ferland responded it would be helpful.

On #2, Ms. McCabe acknowledged Mexico's comment on keeping any G8 communications (e.g., MFSG report) separate from CCAC updates. Canada's Mr. Blandford specified the MFSG's efforts will end with the report but perhaps the ASG could provide follow-up on the suggested mechanisms. He recommended tasking the ASG with reviewing the report and suggesting ways to implement the results or findings, and then perhaps the Partners could take up action items as they align to country priorities.

Regarding #3, Mexico's Mr. Chavez suggested removing the "led by…" phrase, which met with other participant approval. United States' Mr. Eil inquired if others might be interested in convening an ad-hoc working group to continue the finance discussions and run analogs through the sectors/subcommittee. Hearing no response, Ms. McCabe asked if there was any value in reaching out to the entire partnership regarding an ad-hoc financing group. Japan's Mr. Shimada wondered aloud what the Partners would do and expressed he was unsure if they would come to a different conclusion than the MFSG. Mr. Eil indicated he was merely responding to what he heard from Partner Countries for need to continue the finance discussion and wondered if there might be internal steps the ASG could take (e.g., highlight shovel-ready projects on the GMI website).

Mr. Shimada indicated items #4 and 5 had already been addressed by previous CCAC-related tasks. Based on the questions posed by Ms. McCabe, Mr. Ferland noted it would be an entirely new effort for GMI to focus on financing. Regarding #5, Mexico's Mr. Chavez noted he was still looking for definitions in order to answer appropriately so as to avoid doubling efforts. Ms. McCabe stated the ASG task to coordinate with CCAC to resolve that issue.

Canada's Mr. Blandford expressed his view that GMI was a great source for project origination, which was not CCAC's strength. He moreover stated neither effort is looking for more work; he thought it was sufficient that GMI brought up cross-cutting issues such as financing at Partnership-wide meetings. In response to United States' Mr. Eil's inquiry about an ad-hoc finance group, Mr. Blandford suggested an Internet-based meeting (e.g., webinar) could be convened to review the MFSG report and discuss any lingering questions. Mr. Ferland reminded participants the chair had previously suggested an interim Steering Committee meeting in six months via webinar, during which time the ASG could garner direct feedback on the report. United States' Ms. Franklin echoed there was no need to create a separate group to continue the financing discussion. Ms. McCabe asked the ASG to tee up the report review in six months.

At the end of the discussion, Mr. Ferland thanked Ms. McCabe for serving as chair over the two days.

DAY THREE

Ms. Franklin opened the third day with subcommittee progress reports.

Subcommittee Progress Reports

Wastewater

Mr. Chris Godlove with U.S. EPA provided the <u>Municipal Wastewater Subcommittee progress report</u>. He explained the sector initially started as a task force and was elevated to subcommittee status in 2011. Since then, the subcommittee has been working to identify Partner delegates and establish its Project Network. The Municipal Wastewater Subcommittee is currently developing its sector action plan and will shortly issue a sector-specific fact sheet that will be posted to the GMI website.

Finland's Mr. Mäkelä thanked Mr. Godlove for his presentation and stated there would be a forthcoming wastewater grant to a Chinese university to help recommend possible technologies. He also noted there were only 14 countries on the Municipal Wastewater Subcommittee e.g., why aren't all countries participate in the subcommittee?), and he wondered if it might be useful to share the information with more Partners. Mr. Godlove responded it was great to hear about Finland's forthcoming grant and said the Wastewater Subcommittee would be happy to welcome additional interested participants.

China's Mr. Guoshun Sun congratulated Mr. Godlove on elevation of the Wastewater Task Force to a full-fledged subcommittee and expressed disappointment there was not a Chinese representation on the subcommittee, nothing that he would make an ask among his colleagues to get involved. He acknowledged the challenges encountered during the first year, but now sees the benefits for someone to participate and will make the case to his counterparts. Mr. Godlove commented on the early process challenges, including identification of interested countries and their appointed delegates. Now that process is complete, and the subcommittee can focus on moving forward. He noted that even at plants with digesters, which are fairly common, methane was escaping. He saw it as the subcommittee's role to call attention to these missed opportunities and provide technical assistance. Mr. Guoshun Sun added that although China might not be part of the subcommittee yet, there are already ongoing wastewater-related activities in that country. He admitted methane was released to the atmosphere if uncontrolled and encouraged the subcommittee participants to share any best practices and/or lessons learned with developing countries. Mr. Godlove indicated the subcommittee will consider the idea.

India's Mr. Prasad asked if there had been any input from his country. Mr. Godlove explained there were no official delegates or Project Network members from India, but he was aware of the upflow anaerobic sludge blanket digestion treatment and collection of gas taking place in that country so there was perceived interest.

The EC's Ms. Wilde explained its members have mostly centralized systems, the sludge from which is covered by landfill policies, but she sees the international significance for optimization as key. Mr. Godlove indicated he foresaw opportunities to share EC member expertise through the wastewater-related Project Network.

Oil and Gas

Mr. Mike Layer with Natural Resources Canada and subcommittee co-chair provided the <u>Oil and Gas</u> <u>Subcommittee progress report</u>. He opened by reviewing the Steering Committee's 2010 charge to expand GMI to include methane abatement, which has allowed the oil and gas sector to have a more holistic approach and also makes GMI the go-to organization for other oil- and natural gas-related partnerships. He outlined the outcomes for the Oil and Gas Subcommittee's April 2012 meeting in Denver, at which they celebrated several years of service by the previous co-chair from India (who stepped down) as well as heard the CCAC announcement directly from the U.S. State Department. He noted the oil and gas sector covers two-thirds of the CCAC, and sees the effort as a complement to GMI's sector-based approach and foresees the core CCAC competency as positioning to develop solutions (e.g., polices).

Again, Mr. Layer noted the benefits of GMI partnership is timely and current, as well as uniquely positioned to serve as the go-to for implementable solutions. In recent years, the Oil and Gas Subcommittee has been invited to participate at several engineering conferences to help provide perspective as it relates to policy and regulatory development. He also stated it has become apparent to GGFR the value of collaboration with GMI (e.g., joint meetings); again, complementary with no potential for redundancy anytime soon.

Mr. Layer also addressed NAMA's, for which Canada is providing assistance in both Columbia and Mexico. He closed by outlining next steps, which include identifying localized regions (e.g., Southeast Asia) where the Oil and Gas Subcommittee has not conducted past meetings and workshops. He emphasized the subcommittee will try to integrate activities with other efforts (e.g., CCAC Oil and Gas Initiative) so as not to create duplicative efforts while stressing GMI's technical competence and capacity building.

EC's Ms. Wilde asked if there were statistics on the top emitters in order to set priorities and get them involved. Mr. Layer said the data is important but perhaps not as critical as which countries have the greatest reduction

potential (e.g., technical capabilities) exclusive of emissions. He also noted the top ten emitting countries have always been on the list. Ms. Wilde thanked him for the information and said she would attend the Oil and Gas Subcommittee to learn more, particularly as it relates to national plans. She also commented the utilization of NAMAs is a requirement of government to be involved beyond the Project Network, but it doesn't mean they are truly engaged. Mr. Layer noted challenges associated with the former Asian-Pacific Partnership (APP) and how it thought industry should have a larger responsibility. The CCAC now has these ingredients in place, and GMI should seek to influence their efforts while still in its infancy. He emphasized the need to avoid yet another partnership where government expects industry to shoulder the burden.

Poland's Mr. Kamienski asked about emissions from excavation of natural gas from a life-cycle perspective. Mr. Layer noted there was a Cornell paper that explored emissions from unconventional gas that indicated associated emissions were similar to those from coal. He added that critics are using life-cycle analysis (LCA) against the energy sector, despite a lack of standardization for how LCA is conducted or why. He said the issue was important to the Oil and Gas Subcommittee and he encouraged the Steering Committee to take up LCA issues.

China's Mr. Guoshun Sun commented on the importance of the subcommittees to identify these types of issues (e.g., LCA) and echoed the EC's comments regarding data from GMI to show influence. He did question, however, the need to describe subcommittee meetings in lieu of project implementation. Mr. Layer explained oil and gas projects were described in the summary slides he did not present, but will be available online. He also acknowledged all of the work that has been done under China's Five-Year Plans, which include transition and how to transfer knowledge among stakeholders.

Mr. James Du Vernay for the U.S. State Department asked about Russia's participation in the Oil and Gas Subcommittee and also how the subcommittee interacts with GGFR. Mr. Layer responded the subcommittee currently lacks an active Russian chair and while they have been involved over the years, the country has only made sporadic advancement with limited outcomes. Regarding its work with GGFR, he noted the Oil and Gas Subcommittee has benefited from shared information. He indicated GMI would benefit from effective collaboration with CCAC through high-level awareness and being able to influence policies.

Municipal Solid Waste

Mr. Tom Frankiewicz, U.S. EPA and subcommittee co-chair, opened the <u>MSW Subcommittee progress report</u> saying he hoped there was as much interest in MSW as previous two subcommittees. He outlined subcommittee efforts to reposition itself to better address GMI's expansion (e.g., abatement) and reviewed the subsequent change in the subcommittee's name from "Landfill" to "MSW" to reflect the broader mission and draw boundaries around MSW (i.e., inclusion of organic fraction of solid waste, move beyond landfill gas recovery and use).

Mr. Frankiewicz provided an overview of the July 2012 Singapore tri-sector meeting among the Agriculture, MSW, and Wastewater Subcommittees, noting these stakeholders typically wear multiple hats and at Partnershipwide meetings, they often miss out on digester sessions when they have to choose between sectors. A tri-sector meeting helps facilitate those members' abilities to carry out their broad[er] realm of activities. During its July 2012 in-person meeting and subsequent November 2012 webinar, the MSW Subcommittee focused on identifying Expo topics and potential speakers, as well as checked in with Partners regarding development of their GMI Country Action Plans. He indicated that while not as robust as in-person meetings, webinars are a cost-effective way to get Partners together and he foresees using the technology to conduct topic-focused discussions (e.g., NAMAs) in the future.

From a tools perspective, Mr. Frankiewicz announced the MSW Subcommittee's *International Best Practices Guide* (BPG) is now available on CD. The subcommittee has partnered with the Solid Waste Association of North America to distribute the CD, and is currently working to translate the BPG into Spanish and Chinese. He also noted the *International Landfill Database* has been added to GMI's CRM, which allows users to manipulate the data by type and level of involvement (e.g., developer, end user) to identify potential projects.

Next steps for the MSW Subcommittee including continued repositioning and changing the way it works to reduce the "business" elements of subcommittee meetings and create more of a forum to share information and develop tools (e.g., modify LFG models to include anaerobic digestion options, adapt Canadian composting guide for an international audience). Mr. Frankiewicz also noted the subcommittee is identifying ways to provide input on NAMAs by sharing or leveraging resources versus replicating efforts. One way in which the subcommittee is contributing is through MRV discussions and development of a MRV template or guide.

Mexico's Mr. Chavez commented on the MSW Subcommittee's proposed next steps, particularly as it relates to landfill assessments and inventories, and wondered if there was similar data available for other sectors. Mr. Ferland explained how the CRM works and that only the MSW and agriculture sectors have Web-based interface to display data online but other sectors are forthcoming.

China's Mr. Guoshun Sun was excited to hear about the subcommittee's activities and looked forward to learning more about how to better manage China's solid waste. He noted they are currently working to collect information and control identified sites themselves, and also exploring opportunities to turn some sites into recreation areas. He hoped the subcommittee would take those types of projects into account. He also encouraged the subcommittee to include information on lessons learned, as well as best practices, because it's sometimes what didn't work that provides the most insight.

Mr. Guoshun Sun also asked—since so many of his questions were targeted toward all subcommittees—if the next two chairs could deliver joint presentations. Steering Chair Ms. Franklin indicated it was an interesting and valuable point to be more efficient, but the next two presentations would be Coal and Agriculture, which are quite divergent sectors. Mr. Ferland acknowledged it was a good idea from a time-saving perspective and perhaps they would combine Agriculture, MSW, and Wastewater together in the future.

United States' Mr. Eil inquired about the subcommittee's perspective of and/or linkages with the CCAC MSW initiative. Mr. Frankiewicz said the subcommittee shared the Steering Committee's view that GMI functions primarily as technical experts to share information and contribute to CCAC efforts, but still sees GMI as a separate mission.

EC's Ms. Wilde explained the EU landfill directive places emphasis on composting and recycling to reduce volume of waste landfilled, and asked about the subcommittee's position on these efforts. Mr. Frankiewicz reiterated the subcommittee's boundaries, which had previously been limited to methane recovery and use (e.g., LFG). Given GMI's expansion (i.e., abatement) and increased adoption of organics bans, the MSW Subcommittee does look at opportunities to process organics via AD to purposefully use the biogas (versus land application of compost). While he acknowledged diversion is part of the preferable waste management hierarchy (e.g., reduce, reuse, recycle), it is outside the purview of GMI's scope to abate, recover, and use methane.

Germany's Ms. Sieck commented the subcommittee's name change reflected an expanded view, like in NAMAs at the national level, noting that one cannot look at just one element of waste management but needs an integrated approach, and she will be interested to learn what comes out of the CCAC MSW Initiative.

Coal Mines

Ms. Felicia Ruiz with U.S. EPA and subcommittee co-chair provided the <u>Coal Subcommittee progress report</u>. She began by describing the virtual Internet-based meeting held in May 2012, and the subsequent in-person meeting held in September 2012 in conjunction with Australia's CMM seminar and workshop. During both sessions, she said the subcommittee discussed Expo themes, topics, and speakers as well as how best to address methane abatement beyond typical capture and use by reviewing a white paper on flaring. At the September meeting, the subcommittee discussed opportunities to engage with CCAC, continued to plan in earnest for the Expo based on the topic abstracts received and also identified moderations for its sessions, and reviewed *International CMM Database* updates. During the Coal Subcommittee held on the previous day, 75 representatives—the most to date—discussed updates to the sector-specific action plan.

EC's Ms. Wilde asked why they were updating the coal sector plan. Ms. Ruiz explained the process (e.g., review/revise to reflect current status), stating the sector action plan was last been updated in 2010 and more than 100 additional vendors had joined since that date. China's Mr. Guoshun Sun asked if CBM activities would be incorporated, to which Ms. Ruiz responded the document includes both CMM and CBM.

Poland's Mr. Kamienski asked where the next Coal Subcommittee might meet next, and suggested it be convened in conjunction with the 19th Convention of Parties (COP19), to be held 11-22 November 2013 in Warsaw. Ms. Ruiz explained the next subcommittee would likely be held via the Internet (i.e., webinar) since they were only recommended to meet face-to-face once per year. Mr. Guoshun Sun expressed support for an additional in-person meeting but suggested it take place in advance of the COP, stating delegates are too busy during negotiations. Ms. Franklin noted the Steering Committee would be discussing its next meeting later, which might impact the Coal Subcommittee. Japan's Mr. Shimada suggested holding a Partnership-wide meeting—not just coal—in advance of COP, but admittedly it might be difficult for some people to be away for an extended period of time. He did note the CCAC was holding its meeting at COP. Mr. Kamienski explained his intent that the Coal Subcommittee meeting be held in the coal areas of Poland, rather than Warsaw. Ms. Wilde suggested holding the subcommittee meeting in conjunction with the World Coal Association meeting to be held 20-22 October 2013 in Berlin, Germany.

Agriculture

Ms. Allison Costa, U.S. EPA and subcommittee co-chair, provided the <u>Agriculture Subcommittee progress report</u> and expressed regrets from fellow co-chairs Jorge Hilbert, Argentina and Anil Dhussa, India for being unable to attend the Expo. Continuing, she explained the subcommittee had a busy year, having conducted two webinars as well as an in-person meeting in Singapore in July 2012 and the preceding afternoon.

During the April 2012 webinar, the subcommittee discussed its declining participation (due in part to recent turnover in Partner governments) and determined a Statement of Purpose might help others see the value of being involved in the agriculture sector. These discussions continued in Singapore, along with a subsequent phone survey to Partners, and the final Statement of Purpose was revealed in late 2012. During the previous day's subcommittee meeting, attendees reviewed a draft *International BPG* currently under development which reflects subcommittee-wide efforts. To date, Partners have submitted case studies for the BPG; yesterday's comments will be incorporated and a revised version will be circulated. During the next phase (e.g., late 2013), the subcommittee will add Partner insight on finance challenges and solutions.

Ms. Costa re-affirmed the Agriculture Subcommittee will not address enteric fermentation at this time and announced she anticipates the subcommittee will convene via webinar later this year.

Canada's Mr. Blandford noted Mr. Eil, U.S. State Department, and Sunny Uppal, Environment Canada, presented on the CCAC Agriculture Initiative the previous day and a majority of their talk focused on enteric fermentation and rice cultivation, whereas GMI is comprised mostly of AD experts. Japan's Mr. Shimada asked what differences might exist within the agriculture sector if only methane is included under CCAC (unlike other sectors that include black carbon). He also suggested that each GMI sector develop a BPG. Ms. Costa said Coal and MSW have also developed BPGs.

Mr. Eil responded to the question regarding potential overlap between GMI and CCAC's agriculture efforts. He noted the CCAC Agriculture Initiative is only an initial draft so there is plenty of opportunity to ensure it complements—versus competes with—GMI. He also echoed Canada's comment that CCAC is more focused on enteric and rice because GMI does not address those sources. He congratulated the Agriculture Subcommittee on the draft BPG but recognizes the financing phase is forthcoming. Ms. Costa admitted financing always presents challenges for Partners and she anticipates the profile will contain a variety of progress updates from various projects. She also noted it will likely contain policy information other countries can use.

Ms. Franklin thanked Ms. Costa for her presentation, and expressed her appreciation for the substantive inputs from all of the subcommittees. She also commended the BPG efforts for the sectors that have prepared them, and

encouraged the other sectors to consider developing similar documents. Mr. Shimada suggested it might be helpful to consider best practices across all of GMI, not just the sectors. He noted the Best Applicable Technologies (BAT) document was one of the APP's best-selling and meaningful guides that described key outcomes. He added that if undertaken, it should be coordinated by the Steering Committee. Canada's Mr. Portalupi echoed such a document would be valuable to the overall partnership and might also help to engage the Project Network as part of the outreach and communications strategy. Mr. Eil also concurred, stating GMI could export the BPG to a broader community to attract new Partners. He added the guide should focus more on technical assistance, in which GMI has the most experience, but also touch on issues related to policy and financing. Argentina's Mr. Zopatti suggested for the financing component, the guide should include information on how the Partners secured funding. In particular, he said the guide should not just include success stories but also projects that failed so others might learn from (and not repeat) their mistakes. China's Mr. Guoshun Sun also supported the concept but stressed it should be promoted only as a guide—not a standard—for Partners and other countries. He noted that if perceived as standards, developing countries might be hesitant to undertake efforts they cannot reach. Instead, he encouraged making the guide a collection suggested improvements and lessons learned. Mr. Portalupi noted he felt GMI was now at a crossroads and might mark its maturity past capacity building toward project implementation, so he hoped the guide could also be used as an opportunity to demonstrate how to facilitate implementation coupled with case studies.

EC's Ms. Wilde asked for better metrics from the subcommittees. While she appreciated the formal report, she noted different formats and lack of consistent key indicators. She said she would also like to see minister participation at the subcommittee level and encouraged using the subcommittees' expertise to get new Partners. Ms. Franklin reminded everyone of the varying subcommittee maturity, noting the wastewater sector is new.

Poland's Mr. Kamienski commented on the need to summarize activities oriented by countries and/or organizations that need technical assistance. He referenced the GMI *CMM Country Profiles* document, which includes assessment from 70 countries and emphasized a majority of the report highlights opportunities for methane reductions and what is needed. He added this type of information allows developers to identify priority countries for projects.

Japan's Mr. Shimada echoed Argentina and China's insistence to include lessons learned, as well as China's comment about not setting standards (e.g., purely domestic experience). China's Mr. Guoshun Sun interjected those lessons learned should include what didn't work. He also stated there was no need to hear how many meetings subcommittees have held and what they talked about. In line with the EC's call for metrics, he said he would prefer to hear information on the number of projects undertaken and results (e.g., statistics), such as the number of new subcommittee members since the last Steering Committee meeting. Mr. Guoshun Sun also opposed Poland's suggestion regarding the need for conducting country assessments, since that is already being done by UNFCCC. He encouraged GMI to simply borrow the methane-related information and avoid duplication, noting fatigue and repackaging opportunities as discussed for country action plans. Australia's Mr. Murphy commented the CMM BPG is a good example of a useful BPG that does not attempt to impose standards, but builds broader understanding of the key issues. United States' Mr. Eil seconded Japan and China's view of subcommittee read-out reports and suggested a format similar to the discussion white papers for Steering Committee review in advance of the meeting, thereby reserving meeting time for questions and answers (O&A) as well as to clarify any discrepancies. He continued by recommending any BPG should highlight opportunities to match policies and technologies within countries to make the information more relevant to developers as well as match expertise more strategically.

China's Mr. Guoshun Sun returned to the EC's comment on data and how GMI has made a difference, noting 2014 would be GMI's 10th anniversary and provided an excellent opportunity to package and promote achievements. He also re-emphasized there was no need for separate assessments; countries should include technical needs within their country action plans in hopes the Project Network would be able to meet those needs. China's Mr. Zhen Sun added the need for better management of knowledge from GMI experts and suggested creating a directory.

Steering Chair Ms. Franklin summarized the discussion to capture consensus. First, she noted Partners felt it would be helpful to have a different subcommittee format template, with more of the substance provided in an advance white paper and restructured meeting discussion to improve efficiency and create more focus on Q&A. Secondly, she heard the desire for a comprehensive BPG (not just by subcommittees), noting it would be an important—but ambitious—project. She suggested tasking the ASG with developing a scoping paper to determine the amount of existing content and how the document might be organized (e.g., format/design). She thanked China for pointing out 2014 is GMI's 10th anniversary and thus, will be a big year. She noted the Partner Accomplishment Report (PAR) released in 2009 was a tremendous effort; in part, because the Partners were not forthcoming with information. Mr. Ferland commented he sees the value in such document and reminded the delegates of the importance of designating points-of-contact (POCs) to review and ensure a complete, inclusive report. This is similar to the charge tasked to Partners in 2007 and a very necessary step in the process.

Japan's Mr. Shimada noted the need for more Steering Committee collaboration—and perhaps including previously discussed lessons learned here instead of BPG—and suggested establishing a task force to oversee 10th anniversary report development. He envisioned POCs would participate in periodic task force calls to discuss progress, and the need for them to do more than just send information to the ASG. EC's Ms. Wilde wondered if the GMI Country Action Plans might provide enough information for the proposed report. Mr. Ferland indicated they shouldn't rely on one document to substantiate the other. Ms. Franklin seconded Japan's concept for an anniversary team and recommended Mr. Shimada lead the effort.

Mechanisms to Increase Sector Subcommittee Engagement

Mr. Ferland provided an overview of the <u>Mechanisms to Increase Sector Subcommittee Engagement white paper</u> via accompanying <u>Sector Engagement presentation</u>, noting aspects of this white paper had been raised by the EC and Poland during other discussions. He explained GMI has tried different models to increase participation while remaining cognizant of travel time and costs. In recent years, the subcommittees have employed various meeting formats, including:

- Conjoined with other industry-related conferences (e.g., International Solid Waste Association).
- Joint or multiple sectors, such as the tri-sector Agriculture, MSW, and Wastewater meeting in Singapore.
- Partnership-wide meetings (exclusive of an Expo), such as Krakow.
- Internet-supported conference calls (e.g., webinars); while cost-effective, this format is difficult given numerous time zones.

Despite the success some of these options have achieved, he noted the best approach appears to be a sector-based only approach (e.g., individual subcommittee meetings), with periodic Partnership-wide meetings and Steering Committees on the side. He suggested this as the best format for the proposed 10th anniversary and noted the ASG is currently seeking hosts.

Mr. Ferland outlined the issues for Steering Committee consideration, including:

- Leveraging linkages to CCAC by holding related sector meetings with its initiative meetings (e.g., MSW, Oil and Gas), noting that CCAC co-located its meeting with the Expo this time around.
- Funding from developed country Partners for developing country delegate travel, similar to past support (e.g., NEDO, ADB) or via bi-lateral agreements or grants associated with in-country efforts (e.g., NAMAs).
- Holding a Partnership-wide meeting in late 2014, noting that Serbia has tentatively volunteered.

Mr. Ferland acknowledged several of these issues are slightly redundant with previously-discussed topics—especially as they relate to CCAC and finance. He then opened the floor to comments.

Japan's Mr. Shimada stated there is already transparency on support which is complementary to CCAC. For funding delegate travel through existing projects, he felt it might depend on flexibility and legalities within the

countries' agreements. He echoed Mr. Ferland's comment regarding CCAC (i.e., better coordination and integration with other methane-related initiatives) had been address previously, but he wondered if the forthcoming MFSG report would include funding suggestions for delegate travel or just projects; if the former, that might answer the second issue. Regarding a late 2014 Partnership-wide meeting, Japan would support Serbia's offer to host.

Canada's Mr. Blandford responded the MFSG would only address project funding and Ms. Franklin emphasized this discussion focused on increasing developing country participation. She noted broad consensus to make the 2014 meeting Partnership-wide and not scatter the sectors. Australia's Mr. Murphy asked if Serbia offered to hold a Partnership-wide meeting. Mr. Ferland said yes, but initial discussions did not include when or where within Serbia.

Regarding delegate travel, Mr. Shimada commented on the need to pool resources that include funding for administrative and travel costs and wondered if GMI had explored possible financing structures. United States' Mr. Eil stated GMI was dependent on more diversified funding from other Partners and/or initiatives (e.g., CCAC trust fund) for attracting additional resources. He noted bureaucratic challenges to GMI creating a centralized fund and therefore, why the ASG was unable to receive travel funding directly. He encouraged Partners to think about multi-lateral efforts and/or banks that might fund delegate travel and look for other opportunities for possible linkages (e.g., GMI Project Network, CCAC).

Finland's Mr. Mälekä thanked the ASG for its presentation and 24/7 work on GMI. While he thought the paper was well-developed, he did not find the questions to be concise and wondered if the Initiative shouldn't already be doing these efforts. Ms. Franklin reformulated the issues into two essential questions:

- Does the Steering Committee agree to hold a 2014 Partnership-wide meeting?
- In light of the number of CCAC meetings (i.e., three to four per year), should the Steering Committee increase the frequency of its meetings, including another in-person meeting or webinar in late 2013?

Japan's Mr. Shimada responded "yes" to the first question and indicated if it was only the Steering Committee that was meeting (not entire Partnership), conjoined with the COP, this might be feasible toward accomplishing the second question—as long as it was not the second week of negotiations. EC's Ms. Wilde indicated Serbia has applied for EC membership, which will make it eligible for funding. She also suggested GMI approach Turkey as a possible host. Mr. Ferland recognized there are several Eastern-bloc country opportunities and the ASG will be approaching Turkey, given ease of travel from most GMI Partners. China's Mr. Guoshun Sun concurred with Japan's suggestion the first week of COP might work, stating perhaps the Steering Committee could meet for a short three to four hour meeting. He also asked if about past meeting patterns and whether the Steering Committee met in 2012. Ms. Franklin provided a list of past Steering Committee meetings, indicated they met about every 12 to 18 months.² Mr. Shimada announced the CCAC working group would be meeting twice in the coming months (July in Norway, September in Mexico), which might also provide opportunities for co-locating Steering Committee meetings. Mr. Eil noted it might be beneficial for the Steering Committee (only) to meet in person for a second time in 2013 to continue the substantive discussions, but emphasized it was a question of convenience and wondered if there might be other useful junctions. He said the United States would also support a Partnershipwide meeting in 2014, but encouraged the ASG to do more research into possible hosts and keep options open (e.g., explore other venues).

Status of GMI Outreach & Communication Efforts

Ms. Monica Shimamura with the ASG provided a brief overview of the <u>Status of GMI Outreach &</u> <u>Communications Efforts white paper</u> and accompanying <u>Outreach presentation</u>. She noted the ASG maintains and

² Past Steering Committee meetings include: November 2004 (Washington, DC, USA); November 2005 (Buenos Aires, Argentina); December 2006 (Rome, Italy); October 2007 (Beijing, China), January 2009 (Monterrey, Mexico), September 2009 (Washington, DC, USA); March 2010 (New Delhi, India); September 2010 (Mexico City, Mexico); and October 2011 (Krakow, Poland).

routinely updates the GMI website, as well as prepares the *Methane International* newsletter. She emphasized the newsletter is for the Partners and the ASG would like to see more country-related highlights and articles (e.g., recent Australia and Canada stories). Ms. Shimamura explained the ASG also maintains and updates the CRM, which includes site identification and allows for reporting (e.g., emission reductions). She outlined the other outreach mechanisms (e.g., fact sheets, press releases) and noted the number of Project Network members is approaching 1,200. She provided preliminary Expo statistics (e.g., more than 425 participants from approximately 40 countries, nearly 100 posters) and closed by noting the social media outlets GMI employs, including Facebook, Twitter, and LinkedIn. She then invited questions or comments from the meeting attendees.

Australia's Mr. Murphy asked about the size of the GMI team responsible for all efforts. Ms. Shimamura explained she and Mr. Ferland serve as ASG co-directors, with additional U.S. EPA personnel as sector leads and contractor support for the various products and sectors.

Canada's Mr. Portalupi asked if the Partners, particularly the administrative liaisons, could receive list of the Project Network members within their countries so they can see who's participating. He recommended including the list with any new Partner welcome packets. United States' Mr. Eil asked how it might be possible to work more closely with the Project Network and suggested featuring them in website and/or newsletter spotlights to demonstrate their lively and colorful experience. Ms. Shimamura said they are always open to featuring Project Network members—just need willing participants.

In response to the request for website updates, EC's Ms. Wilde indicated she would send dates for upcoming ECrelated conferences. She also asked if Partners had access to existing sector plans and Mr. Ferland noted they are currently linked from the sector-specific Web pages as well as on the individual pages.

Japan's Mr. Shimada asked for GMI's Twitter handle, which Ms. Shimamura provided with caveat there are few followers but GMI hopes to re-invigorate. Finland's Mr. Mälekä asked if the subcommittee and other Expo proceedings would be posted on the website and Mr. Ferland indicated they would be posted within a month. China's Mr. Zhen Sun commented on the importance of climate change issues and providing information for teachers and students, and wondered if it might be possible to refresh the GMI outreach materials. Ms. Franklin recognized the need to market to secondary audiences and noted there is an existing CCAC video on SLCPs.

Recap

To summarize the week's discussion, Steering Chair Ms. Franklin noted the <u>following consensus elements</u>. On the GMI Country Action Plans, discussions revealed the need to address barriers, provide continued support, and increase flexibility (e.g., links to other documents, possible new or softer names). During CCAC discussions, primary topics included perceived differences (e.g., GMI strength = technical expertise; CCAC = high-level involvement, funding), concerns regarding potential overlap or duplication, and improved communications and coordination.

Mexico's Mr. Chavez noted the only thing that can be said about CCAC is that it's about to play an important role (i.e., not "tried and true" since relatively new). United States' Mr. Eil echoed Mexico's comment and emphasized GMI already has achievements. Returning to Canada's previous soccer analogy about having two strikers, he noted it's more like they're playing at the same time/game. Ms. Franklin acknowledged the relative timing issues related to the emerging CCAC and more mature GMI, and would change the language to reflect it.

On financing, Ms. Franklin re-iterated the ASG has been tasked with disseminating information regarding the MFSG report once released. Canada's Mr. Portalupi asked if banks could also provide updates and/or postings when they have solicitations available, noting this might be a good way to engage them and provide additional linkages. Japan's Mr. Shimada re-introduced the concept of convening an ad-hoc finance group, which was met with little interest.

Regarding 2014 as GMI's tenth year, Ms. Franklin noted the attendees agreed the ASG should explore development of a summary report—possibly as a BPG—as well as a Partnership-wide meeting. Next steps for the

Steering Committee include holding one in-person meeting and possibly an additional webinar in 2013. All Partners will be tasked with designating a POC for the 10th anniversary report. Mr. Eil asked if the subcommittees could be tasked with providing more detail on funding barriers to ensure GMI is looking for the right solutions. Japan's Mr. Shimada seconded the notation, and also asked for sector-specific needs regarding delegate travel funding required. He also wondered about making the 2014 event a ministerial-level meeting. Mr. Ferland said since the CCAC meetings were predominantly ministerial, the ASG would explore options to co-locate meetings. Ms. Franklin acknowledged ministerial-level meetings are more work, but it might be worth it for the anniversary.

EC's Ms. Wilde expressed interest in engaging more GMI Partners, especially Steering Committee delegates. United States' Mr. Eil seconded the notion, and stated GMI's outreach and communication efforts need to be more strategic. He also wondered how best to deploy all of the Initiative's information on the GMI website. Poland's Mr. Kamienski added his observation this meeting had fewer members present than in the past and suggested inviting all Partners to the Steering Committee meetings. Mr. Ferland responded the ASG extended invitations to all Partners for this meeting and the low attendance was more a symptom of lack of resources and being in more than one place at one time (e.g., competing sector-specific technical and policy sessions).

Hearing no further comments on the summary and next steps, Ms. Franklin thanked the participants for their contributions over the three afternoons and wished everyone safe travels home.

The meeting was adjourned.

APPENDIX A STEERING COMMITTEE AGENDA

<u>Item</u>

Document

	Day One – Tuesday, 12 March at 14:30	
Agenda 1	Welcome and Opening of the Meeting	
Agenda 2	Introductions	
Agenda 3	Statement of Meeting Goals	
Agenda 4	Adoption of the Agenda	
Agenda 5	Brief Country Statements and Updates (Remarks to be 5-7 minutes per country)	
	 Argentina Australia Italy Brazil Japan Canada Mexico China Nigeria Colombia Poland Ecuador Republic of Korea European Commission Finland Ukraine Germany Ghana United States Bold Partners have indicated they will participate in the meeting. Mongolia, Norway, Pakistan, and Thailand might also participate as official observers. 	
Agenda 6	Status of GMI Country Action Plans**	GMI2/Doc.1
Adjourn at 18:30	End of Day One	
	Day Two – Wednesday, 13 October at 13:30	
Agenda 7	Welcome/Re-Opening	
Agenda 8	GMI's Relationship with CCAC**	GMI2/Doc.2
	Break 15:30 – 16:00	
Agenda 9	Funding Support for GMI Activities and Methane Projects **	GMI2/Doc.3
Adjourn at 18:00	End of Day Two	

	Day Three – Thursday, 14 March at 11:00	
Agenda 10	Reopening	
Agenda 11	 Progress Reports from Subcommittees Agriculture Co-Chairs Coal Co-Chairs Municipal Solid Waste Co-Chairs Municipal Wastewater Co-Chairs Oil & Gas Co-Chairs 	
	Lunch 12:30 – 13:30	
Agenda 12	Mechanisms to Increase Sector Subcommittee Engagement**	GMI2/Doc.4
	Break 15:30 – 16:00	
Agenda 13	Status of GMI Outreach & Communications Efforts**	GMI2/Doc.5
Agenda 14	Next Steps/Charge to Subcommittees	
Agenda 15	Other Business	
Adjourn at 18:00	End of Day Three	

**Background or concept papers on the key topics will be provided.

APPENDIX B STEERING COMMITTEE PARTICIPANTS

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