



METHANE TO MARKETS PARTNERSHIP AGRICULTURE SUBCOMMITTEE MEETING

2nd Session of the Agriculture Subcommittee
Instituto Nacional de Tecnología Agropecuaria (INTA), Buenos Aires, Argentina
16 May 2007

Meeting Minutes

Summary

The second session of the Methane to Markets (M2M) Agriculture Subcommittee was conducted on 16 May 2007 in Buenos Aires, Argentina. The meeting was hosted by Argentina's Instituto Nacional de Tecnología Agropecuaria (INTA).

The subcommittee meeting was preceded by a two-day workshop organized by INTA, entitled *Strategies and Challenges to Implement Anaerobic Digestion Systems in Agriculture*. The agenda and presentations from the workshop will be posted online on the M2M Web site (<http://www.methanetomarkets.org/events/past.htm>).

The main objective of the meeting was to plan the agriculture portion of the upcoming 2007 M2M Partnership Expo in Beijing, China. Other key topics included obtaining updates on Partner countries and determining the next steps of the Agriculture Subcommittee.

Opening Statements and Introductions

The M2M Agriculture Subcommittee Co-chair Jorge Hilbert of Argentina welcomed the meeting participants. Co-chair Jeremy Eppel of the United Kingdom thanked Mr. Hilbert and INTA for hosting the workshop and subcommittee meeting. The Co-chairs adopted the subcommittee agenda.

The meeting participants provided brief introductions; the meeting was attended by M2M Partner country delegates, Project Network members, Administrative Support Group (ASG) personnel, a World Bank representative, and a United Nations Framework Convention on Climate Change (UNFCCC) representative. A list of attendees is presented in Annex 1.

Follow-Up Items from the Previous Agriculture Workshop and Meeting

Mr. Eppel provided a brief review of last year's meeting and the remaining action items from that meeting. Mr. Eppel noted these items were summarized in:

- The M2M Agriculture Subcommittee Action Plan for 2006/2007: http://www.methanetomarkets.org/resources/ag/docs/action_plan_1206.pdf, and
- The report from last year's workshop: http://www.methanetomarkets.org/resources/ag/docs/ag_minutes_11-29-06.pdf

The first follow-up item Mr. Eppel discussed was the UK review of M2M agriculture country profiles to determine if the profiles provide information about barriers or policy implications affecting anaerobic digestion (AD). The UK has reviewed the nine existing country profiles; only the United States, the UK, and Argentina discuss barriers or challenges to AD.

The second follow-up item Mr. Eppel remarked on was the identification of AD research contacts in each country by the Subcommittee representatives. No contacts have been identified, so this will remain an action item for the Subcommittee. Carlos Monreal of Canada supported this action item, and stated it would be useful and important to compile a list of researchers and experts. He requested the ASG secretariat send a reminder email to the Subcommittee about this item, and set a deadline for its completion. Mr. Eppel recommended this task be completed one month from the meeting, by 16 June 2007.

Another on going follow-up item was the completion of country profiles from all Partner countries. Mr. Eppel stated the Subcommittee would like to see profiles completed or updated and the profiles should include information on barriers and policy implications of AD.

Mr. Monreal stated a report has been completed in Canada that provides information on the barriers to AD; he will update the Canadian profile to include this information. Luigi Martire of Italy explained he has begun work on the Italian profile but he has encountered problems identifying data sources, therefore the profile has not been completed. Jessica Rodriguez of Mexico noted the Mexican government has been working to address policy issues and this information could be included in Mexico's profile, which has not yet been developed.

Mr. Eppel asked meeting participants if there were any additional data that should be included in the country profiles. Mr. Hilbert suggested the profiles should include information about all sources of agricultural methane (not only manure) in the country, and the main vendors and contractors for AD projects in the country. Mr. Eppel recommended the AD research contacts for the country should be included in the country profiles.

Mr. Eppel requested the ASG secretariat send reminders about the country profiles to all countries that have not submitted them. This reminder should include the information that should be incorporated into the profiles. In addition, Mr. Eppel requested the secretariat send a list of action items from the Subcommittee meeting to all of the Subcommittee members. The action item list should include deadlines where applicable.

Report from the ASG

Next on the agenda, Erin Birgfeld, ASG Director, presented the ASG update (available in Annex 2). She provided a brief overview of the M2M Partnership and announced that Poland and Vietnam recently became Partner countries.¹

Ms. Birgfeld presented the major outcomes of the M2M Steering Committee Meeting, which included:

- Decisions involving the Partnership Expo (including: the National Development and Reform Commission (NDRC) will be the host, the event will be limited to 3 days, and the event will not be a ministerial-level event);
- Agreement that EPA will continue to perform the ASG duties for the next 2 years;
- Year 3 Charge to Subcommittees; and
- Development of a Partnership-wide accomplishments report in mid-2008.

Next, Ms. Birgfeld discussed the M2M Expo in detail. The Expo will be 30 October through 1 November 2007 at the World China Hotel in Beijing, China. Ms. Birgfeld expressed her regret that a Chinese agriculture representative was not able to attend the Agriculture Subcommittee; she planned to coordinate with the representatives to determine the Chinese participation in the agriculture portion of the Expo.

The Expo Web site (www.methanetomarkets.org/expo/index.htm) includes detailed information about the Expo, including agendas, sponsorship information, and templates for submitting projects. The Expo is intended to be the premier international forum for promoting methane recovery and use project opportunities and technologies. Everyone involved with the M2M Partnership should help identify projects, sponsors, financiers, carbon market players, technology suppliers and developers to participate in the Expo. ASG personnel could send email to potential participants, but personal email or contact from country representatives would be more effective in generating a response.

Ms. Birgfeld stated booths would be provided at the Expo for each paying sponsors, each Partner country, and specific project opportunities in each sector. The country booths will be organized by the country liaison and should showcase projects and suppliers for the country. Ms. Birgfeld encouraged the Agriculture Subcommittee representatives to coordinate with the country liaison on the country booths. Ms. Birgfeld stated anyone interested in a booth should sign up soon because only 100 booths were available and space would be limited.

Ms. Birgfeld reminded participants that project opportunities were due to the ASG by 2 July 2007. Subcommittee members should solicit project opportunities and submit them by this deadline.

Ms. Birgfeld described how the Subcommittees will support the Partnership Expo in a variety of ways, including:

¹ Poland representatives attended the Agriculture Workshop in Buenos Aires, but unfortunately were not able to attend the Subcommittee Meeting. No representatives from Vietnam were able to attend any of the agriculture activities in Buenos Aires, but the ASG hopes that a country representative will be in attendance at the Beijing Expo.

- Assisting with the development of sector-specific policy and technical sessions, including the Agriculture Sector Expo agenda (discussed during this meeting).
- Providing project assistance by showcasing projects at the Expo. Projects can be submitted via agriculture project opportunities templates available on the M2M Web site (<http://www.methanetomarkets.org/expo/submit.htm>).
- Promoting the Expo and M2M, recruiting Project Network Members, and tracking country activities to showcase at the Expo.

Ms. Birgfeld explained the ASG was still developing an online Methane to Markets project tracking system. This system would be able to track where the projects are, what the expected emission reductions are, and what activities were occurring. This database might also include information on the funding opportunities available in various countries.

Ms. Birgfeld notified subcommittee members there was a new ASG structure. Henry Ferland was added as U.S. EPA staff to support the ASG, and Cortney Itle from ERG (an EPA contractor) was added as the new ASG Agriculture Subcommittee Coordinator.

Several questions and discussion followed Ms. Birgfeld's presentation. Mr. Hilbert asked if there were details available about the booth sizes for the Expo. Ms. Birgfeld responded this information would be available on the M2M Web site.

Mr. Eppel inquired if the UNFCCC or the World Bank would have booths at the Expo. Veronica Colerio of UNFCCC responded that a representative from UNFCCC would be present to participate and possibly speak at the Expo, although she was unsure if they would have a booth. Zarina Azizova from the World Bank stated that although she was not certain that the World Bank would have a booth, the Expo would be a good opportunity for the Bank to showcase Clean Development Mechanism (CDM) projects.

Mr. Eppel asked how the Project Network was being notified. Ms. Birgfeld replied the ASG would be placing ads in agricultural journals, and each country representative should encourage the Project Network in their country to participate. Mr. Roos stressed the country representatives should present this as an opportunity for companies to connect with others in the world that were using their technologies. Ms. Azizova offered to provide the ASG with a technology provider list for the Agriculture Sector. Ms. Azizova also stated the Subcommittee should make efforts to include the carbon market players at the meeting. Ms. Birgfeld explained representatives from GreenGas International, EcoSecurities, and NatSource have been notified of the Expo.

Mr. Roos inquired if the World Bank might have the resources to finance vendors that wish to attend the Beijing Expo. Ms. Azizova replied she could make inquiries to determine if there might be funds available for this.

Mr. Eppel inquired how the M2M Partnership should measure success, because there were no targets or goal emission reductions. Also, Mr. Eppel asked whether the M2M Partnership was the only organization implementing this kind of work, or would there be overlap with existing

organizations. He queried if the M2M Expo would be the only showcase for methane reduction opportunities or would there be other organizations doing something similar? Mr. Eppel stated the Subcommittee should be coordinating with any existing organizations that were doing this type of work. Ms. Birgfeld replied that M2M Partnership does want to expand involvement with other organizations when possible. Mr. Roos agreed that the Subcommittee should be working to pull the world together on technologies and carbon accounting methodologies. Ms. Azizova replied that although there were other organizations that were active in the other M2M sectors, there has not been as much involvement in the Agriculture sector. Therefore, she believes M2M could promote agriculture projects and make a difference in this sector.

Mr. Hilbert asked which countries were involved in the Agriculture Subcommittee. Mr. Birgfeld referred to the slide in her presentation that lists the 20 Partner Countries: Argentina, Australia, Brazil, Canada, China, Colombia, Ecuador, Germany, India, Italy, Japan, Mexico, Nigeria, Poland, Republic of Korea, Russia, Ukraine, United Kingdom, United States, and Vietnam. Ms. Birgfeld pointed out that not all Partner Countries have Agriculture Subcommittee members. Mr. Eppel commented the Subcommittee should work to identify other countries that could make a contribution to the Subcommittee. Mr. Eppel stated he would contact his German colleagues and encourage them to participate in the Subcommittee. There were many AD resources and experts in Germany and that could share knowledge. Ms. Azizova stated Denmark also has AD systems, and she can supply the ASG with the name of a man that has given presentations on this topic. Ms. Birgfeld reminded the participants that the Partnership can have Project Network members from countries that were not Partner Countries or that do not have Agriculture representatives, so the Subcommittee can encourage potential Project Network members from other countries to join. Also, Ms. Birgfeld noted that as an action item, the ASG should check that all Partner countries have agriculture representatives.

Mr. Eppel inquired if the ASG would have funding available to assist Project Network members, project representatives, and others that would like to participate in the Expo but lack the funds. Ms. Birgfeld replied the majority of the funding was for sector work, but a portion of the funding would go towards supporting Expo participants. Ms. Birgfeld also noted that other countries and organizations might provide funding assistance.

Mr. Hilbert commented that some AD projects use other agricultural waste (such as food wastes), and not just manure. Mr. Hilbert inquired if these types of projects should be included in the Expo. Mr. Eppel noted the traditional focus of M2M has been manure, and although the Subcommittee does not want to lose the focus on manure, it might be useful to include some other projects. Mr. Eppel pointed out that in the UK, farmers might only find AD economical if they combine manure with food wastes. Mr. Monreal observed that each country might be different, and the Subcommittee should not exclude any countries by limiting the types of AD systems presented at the Expo. Mr. Roos noted that proper carbon accounting methods would need to be developed for these types of projects.

Statements from Country Representatives and Project Network Members

Argentina- Jorge Hilbert

Mr. Hilbert noted the two day workshop prior to the Subcommittee meeting provided an overview of Argentina's progress in implementing agricultural AD systems. There is currently a national movement towards bioenergy and national programs to support the development and use of bioenergy. The workshop provided a broad overview of the financial opportunities in Argentina for these projects.

Mr. Eppel mentioned there were multiple Argentinean government agencies present at the workshop; he asked if there was a national goal or a policy direction or focus in Argentina. Mr. Hilbert responded there was starting to be an interest, and he hopes to make progress and generate more interest. There were more people in Argentina working in the private sector, universities, and government in this field.

Brazil- Magda Aparecida Lima

Dr. Lima stated there were a number of private sector organizations involved in AD CDM projects in Brazil, including EcoSecurities, Instituto Sadia, and AgCert. Dr. Lima explained there was not a big national program for Brazil to organize AD. Brazil has decided they should consult with the private sector and finance academic groups.

Mr. Moyano of EcoSecurities noted his company operates 15 anaerobic digesters on swine farms in southern Brazil. At the time of this meeting, the digesters were in place and working well; however, EcoSecurities encountered some difficulties and the projects did not develop exactly as planned. The problems included:

- A large amount of time was required for equipment installation and evaluation of the project sites.
- The projects were put on hold for some time because of changes to the CDM methodology.
- Because of the size of the swine operations (they were not large, and typically they have 500-1000 sows and 5000 total animals), the CDM methodology changes affected the economics of the projects, and decreased the benefits.
- EcoSecurities bundled the projects to reduce the transaction costs and increase the profitability of the projects; however, the projects were more expensive than expected, partially because validators must in place at each digester and they must be monitored in person.

Ms. Azizova concurred that unless you have a large scale operations, the new CDM methodology has caused some financial set backs. Mr. Monreal noted that a combination of small projects could produce biogas if combined and there should be no size limits for projects, because all projects should be encouraged. Mr. Eppel recommended the Subcommittee suggest to CDM that the methodology be revised. Mr. Hilbert recommended that CDM permit remote monitoring of validators; this would allow information to be gathered quickly and cost effectively.

Mr. Eppel asked if there was any national policy for AD in Brazil. Dr. Lima replied that ethanol production was the largest priority and no national program has been developed for biogas.

Canada- Carlos Monreal

Mr. Monreal stated the Canadian government passed a bill in April 2007 to reduce GHG emissions by 20 percent by 2020 and to reduce industrial air pollution by 50 percent by 2015. AD and the utilization of biogas were recommended technologies in the report to produce green energy and reduce air pollution emissions. The Canadian government was also negotiating a new agriculture policy framework which would promote AD. In addition, Canada has developed a protocol for GHG emission estimates and has asked for U.S. EPA comments; Mr. Monreal stated it would be publicly available in the next few months.

Mr. Monreal stated he and Ray Desjardins (also of Canada) have promoted the Expo by sending information to private, public, and government agencies and to industry suppliers and consulting firms. One company responded to express interest in attending the Expo. Mr. Monreal stated that he had to leave the meeting early, but he agreed to provide comments on the Expo agenda to the Subcommittee.

Ms. Eppel asked if the impact of the new regulations been estimated. Mr. Monreal stated this value has been calculated; Mr. Desjardins clarified the calculation was based on existing methane conversion factors (MCFs) for lagoons, not for anaerobic digesters.

Italy- Luigi Martire

Mr. Martire stated Italy does not have an updated country profile, but he hopes to be able to provide it soon. Energy and bioenergy are priorities in Italy, but biogas is not. Mr. Martire explained there are AD projects in Italy, but they were not centrally organized and it has been difficult to compile data about these systems.

Mr. Hilbert commented there were multiple projects ongoing in Italy through private initiatives.

Ms. Eppel noted the United Nations Food and Agriculture Organization (FAO) was located in Rome and the Subcommittee should develop a relationship with the FAO and generate interest in AD and biogas. Mr. Eppel identified Gustavo Best as a contact in the FAO. Mr. Martire stated he would try to connect with the FAO.

Mexico- Jessica Rodriguez

Ms. Rodriguez explained SEMARNAT (Secretaría de Medio Ambiente y Recursos Naturales) signed an agreement in March 2006 to reduce biogas emissions from agriculture. Multiple organizations were working together on AD projects in Mexico, including:

- SAGARPA (Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación)

- U.S. EPA's AgSTAR Program
- FIRCO (Fideicomiso de Riesgo Compartido, agriculture extension service of SAGARPA)
- INIFAP (National Institute of Forestry, Agricultural and Animal Research)
- USAID (United States Agency for International Development)
- SEMARNAT

Ms. Rodriguez stated approximately 35 percent of agriculture in Mexico was concentrated in one area and there were approximately 50 million swine in Mexico. Ms. Rodriguez has worked on the development of 3 digester systems on small swine farms (100 sows, 500 total animals at most), which are typical in Mexico. The systems flare the biogas and do not attempt energy recovery, due to the small scale of the projects.

SEMARNAT is promoting AD in Mexico by developing a Good Practice manual for digesters which will be completed in November of 2007. In addition, SEMARNAT plans to participate in the 6th Annual Meeting for Swine Producers to publicize AD to the industry. SEMARNAT will focus on small farms, because financing is a barrier for these operations.

SEMARNAT's expectations and goals include:

- Generating more interest from financing organizations;
- Characterizing and evaluating digester performance in Mexico;
- Promoting management of manure to reduce odor and water pollution issues related to swine production;
- Promoting the use of methane for energy; and
- Combating climate change.

Mr. Hilbert noted the United States involvement in Mexico, and asked if it occurred just because of the close geographical proximity. Mr. Roos explained that the United States sells technology and shares our expertise with Mexico. The U.S. AgSTAR program's goal was to develop expertise in Mexico and then phase out. Mexico has a lot of potential for AD systems because of the favorable temperature, the large number of swine, and the large amount of interest.

Mr. Eppel noted that one third of the UK CDM projects were on swine farms in Mexico.

Mr. Moyano clarified the systems were flaring, and not producing electricity. Ms. Rodriguez explained they plan to flare and use the energy for heating. It has been difficult to even produce a flare because of the small scale of the projects.

United Kingdom- Jeremy Eppel

Mr. Eppel explained there was currently quite a bit of pressure policy wise to implement environmental changes in the UK. The UK published a national waste strategy and biomass strategy in May 2007.

Mr. Eppel hoped to see financial incentives developed and financial support for the infrastructure at the farm level; the UK was working with the treasury for future opportunities to use economic

support to get systems off the ground. Mr. Eppel stated that farm groups in the UK were increasingly interested in climate change.

A new AD subcommittee has been created in the UK that is chaired by Michael Cheshire, who participated in the last M2M Agriculture Subcommittee Workshop and Meeting. Mr. Eppel planned to work with this group on the development of a guidance manual for AD.

In the UK, the Stern Review Report on the Economics of Climate Change recognized agriculture in the climate equation. Agriculture issues needs to be addressed more clearly, although the report notes that there is not an easy solution for this sector.

Mr. Bill Salas of Applied GeoSolutions noted that the M2M Partnership is focusing on methane capture and use, and he inquired what the role of the Partnership was for other sources of methane emissions (e.g., rice cultivation and enteric fermentation). Mr. Eppel replied the Partnership decided to focus on the most direct project related activity and the most commercially viable solution, which is AD of manure. However, Mr. Eppel noted the Subcommittee should keep in mind other sources of agricultural methane. Ms. Birgfeld mentioned projects need not have carbon credits for sale if they were economically viable in other ways. Mr. Desjardins concurred and remarked other economic factors could be considered. As an example, Mr. Desjardins noted methane emissions were increasing but the production of milk per cow is increasing more, so the methane emissions created per unit of milk produced were decreasing.

United States- Kurt Roos

Mr. Roos stated that the United States has developed a national standard on measurement of digestion gas, which might lead to a labeling and certification system. The methodology relates back to the IPCC methodology.

Mr. Roos noted that this was the last year in a cycle of the U.S. Farm Bill, which provides funding for digesters. The United States expected about 5 more digesters would be developed in 2007. In the next 5-year cycle of the Farm Bill, Mr. Roos anticipated there would be more funding available for farm scale AD and other renewable resources. Mr. Roos noted there would be a mandatory program in California for greenhouse gas (GHG) reductions, and other states might also develop mandatory programs.

There have been grants solicited under the M2M partnership for AD projects. The United States will provide 10 grants for project in India, China, Vietnam, and Latin America, and Mexico.

Mr. Roos stated there were currently 130-135 AD systems on farms in the United States. These systems account for approximately 70,000 metric tons of methane emission reductions.

Mr. Salas commented the California Climate Action Registry (CCAR) protocol had been released. Mr. Salas explained that CCAR is a voluntary program that would be required in the future, but the policy mechanism has not yet been developed. Mr. Roos noted that the U.S. EPA has commented on the CCAR methodology.

Mr. Eppel inquired if there were any issues related to digestate use in the United States. Mr. Roos replied that a permit and nutrient management plan was required for land application of digestate in the United States.

Mr. Eppel asked if AD was getting a higher strategic policy look than other biofuels in the United States. Mr. Roos replied that AD is a small portion of the overall renewable energy focus, but it is an important technology for keeping farms sustainable and efficient. The Farm Bill is supporting increased funding for AD, so it is a recognized and viable technology.

Mr. Eppel lastly asked if the United States was looking at organic waste management in addition to manure. Mr. Roos responded that some United States farms might look to other waste sources such as cheese whey or spoiled ice cream.

Mr. Roos noted there has been some discussion of running a pipeline to collect and convey natural gas from biogas systems in Wisconsin. There were multiple technical barriers to this proposed pipeline, including the need to have standards for the collected gas.

EcoSecurities- Frederico Moyano

Mr. Moyano described the work that EcoSecurities does in Brazil during Dr. Lima's discussion on Brazil. He noted there were alternatives to AD that the Subcommittee might want to consider as viable technologies, and there were different types of waste streams that might be considered, such as slaughter house waste. Ms. Azizova agreed that slaughter house waste was a concern that could be addressed by the Subcommittee. Mr. Eppel noted it was important to keep other technologies and wastes in mind, but the M2M Agriculture Subcommittee agreed to focus on AD of manure.

Applied GeoSolutions - Bill Salas

Mr. Salas noted there were multiple methodologies being implemented for carbon accounting, including the Regional Greenhouse Gas Initiative (RGGI), CCAR, UNFCCC, and CDM. There was a great deal of variability between the various emission estimates; the Subcommittee should help to focus these methodologies.

Mr. Roos agreed there were various methodologies, and suggested that the Subcommittee support the development of a document to outline methodologies to evaluate the environmental performance of anaerobic digesters. This paper may provide the basis for developing a draft methods report for review and comment by selected international experts in a future workshop sponsored by interested M2M countries.

Mr. Eppel inquired if the development of an M2M supported methodology would help refine the CDM or UNFCCC methodologies. Ms. Azizova reported that the CDM would only support methodologies that were based on IPCC guidance. Ms. Colerio stated the UNFCCC would not be opposed to relying on a methodology other than IPCC, if an improved method would be developed.

Ms. Azizova also commented that the IPCC emission factors should be reconsidered. Ms. Colerio concurred, and suggested the Subcommittee also encourage countries to develop emission factors. Mr. Roos offered to develop a document to better estimate methane leakage rates from various types of anaerobic digester systems. The goal of this work will be to improve the leakage rate estimates provided under the IPCC livestock waste emission guidance from anaerobic digestion technologies.

Ms. Azizova encouraged the Subcommittee to make use of the World Bank Agriculture and Rural Development department. She offered to send ASG information on country studies and country assistance developments. Ms. Colerio encouraged the Subcommittee to correspond with UNFCCC to encourage interest in agriculture and AD.

Agriculture Sector Agenda for the M2M Expo

Ms. Birgfeld informed the meeting attendees that the Beijing agenda was available on the M2M Web site <http://www.methanetomarkets.org/expo/docs/agenda.pdf>. There will be a plenary session to welcome participants on the morning of the first day followed by an overview of the Methane to Markets Partnership, possibly presented by Bill Wehrum of the U.S. EPA.

In the afternoon of the first day, each sector has a break out session. The Agriculture Subcommittee will develop the agenda for this break out session. In addition, the Subcommittee might participate in a round table discussion on the morning of the first day of the Expo. Ms. Birgfeld encouraged the Subcommittee to generate a revised agriculture sector agenda before she travels to China in the end of June.

Ms. Birgfeld noted the Steering Committee meeting was scheduled concurrently with the Subcommittee meetings. Mr. Eppel expressed his concern that he would not be able to attend both meetings. Ms. Birgfeld will investigate if there would be a more effective way to organize the Expo agenda.

Ms. Birgfeld explained the Subcommittee should provide input to the Steering Committee concerning the next steps of the Subcommittee. The ASG will update the Agriculture Action Plan, which will assist with this Subcommittee report to the Steering Committee.

Mr. Eppel remarked the Subcommittee needs to consider how to generate interest in the Agriculture Sector; all members need to talk to interested parties and encourage participation. Also, Subcommittee members should seek out others that might be working in similar areas but not connecting with the M2M Partnership. In addition, while developing the agenda, the Subcommittee should consider how we can attract attention to the Agriculture Sector and get people interested in attending the Agriculture Sector meetings. Mr. Eppel suggested that the Subcommittee develop a flier to advertise the Agriculture Sector.

The Subcommittee participated in a discussion of the draft Agriculture Sector agenda, which included the following suggestions:

- Mr. Eppel requested there be Chinese-English translation at the Subcommittee meeting.
- Mr. Eppel suggested the Subcommittee look for speakers to discuss manure and biogas recovery, possibly from CDM or FAO. Mr. Roos suggested Nat Pinnoi as a possible speaker. Mr. Roos explained that Nat Pinnoi works with the World Bank in Thailand on these types of projects and he could give a discussion on solutions to problems encountered by AD.
- Mr. Roos suggested the agenda begin with an overview of AD and follow that with a summary of projects by region. Mr. Eppel recommended all possible opportunities be summarized in an opening session to generate interest in the agriculture sector, and then regional projects might be focused on. Mr. Hilbert agreed and stated the agenda could feature 3-4 projects in each region; with a clear division by temperature and climate.
- Mr. Eppel expressed his concern that the Subcommittee should keep the audience interested. Ms. Birgfeld stated there will be a varied audience and therefore it would be difficult to target specific audiences. Mr. Roos suggested the agenda be separated by topic. Mr. Eppel agreed and proposed that the first day should provide an introduction that describes the technologies being applied, the policy barriers, and how the barriers were being overcome; the second day should focus on more specific information including case studies and profiles.
- Mr. Eppel remarked the first day presentation should include an overview of the possible projects in the agriculture sector, with an estimate of the potential methane reductions and a dollar per ton of methane value of reductions.
- Mr. Eppel reminded the Subcommittee the agenda should focus on what our Chinese hosts will find most useful and appropriate for their interests, and we will need to coordinate with them to finalize the agenda. Mr. Roos stated he will correspond with Mr. Li, the Chinese agriculture representative, to obtain his input on the agenda. In addition, the Co-Chairs, Mr. Roos, and Mr. Li could participate in a teleconference to discuss the agenda.
- Ms. Birgfeld mentioned that Caterpillar personnel have contacted several M2M representatives to express interest in participating in the Expo. The ASG will contact Caterpillar to obtain a summary of the information they would like to present.
- Mr. Moyano inquired if projects that deal with other agricultural wastes other than manure or technologies other than AD could be included in the agenda. Mr. Eppel stated they would not be discouraged, but not sought out.
- Mr. Hilbert suggested that if woody biomass was being considered in the agenda, the Subcommittee should not overlook dung biomass.
- Dr. Lima suggested Joe Mangino of ERG or Professor Dong from China as speakers about IPCC topics.

Mr. Roos will restructure the draft agenda based on the discussions of the meeting. He will discuss the next draft of the agenda with Mr. Eppel and Mr. Hilbert, and possibly Mr. Li. The agenda will then be distributed to the entire Subcommittee for input and suggested speakers.

New Business

Ms. Rodriguez stated that SEMARNAT would be interested in hosting a future Subcommittee meeting in Mexico.

Mr. Eppel informed the group the International Energy Agency (IEA) has developed a working group called Task 37. This group is interested in the production of biogas and high quality digestate as a result of the biological treatment of organic fraction of municipal solid waste, as well as the anaerobic treatment of organic rich industrial wastewater. The group aims to exchange information, stimulate interest, and promote proper waste management techniques. Mr. Eppel has contacts that have interacted with the group and they were unaware of the M2M Partnership; he will develop a contact within this group.

Mr. Eppel encouraged all Subcommittee members to investigate other organizations that were working in this area. Mr. Eppel planned to work to develop connections in the Renewable Energy and Energy Efficiency Partnership (REEEP), and the FAO.

Adjourn

Mr. Eppel thanked the participants for attending and Mr. Hilbert and INTA for hosting the workshop and meeting and adjourned the meeting.



Annex 1- Agriculture Subcommittee Meeting Attendee List

BUENOS AIRES, ARGENTINA

16 May 2007

ARGENTINA

Jorge Hilbert (Co-Chair)

Instituto Nacional de Tecnología
Agropecuaria (INTA)
Email: hilbert@cni.inta.gov.ar

Maria Eugenia Rallo

Secretaría de Ambiente y Desarrollo Sustentable
San Martín 451
Buenos Aires 1004
Argentina
+54 11 43488678
Email: mrallo@ambiente.gov.ar

BRAZIL

Magda Aparecida Lima

Brazilian Agriculture Research Corporation
- Embrapa
Rodovia SP-340, km 127,5
Jaguariúna, SP 13820-000
Brazil
+55-19-3867-8745
Fax: +55-19-3867-8740
Email: magda@cnpma.embrapa.br

Federico Moyano*

EcoSecurities
Rua Lauro Muller 116 of. 4303, Botafogo
Rio de Janeiro, 22290-160
Brazil
+55-21-2546-4173
Fax: +55-21-2275-9472
Email: federico@ecosecurities.com

CANADA

Raymond Desjardins

Research Scientist
Agriculture and Agri-Food Canada
960 Carling Avenue
Ottawa, Ontario K1A 0C6
Canada
+1-613-759-1522
Fax: +1-613-759-1432
Email: desjardins@agr.gc.ca

Carlos Monreal

Research Scientist/Science Advisor
Agriculture and Agri-Food Canada
Room 4046, 960 Carling Avenue
Ottawa, Ontario K1A 0C5
Canada
+1-613-759-1053
Fax: +1-613-759-1924
Email: monrealc@agr.gc.ca

ITALY

Luigi Mauro Martire

Ministry for the Environment, Land and Sea
Via C. Colombo 44
Rome 00147
Italy
+390657228132
Fax: +390657228180
Email: martire.luigimauro@minambiente.it

MEXICO

Jessica Susana Rodriguez Aguilar

Secretariat of Environment and Natural
Resources (SEMARNAT)
Paseo en la Montaña
Tlalpan, Mexico Distrito Federal
+52 55 56 28 06 90
Fax: +52 55 56 28 56 56
Email: jessica.rodriguez@semarnat.gov.mx

UNITED KINGDOM

Jeremy Eppel (Co-Chair)

Head, Sustainable Agriculture Strategy
Division
Department for Environment, Food and
Rural Affairs (Defra)
Room 810, 9 Millbank
London, SW1P 3JR
United Kingdom
+ 44 20 7238 3117
Fax: + 44 20 7238 3120
Email: jeremy.eppel@defra.gsi.gov.uk

UNITED STATES

Zarina Azizova*

Analyst
World Bank
1818 H Street NW
Washington DC, DC 204333
USA
+1-202-458-9865
Fax: +1-202-522-7432
Email: zazizova@worldbank.org

Erin Birgfeld

Director, Administrative Support Group
Methane to Markets Partnership
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, Dc 20005
USA
+1-202-343-9079
+1-202-343-2202
Email: birgfeld.erin@epa.gov

Cortney Itle

Environmental Engineer
ERG
14555 Avion Parkway
Chantilly, VA 22124
USA
+1-703-633-1630
Fax: +1-703-263-7479
Email: cortney.itle@erg.com

Kurt Roos

Manager, AgSTAR Program
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, Dc 20005
USA
+1-202-343-9041
+1-202-343-2204
Email: roos.kurt@epa.gov

William Salas*

President
Applied Geosolutions, LLC
87 Packers Falls Road
Durham, NH 03824
USA
+1-603-292-5747
Fax: +1-413-714-1051
Email: wsalas@agsemail.com

OTHER

Verónica Colerio*

UNFCCC (Naciones Unidas)
Mecanismos de Desarrollo Limpio
Bonn, Alemania
+0228-8151675
Email: vcolerio@unfccc.int