

Seventeenth Session of the Agriculture Subcommittee Internet-Based Meeting 16 September 2014

### Minutes

- 1 The Global Methane Initiative (GMI) Agriculture Subcommittee conducted its seventeenth session via an Internet- and telephone-based meeting on 16 September 2014.
- 2 Jorge Hilbert of the Argentine Instituto Nacional de Tecnología Agropecuaria (INTA), an Agriculture Subcommittee Co-Chair, welcomed meeting participants on behalf of Agriculture Subcommittee Co-Chairs Allison Costa of the United States Environmental Protection Agency (U.S. EPA) and Anil Dhussa of the Indian Ministry of New and Renewable Energy. Mr. Hilbert reviewed the meeting agenda, which included:
  - Introductions
    - Guest Speakers from Climate and Clean Air Coalition (CCAC)
      - o Theun Vellinga: Manure management initiative
      - Harry Clark: Enteric fermentation initiative
  - Anaerobic Digestion (AD) Incentives Report
    - Update on the status of the report
    - Report highlights
    - Online resources to accompany the report
    - Deadline for comments
  - GMI 2.0 Plans for GMI Post-2015
    - o Current GMI Charter expires October 2015
    - Interaction between GMI and other methane-related organizations
  - Administrative Support Group (ASG)
    - Methane video/infographic
    - All-Partnership meeting
- 3 The subcommittee meeting agenda and a recording of the meeting are posted on the <u>GMI website</u>.
- 4 Mr. Dhussa invited the presenters to introduce themselves, and he provided an overview of the meeting participants, which included GMI Partner Country delegates and Project Network members in addition to ASG personnel. Annex 1 includes a participant list.

# CCAC Livestock and Manure Management Component for Reducing Short-lived Climate Pollutants

5 Mr. Vellinga provided an overview of the CCAC livestock and manure management component for reducing short-lived climate pollutants (SLCPs). The initiative's goal is to accelerate practice change and innovation in integrated manure management to reduce SLCPs and to support sustainable livestock sector development. The initiative stresses both the emission reductions and food security aspects of manure, since manure is an important source of nutrients.

- <sup>6</sup> The initiative is currently developing a Manure Knowledge Kiosk to offer support and technical services to all stakeholders in the manure management chain. The first phase of this project is to develop an inventory of manure management and the second phase is to stimulate change in manure management practices. Coordinators of this work include Wageningen UR Livestock Research and United Nations' Food and Agriculture Organization (FAO). There are three regional centers, including: the Tropical Agricultural Research and Higher Education Centre (CATIE) in Costa Rica; Stockholm Environment Institute (SEI) in Bangkok, Thailand; and International Livestock Research Institute (ILRI) in Sub-Saharan Africa.
- 7 The CCAC Livestock and Manure Management Component has a clear link with the Global Agenda for Sustainable Livestock, a multi-stakeholder initiative whose goals are to improve productivity and reduce environmental impact of agriculture. The Agenda currently addresses food security and global health; equity and poverty reduction; and resources and climate. FAO serves as the secretariat of the Agenda. The Agenda has three action areas: 1) to close the efficiency gap to increase efficiency on farms, 2) restore value to grasslands, and 3) develop "waste to worth" projects. The Agenda worked with the CCAC agriculture initiative to develop the Livestock and Manure Management Component.
- 8 The Manure Knowledge Kiosk will work to manage and remove barriers to action in order to enhance food security and sustainable development. The Kiosk will include a web-based knowledge center, which is still under development. The Kiosk will focus on the following areas of manure management: collection, storage, treatment, products and application/use. It does not focus on excretion (animal nutrition or enteric fermentation) or fertilization (nutrient content or crop requirements). Each part of the manure management chain is related to the others, so any change to one part of the chain will impact other parts of the chain. The effluent from AD has lost some carbon (as methane), but it still has high levels of nutrients such as phosphorus, potassium, and nitrogen. GMI can work with the Livestock and Manure Management Component to: develop consistent messaging about AD, share information about AD, and provide good examples of small and communal AD systems.

### **CCAC Enteric Methane Proposal**

- 9 Mr. Clark provided a summary of the CCAC Enteric Methane Component Proposal. The FAO and Global Research Alliance are cooperating on a proposal to address enteric methane emissions. Agriculture is vital to achieving food security, poverty reduction, and sustainable development. Agriculture is vulnerable to impacts of climate change and must meet increasing demands for food while decreasing greenhouse gas emissions. There are opportunities in agriculture to reduce emissions while still meeting the food supply demands.
- 10 Enteric fermentation emissions are gases emitted by animals as part of their digestive process, which are formed by microbes in the digestive tract. The largest category of emissions from agriculture are enteric fermentation emissions, which is why they are a focus area for reduction.
- 11 The proposal includes activities to improve efficiency to decrease emissions per unit product. The proposal looks at multiple approaches to improve efficiency. These approaches will vary regionally and must be feasible at the local scale. The proposal includes capacity building to develop local networks, technical transfer, and measurement skills. In addition, the proposal seeks to develop institutional and policy frameworks to encourage mitigation actions. Approaches suggested by the proposal will have the ability to be scaled up.
- 12 The initiative will use the FAO model to look at life cycle analysis with regional data from demonstration farms and regional experts to develop regional approaches. There will likely be three initial locations, which are still under development but might include animals in South American grasslands (Uruguay or Argentina), dairy farms in Asia, and beef herds in Ethiopia. Once the mitigation options have been identified and modeled, they will be implemented on the demonstration farms and the mitigation potential will be monitored, as well as the feasibility and profitability.

- 13 The proposal would provide guidance to develop policies that incentivize projects. The FAO will serve as the coordinator and will work with regional experts from the Global Research Alliance network. Project implementers will be identified regionally. The work would be collaborative and share resources with the other groups and partnerships as appropriate.
- 14 The proposers developed and shared a high-level concept sketch in mid- 2014. CCAC reviewed the concept sketch and FAO and Global Research Alliance developed a funding proposal template which they discussed at a September2014 Rome meeting. Mr. Clark and Pierre Gerber are currently revising the funding proposal and will submit it to CCAC by 5 October 2014. The CCAC will review the draft by 22 October, at which point the FAO and Global Research will revise the draft and formally submit it to CCAC in November.

### **AD Incentives Report**

- 15 Ms. Costa turned attentions to the draft *Policies and Incentive for Anaerobic Digestion in Selected Countries* shared with Agriculture Subcommittee delegates and Project Network members prior to the meeting. The document's goal is to have one compiled resource for policy and incentive information to promote policy development and encourage national leaders to improve existing policies and incentives. It is hoped the document will also advance the creation of an online resource for international policies, programs and incentives that affect AD projects, encourage interest in future research, and stimulate new AD projects.
- 16 The report includes a summary of measures used by 28 countries, including details and examples of several types of policies and incentives. The report's intended audience is policy influencers; AD project developers; financing organizations and investors; agricultural industry representatives; nongovernmental organizations; and researchers. Online resources are being developed to accompany the report that will include more information. Via the online resources, users will be able to download data, compare countries, and filter data by country or types of policies or incentives.
- 17 Ms. Costa noted EPA would like the Agriculture Subcommittee delegates and Project Network members to review the report and provide comments by 24 September 2014. The final report will be published on the GMI website in November 2014.
- Ms. Costa stated Luigi Petta provided an update to the report on behalf of Italy, which implemented a Ministerial Decree 6 July 2012 that benefits renewable energy projects. Projects are eligible to receive feed-in tariffs, which vary depending on the power output of the project. U.S. EPA will add the information from Italy into the report before it is finalized.

### GMI 2.0 - Plans for GMI Post-2015 and ASG Update

- 19 Ms. Monica Shimamura of the GMI ASG provided an update on ASG activities. She noted GMI is celebrating the 10-year anniversary of its establishment in 2014 and is planning several recognition activities, which include an International Methane Forum (All-Partnership Meeting) in Washington, D.C. in 2015.
- Also, the ASG has developed GMI videos that will be finalized in the coming months. GMI stakeholders can use these videos to help communicate GMI issues and goals. The general methane video describes why methane is important. There are also sector specific information for biogas (agriculture, municipal wastewater, and municipal solid waste); coal; and oil and gas.
- In addition, the ASG developed an infographic pamphlet that describes what GMI has been doing over the last 10 years. The inforgraphic shows what methane is, why methane mitigation matters, and what GMI's role has been in reducing methane emissions.

- The ASG is also working on an interactive map for the GMI website to show projects worldwide, which should be available in October 2014.
- A Steering Committee Meeting will be held in Montreal, Canada on 16-17 October 2014. The Steering Committee will be discussing the GMI Charter and Terms of Reference, which expire in October 2015, as well as how GMI will move forward post-2015. There are now other initiatives working in this arena, such as CCAC, and the carbon markets are not as active as they once has been. Given these circumstances, the Steering Committee will discuss the future of GMI and synergies between GMI and CCAC. The ASG will present the vision at the 2015 International Methane Forum.
- Ms. Sarah Greenburg asked meeting participants if they had any questions. Ms. Birgitta Vainio-Mattila from the Finland Ministry of Agriculture and Forestry asked if ammonia emissions have been considered as part of the Livestock and Manure Management Component. Mr. Vellinga replied they do not explicitly address ammonia emissions. They are currently creating an inventory of how manure is managed and based on this information, they can make some assumptions related to ammonia emissions. However, this is not a main focus of the work.
- 25 Mr. Hilbert noted that is overlap between the work of the CCAC Livestock and Manure Management Component and the GMI Agriculture Subcommittee. He encouraged the programs to continue to collaborate and share information.
- Mr. Dhussa asked how important AD was as a manure management option for the Livestock and Manure Management Component. Mr. Vellinga replied it depends on the region and he has seen some areas of the world where AD is not used properly. In Germany, for example, there are many incentives for AD and corn is grown for use as an AD feedstock instead of manure. In India, however, AD is important as a cooking fuel and heating source. Mr. Vellinga noted it is difficult to assign the overall importance of AD because it varies geographically. The entire manure chain should be considered when any changes are made to manure management.
- 27 Nurgil Kitir of Yeditepe University in Istanbul thanked the speakers and noted manure management is very important. In Turkey, he indicated manure is difficult to apply on the fields and inquired whether Mr. Vellinga had any techniques to share. Mr. Vellinga replied animal confinement, the type of manure, and the terrain should be considered and Mr. Kitir can contact Mr. Vellinga with any additional questions.
- 28 Ms. Costa thanked the participants and noted there are many opportunities for the GMI Agriculture Subcommittee to work with the CCAC Agriculture Initiative components. Mr. Dhussa also thanked the speakers and participants and adjourned the meeting.

### **GLOBAL METHANE INITIATIVE**

AGRICULTURE SUBCOMMITTEE INTERNET-BASED MEETING 16 September 2014

### ANNEX 1.

# FINAL PARTICIPANT LIST

### Argentina

\*Jorge Hilbert INTA C 25 1712 Castelar Buenos Aires, 1033 Argentina hilbert@cnia.inta.gov.ar

### Brazil

♦Renata Martins Pacheco UFSC Renata.mp@UFSC.br

### Canada

\*Ray Desjardins Agriculture and Agri-Food Canada Ottawa, ON ray.desjardins@agr.gc.ca ◆Jose Carlos Diaz Vidal Suncurrent SA de CV Ottawa, Canada jcdiax@suncurrent.mx

### China

\*Yu (Steven) Zhang NRDC Beijing, China zhangy@ccchina.gov.cn

# Finland

\*Birgitta Vainio-Mattila Ministry of Agriculutre and Forestry Helsinki, Finland birgitta.vainio-mattila@mmm.fi

### India

### \*Anil Dhussa

Ministry of New and Renewable Energy, Government of India Block 14 CGO Complex, Lodi Road New Delhi, 110003 India +91 9810861131 Fax: +91 11 24364188 akdhussa@nic.in ♦Mateen Abdul Emergence Bioenergy Inc Bangladore, India mateen@emergencebioenergy.com

◆Virendra Kumar Indian Institute of Technology Delhi New Delhi, India vkvijay@rdat.iitd.ac.in

# Italy

\*Luigi Petta ENEA Bologna, Italy luigi.petta@enea.it

# Netherlands

◆Thuen Vellinga CCAC Netherlands theun.vellinga@wur.nl

# **New Zealand**

♦Harry Clark CCAC New Zealand harry.clark@nzagrc.org.nz

# Turkey

♦Nurgül Kitir Yeditepe University Istanbul, Turkey nurgul\_kitir@hotmail.com

### **United States**

#### \*Allison Costa

U.S. EPA 1200 Pennsylvania Avenue, NW (MC: 6207J) Washington, DC 20460 +1-202-343-9468 Costa.Allison@epa.gov

### ◆Samantha Csapilla

Avatar Energy LLC Burlington, VT scsapilla@avatarenergy.com

#### **♦Lori Edwards**

SCS Engineers Geneva, IL ledwards@scsengineers.com

#### •Sarah Greenberg

ASG Contractor Support ERG Lexington, MA Sarah.Greenberg@erg.com

### ♦Bob Hamburg

Omega-Alpha Recycling Systems Glenside, PA <u>bhanomalous7@gmail.com</u>

### •Cortney Itle

ASG Contractor Support ERG Chantilly, VA 20151 +1-703-424-8360 Cortney.Itle@erg.com

### •Lauren Lariviere

ASG Contractor Support ERG Lexington, MA Lauren.Lariviere@erg.com

#### ◆Cathy McGirl TetraTech

Sterling, VA cathy.mcgirl@tetratech.com

### ♦Michelle Nolte TetraTech SanJose, CA michelle.nolte@tetratech.com

### •Kristina Pflanz

Global Methane Initiative U.S. EPA 1200 Pennsylvania Avenue, NW Washington, DC 20460 pflanz.kristina@epa.gov

#### **•**Karen Schaffner

RTI Research Triangle Park, NC ksschaffner@rti.org

### ♦Jason Shih

BioResource International Cary, NC jasonshih.bri@gmail.com

### •Monica Shimamura

Co-director Global Methane Initiative U.S. EPA 1200 Pennsylvania Avenue, NW Washington, DC 20460 +1-202-343-9330 Shimamura.Monica@epa.gov

◆David Specca Rutgers University EcoComplex Bordertown, NJ <u>specca@aesop.rutgers.edu</u>