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## **Status of the Wastewater Sector in the Methane to Markets Partnership**

### **Discussion Paper**

#### **1. Purpose**

This paper provides an overview of the discussions regarding possible inclusion of the wastewater sector under the Methane to Markets Partnership, identifies options for possible committee structure(s), and presents next steps for the Steering Committee's consideration.

#### **2. Background**

The issue of the inclusion of wastewater projects<sup>1</sup> under the Methane to Markets Partnership was first raised and discussed at the January 2009 Steering Committee meeting in Monterrey, Mexico. During this meeting, Chile highlighted their current wastewater activities and projects that were capturing and using the methane gas. As a key outcome of this discussion, the Steering Committee tasked the Administrative Support Group (ASG) with developing a white paper to assess the potential for including this sector in the Partnership, including a characterization of global emissions<sup>2</sup> and identification of mitigation options and major barriers to project development.<sup>3</sup>

At the September 2009 Steering Committee Meeting in Washington, DC, the ASG presented the results of the scoping paper. Given the availability of demonstrated technologies to reduce methane emissions from wastewater treatment and its prevalence in many Partner countries, the Steering Committee recognized this sector has the potential to achieve methane capture and utilization projects in the near term. In addition, the Committee also recognized that this sector has interrelationships with the work of both the landfill and agriculture subcommittees. The emphasis of anaerobic digestion technology as a mitigation option is tied to the work of the Agriculture Subcommittee and for some countries the government agencies involved in overseeing and regulating public infrastructure have responsibilities associated with landfills and wastewater treatment plants (WWTPs).

As a result, the Steering Committee tasked both the Agriculture and Landfill Subcommittees to consider this issue at their Fall 2009 meetings and also established a task force to further explore interest among

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<sup>1</sup> Methane is emitted during the handling and treatment of domestic, commercial, and industrial wastewater through the anaerobic decomposition of organic material. Most developed countries rely on centralized aerobic wastewater treatment to collect and treat domestic and commercial wastewater, resulting in small and incidental methane emissions. In developing countries with little or no collection and treatment of wastewater, anaerobic treatment systems such as lagoons, septic systems, open sewers, and latrines are more prevalent, resulting in greater emissions.

<sup>2</sup> In 2005, estimated methane emissions from wastewater accounted for nine percent of global anthropogenic methane emissions and current Partners represent 70 percent of the global emissions, which are expected to grow by 20 percent by 2020 given expanding populations, increases in gross domestic product (GDP), and industrial growth.

<sup>3</sup> The paper, "Municipal Wastewater Treatment Sector: Options for Methane Emission Mitigation," focused on municipal wastewater as wastewater from agricultural sources (i.e., food processing) is currently included in the scope of the Agriculture Subcommittee.

partner countries and determine how this sector could best be incorporated in the Partnership. Representatives from Mexico and the United Kingdom volunteered to chair the new Wastewater Task Force. Australia, Colombia, Pakistan, and the United States have also expressed interest in participating. To date, the Task Force has not yet had an opportunity to convene.

### 3. Summary and Update on Considerations for Incorporating Wastewater

The Task Force will be considering several options for incorporating the wastewater sector into the Partnership that have already been raised during Steering Committee deliberations. These options include:

- Creation of a working group within the Landfill or Agriculture Subcommittee that convenes periodically and reports out to the Subcommittee. As necessary, the working group could also coordinate meetings in conjunction with the Subcommittee meetings.
- Creation of a new Subcommittee.

Advantages and disadvantages of creating a new subcommittee and incorporating it into an existing subcommittee (either Landfill or Agriculture) are summarized in Table 1.

**Table 1: Possible Methane to Markets Structures, Advantages and Disadvantages**

Option	Advantages	Disadvantages
Working Group within Existing Subcommittee	<p>Low incremental increase in administrative costs.</p> <p>Allows for better coordination when there is overlap of either technology options (Agriculture) or policy management structures (Landfill).</p>	<p>Scope of delegate technical expertise is different.</p> <p>Industry/ Project Network organizations differ and there would be limited options for co-locating meetings with industry-related meetings.</p> <p>Size of committee might become unwieldy.</p>
New Subcommittee	<p>Allows discussion of targeted approach to municipal wastewater.</p> <p>Easy to co-locate Subcommittee meeting with appropriate industry-related meetings (e.g., WEF, IWA).</p> <p>Allows for more focused interaction among technical/policy experts that are unique to the sector.</p>	<p>Additional incremental burden on Partners to field delegates to participate in another subcommittee.</p> <p>Additional burden on Steering Committee to guide another subcommittee.</p>

To further inform the Task Force, the Landfill Subcommittee discussed the interrelationship of solid waste and wastewater, and possible inclusion of these activities under its purview during their September 2009 meeting. Based on some initial input from its members, the Subcommittee concluded that it might be appropriate to include wastewater projects under the Landfill Subcommittee. Some members, however, expressed concern that the expertise needed to address project development issues in the wastewater sector different from the landfill gas sector. Additionally, initial feedback from Agriculture Subcommittee

members was not supportive of incorporating this work into the Agriculture Subcommittee. This feedback is being considered by the Wastewater Task Force going forward.

A final consideration that the Task Force will be taking into account is the how the Project Network could best be engaged and the role that other international institutions are playing in this area. In the initial ASG scoping paper it was noted there are several key international organizations currently involved in wastewater issues (e.g., Water Environment Federation, International Water Association, Global Water Partnership, Water Supply and Sanitation Council). Many of these organizations promote environmental and climate change initiatives, but do not include methane mitigation from WWTPs. Additional engagement with these water-related organizations will be needed to learn more about their activities and to further define the role Methane to Markets might play in this sector.

#### **4. Next Steps and Items for Steering Committee Consideration**

As noted above, the Task Force has not had the opportunity to convene. In light of this, the Steering Committee may want to consider the following:

Task Force Membership: Assess and confirm interest among members of the Steering Committee to participate in the Wastewater Task Force.

Consultation: Encourage the Task Force to convene a teleconference among interested Partners in the first half of 2010 and report back on their deliberations.

Language for the TOR: Depending on the work of the Wastewater Task Force, the ASG could work with the chairs to develop language for adding wastewater as a new sector in the TOR or for a placeholder indicating the option to add this later—as was done for agriculture in the original TOR.