



## Comments on the Mexico Livestock Protocol version 1.0

### Organizations that Submitted Comments on the Mexico Livestock Project Protocols Version 1.0

1. Cappy and Associates Mex, S.A. de C.V.
2. DNV Mexico
3. Ecosecurities

#### A. GENERAL COMMENTS

##### A1. Inclusion of projects installing anaerobic digesters without a previous treatment lagoon (Ecosecurities)

Many livestock projects are excluded of the CDM because farms don't have lagoons in which anaerobic digestion (AD) could take place and therefore methane emissions baseline couldn't be proved, instead farmers dump wastewater and manure into rivers or drainage. Right away, water bodies are been severely polluted.

These projects could be included in the Reserve if project developers decided to construct an AD facility in order to treat wastewater instead of dumping it into rivers. The CDM does not accept this because it represents generating artificial emissions of CH<sub>4</sub>. However, it could be an interesting environmental and business opportunity for The Reserve and project developers if the production of such "artificial" biogas (CH<sub>4</sub>) is locked by a condition in which the project developer is obligated to utilize the biogas for electricity generation; if the project activity doesn't start generating electricity after two years, for instance, the Reserve shall withdraw the registration of this project, consequently the issuance of carbon credits for this project will be terminated.

An Annex describing the rules for these Special Cases could be included as part of the Livestock Protocol as well as a methodology or recommendations to calculate the possible emission reductions.

It doesn't make sense the construction of an AD facility just to destroy methane in order to obtain carbon credits, the goal must be renewable energy and stop polluting water.

**Response:** When manure and wastewater are dumped into rivers and drainage, baseline emissions are difficult to estimate and methane emissions are very low or null because the decomposition of the organic matter takes places in aerobic processes.

The Reserve agrees on the importance on fostering renewable energy generation and reducing water pollution. In this sense, the Reserve anticipates the development of a supplement to the Livestock and Landfill Protocols for Mexico in order to include emission reductions estimation and registration of

activities derived of fossil fuel displacement in power generation with biogas in Mexico.

## **A2. ACM0010 version 5 (DNV Mexico)**

The current version of the ACM0010 methodology is the 05, as the Protocol is based on version 02, it is not updated regarding the guidelines of the UNFCCC. This revision could be an opportunity to update the Protocol to the requirements of the updated version in the eligibility framework pointed out by the Climate Action Reserve.

**Response:** Thank you very much for your comment. We have examined the main revisions conducted from the CDM methodology ACM0010 version 2 to 5, and we observed that these revisions are included in the Protocol or are not applicable. For example:

- Incorporation of the tool to determine project emissions from flaring gases containing methane. In the Protocol, methane emissions from biogas combustion are considered in Equation 5.6 (pages 27-28), considering the methane collected and metered, the methane collection efficiency of the biogas control system and the methane destruction efficiency(ies) of the destruction device(s).
- Incorporation of the tools to calculate baseline, project and/or leakage emissions from electricity consumption and to calculate the emission factor for an electricity system. The protocol does not account for carbon dioxide reductions associated with displacing grid-delivered electricity as explained on page 14. However, as per **A1**, the Reserve anticipates the development of a supplement for Mexico in order to include emission reductions estimation and registration of activities derived of fossil fuel displacement in power generation with biogas in Mexico.
- Incorporation of the tool to calculate project or leakage CO<sub>2</sub> emissions from fossil fuel combustion. Baseline and project CO<sub>2</sub> emissions from fossil fuel mobile and stationary sources are included in Equation 5.10 (page 32).
- Incorporation of the tool for demonstration assessment and of additionality. The Reserve uses a “standardized” approach to determine additionality, which assesses project additionality using a technology or performance threshold and a regulatory additionality test. For each of the protocols, a threshold analysis addresses the issue of financial additionality by identifying a class of projects or activities that may be considered “business as usual”, taking into account common practice, barriers and other variables. For this particular Protocol, the threshold analysis is described on Annex C (pages 60-66). The “performance standard” approach of the Reserve differs from CDM, where additionality is assessed using information and analysis specific to each project.
- Inclusion of a new formula to determine the annual average number of animals. In the Protocol, the average number of animals is monitored on a monthly basis, and averaged for a total annual population for its use in equations 5.3 (page 22), 5.4 (page 23), 5.7 (page 29) and 5.8 (page 30).
- Addition of sampling procedures to estimate the animal weight. Version 5 requires a random sampling taking into account stratification of each livestock population into a minimum of 3 weight categories and a minimum of one monthly sample per age category for each defined livestock population. The protocol requires the differentiation between livestock categories as per Table B.2 (page 53) and if possible, the animal mass should be monitored on a monthly basis (Table 6.1, page 36).

## **A3. Project submittal forms – Compliance with USDA NRCS 359, 313 and 366 (Capp and Associates, Mex SA de CV)**

In form 1 - question 9 and form 2 - question 4g, it is requested that a party provides information of the compliance with the specifications of the NRCS Conservation Practice Standard 359 for Waste Treatment Lagoons, NRCS Conservation Standard 313 for Waste Storage Facilities, and NRCS Conservation Practice Standard 365 and 366 for Anaerobic Digesters, respectively. Are they valid for Mexican projects?

It would be better to start to what Mexico regulations states, at the moment there is no rule in effect, when the Mexican standards would be published then we move accordingly. However, in Mexico issuance of laws and regulations takes a long process and if we wait we may lose the opportunity to interest the operators of farms.

**Response:** Agree. Currently, there are no Mexican rules or standards for the design and maintenance of manure storage facilities, treatment lagoons or anaerobic digesters. The compliance with the USDA NRCS Conservation Practice standards for Mexican projects is not mandatory. Questions 9 and 4g were eliminated in forms 1 and 2 respectively. Once the Mexican technical standard (NMX) for the design and operation of anaerobic digesters for manure treatment systems is published (currently under development and expected to be published in 2009), question 4g in form 2 will be included making reference to this NMX.

## **B. GHG ASSESSMENT BOUNDARY**

### **B1. Emissions from compost production and on-site transportation of waste (DNV Mexico)**

In the GHG assessment boundary, it is indicated... "The assessment boundary of this protocol includes all GHG sources from waste production to disposal, including off-site manure disposal...". Does the Protocol include the possibility of producing compost on site? Do the project emissions consider the emissions generated in automotive equipment for waste transportation in the farm?

**Response:** Table 4.1 (pages 16-17) illustrates the GHG sources and associated gases included in the GHG assessment boundary. Methane emissions from other waste treatment and storage categories different from the biogas control systems, such as compost piles, should be included as well as carbon dioxide emissions from any supportive equipment (engines, tractors, etc.) for compost production. Vehicle CO<sub>2</sub> emissions from waste collection, transportation and disposal should also be included.

## **C. PROJECT MONITORING**

### **C1. Calibration, monitoring frequency (DNV Mexico)**

Monitoring parameters do not clearly indicate the frequency, actors or methodologies to verify relevant data such as monitoring equipment calibration or burners efficiency. At the same time, the use of external laboratories or third-party services aims to provide more accuracy and transparency for the information presented by participants, their use could be considered in these projects.

**Response:** Agree. Project monitoring section (pages 33-34) has been modified to provide a clearer guidance on how the biogas flow and methane concentration should be metered and recorded, and how measurement equipment should be maintained and calibrated. For cases when any device fails a calibration test or there is missing data, Annex D (pages 67-68) was added to explain data

substitution methodology and the adjustments to be made in case of a failed calibration.