

**Indicative simplified baseline and monitoring methodologies
for selected small-scale CDM project activity categories**

NOTE: The revised version of the methodology reflects only the revised definitions in accordance with the COP/MOP decision -/CMP.2 “Further guidance relating to the clean development mechanism”, paragraph 28 and therefore there is no need to re-publish the PDD at validation stage as prescribed by EB27 para 29(a).

TYPE III - OTHER PROJECT ACTIVITIES

Project participants shall take into account the general guidance to the methodologies, information on additionality, abbreviations and general guidance on leakage provided at <http://cdm.unfccc.int/methodologies/SSCmethodologies/approved.html>.

III. D. Methane recovery in agricultural and agro industrial activities**Technology/measure**

1. This project category comprises methane recovery from manure and wastes from agricultural or agro-industrial activities by
 - (a) installing methane recovery and combustion system to an existing source of methane emissions, or
 - (b) changing the management practice of a biogenic waste or raw material in order to achieve the controlled anaerobic digestion equipped with methane recovery and combustion system.
2. Projects that recover methane from landfills shall use category III-G and projects for wastewater treatment shall use category III-H.
3. Measures are limited to those that result in emission reductions of less than or equal to 60 kt CO₂ equivalent annually.

Boundary

4. The project boundary is the physical, geographical site of the methane recovery facility.

Project Activity Emissions

5. Technical measures shall be used (e.g. flared, combusted) to ensure that all biogas produced by the digester is destroyed. If biogas is released to the atmosphere unburned, these methane emissions shall be considered as the project emissions. Project emissions therefore consist of:
 - (i) Methane not captured by the project and released to the atmosphere;
 - (ii) Methane captured and not flared (e.g. physical leakage, flare inefficiency, flare availability);
 - (iii) CO₂ emissions from combustion of non-biogenic methane;
 - (iv) CO₂ emissions from use of fossil fuels or electricity for the operation of the facility;

**Indicative simplified baseline and monitoring methodologies
for selected small-scale CDM project activity categories*****III.D. Methane recovery in agricultural and agro industrial activities (cont)***

(v) The aerobic treatment and/or proper soil application of the sludge leaving the digesters in the project activity shall also be ensured and monitored. If the sludge is treated and/or disposed anaerobically, the resulting methane emissions shall be considered as project emissions.

Baseline

6. The emission baseline is the amount of methane that would be emitted to the atmosphere during the crediting period in the absence of the project activity. For each year during the crediting period, emissions are calculated as specified in paragraph a and paragraph b below and lower of the two values is used

- (a) Actual monitored amount of methane captured and destroyed by the project activity.
- (b) The methane emissions calculated ex ante using the amount of the waste or raw material that would decay anaerobically in the absence of the project activity, with the most recent IPCC tier 2 approach (please refer to the chapter ‘Emissions from Livestock and Manure Management’ under the volume ‘Agriculture, Forestry and other Land use’ of the 2006 IPCC Guidelines for National Greenhouse Gas Inventories).

7. If the recovered methane is used for heat or electricity generation it can apply to the corresponding category of type I project activities.

Leakage

8. No leakage calculation is required

Monitoring

9. The amount of methane used as fuel or combusted shall be monitored, using flow meters and analysing the methane content of the combusted gases either online, or with samples taken at least quarterly, and more frequently if the results show significant deviations from previous values.

10. Regular maintenance should ensure optimal operation of flares. The flare efficiency, defined as the fraction of time in which the gas is combusted in the flare, multiplied by the efficiency of the flaring process, shall be monitored.

11. Flow meters, sampling devices and gas analysers shall be subject to regular maintenance, testing and calibration to ensure accuracy.