

# EB48 – Methodologies



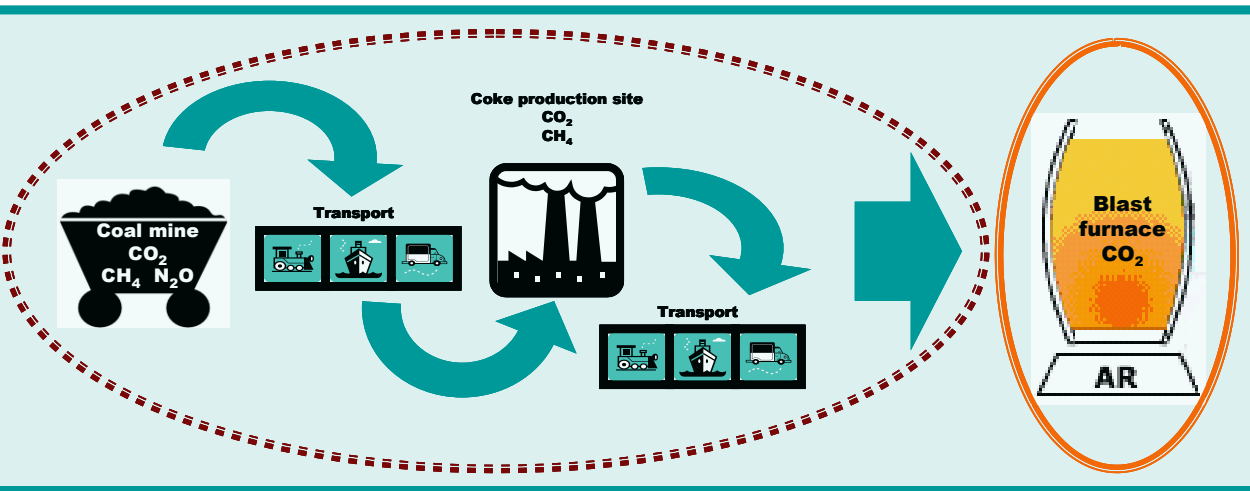
# **EB48 – annotated agenda item 3b**

## **Report of MP39**

**EB47 – Annotated agenda item 10a**  
**Proposed new methodology based  
on NM0278**

# NM0278 – Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system

## Project Boundary – Coal coke iron ore reduction system



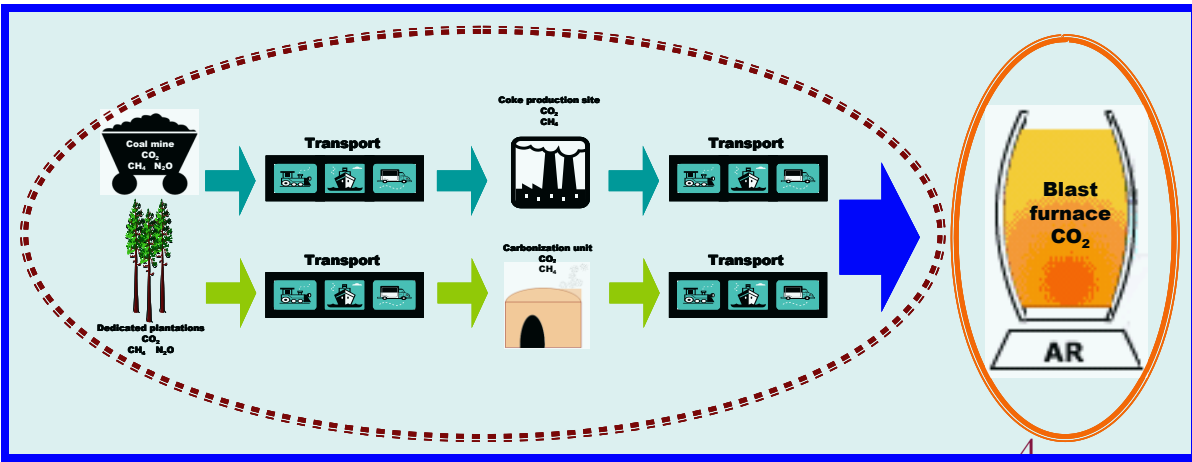
- Plantation can be under registered CDM A/R project using ARAM0005 methodology or normal renewable plantations.
- Leakage emissions due to shift of pre-project activity are claimed.

## Project: Renewable Plantation based iron ore reduction system

### Baseline: Fossil fuel based iron ore reduction system

**Emission reductions:**  
From partial or complete use of renewable reducing agents instead of GHG intensive reducing agents in the iron ore reduction process.

## Project Boundary – Iron ore reduction system based on mix of coke & renewable charcoal



# NM0278 – Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system

## Key Applicability Condition

The methodology is applicable to project activities that aim at the establishment of new iron ore reduction systems, which are characterized by a **new investment**.

Type 1: Production of reducing agents, to be used in iron & steel plant, by investing in dedicated plantations by the project entity;

Type 2: Establishment of specific long-term binding contracts for the supply of reducing agents, to be used in iron & steel plant, i.e., renewable charcoal from dedicated biomass plantations corresponding to a new investment in the dedicated plantation; this eligibility requirement can be fulfilled whether the long term contractor being listed as a project participant or not;

Type 3: Refurbishment/replacement of blast furnace;

Type 4: Establishment/acquisition of blast furnace.

## Emission Reduction

Based on difference in baseline and project emissions due to reducing agent production and use of reducing agent in blast furnace.

# NM0278 – Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system

## Main changes made based on EB47 and A/R WG feedback

EB47 comments	Changes
Review the project boundary as applied to the source of renewable biomass for production of reducing agent: (i) registered A/R CDM project activity; (ii) other biomass plantation;	Making the definition of project boundary clearer with respect to plantation, particularly that if plantation is a registered A/R project then it is not included in project boundary.
Review the necessity of supplier of renewable biomass to be the project participants;	Clarifying that the wood supplier need not be a project participant;
Review the proposed methodology by the afforestation and reforestation working group (A/R WG) with regard to the approach related to renewable biomass production.	Following main changes made based on A/R WG review. (i) Reference to various A/R tools in relevant sections, (ii) Change in the text on additionality of project when it is combined with CDM A/R project, (iii) Making requirements of cross checking of biomass supplied to steel project with biomass grown on land, (iv) Addition of definition for dedicated plantation.

# NM0278 – Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system

## Combined additionality for A/R and blast furnace project- The new text

- The baseline selection and additionality procedures are to be performed, considering the two activities together, which implies that, the investment analysis and/or the barrier analysis shall encompass the iron ore reduction system as a whole (production of the biomass/ reductant and the operation of the steel mill);
- **The demonstration of additionality of the A/R CDM project activity shall also comply with the requirements of the approved A/R CDM methodology;**
- The project proponents shall refer to the integrated process in the two PDDs and shall submit them for registration together although the crediting period of the iron ore reduction activity may only start after the first harvesting of the trees established in the context of the A/R CDM project activity.

# NM0278 – Use of charcoal from planted renewable biomass in the iron ore reduction process through the establishment of a new iron ore reduction system

## The Board may please take account of the following issue:

The A/R project is outside the project boundary as per paragraph 38 of EB25 decision, for the cases where renewable reducing agent is procured from a registered CDM AR project activity, project emissions are accounted within the respective project so as to avoid double counting of project emissions.

However, for combined additionality demonstration for iron & steel project, all the investments/ barriers of A/R project are taken into account, although they are outside the project boundary.

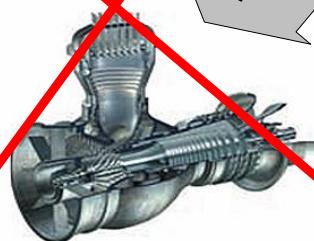
# NM0292: “Baseline and monitoring methodology for new grid connected power plant using waste gas fired Combined Cycle Gas Turbine technology instead of more GHG intensive technology ”



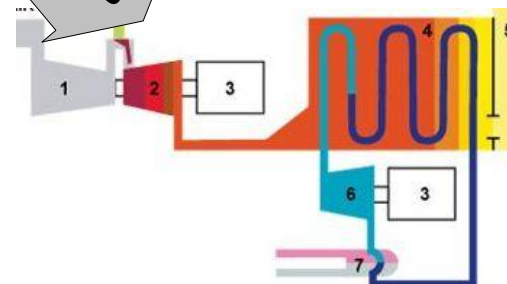
Iron & Steel facility

Waste gas

Waste gas



Low efficiency power plant



Combined cycle waste gas power generation

# NM0292: “Baseline and monitoring methodology for new grid connected power plant using waste gas fired Combined Cycle Gas Turbine technology instead of more GHG intensive technology ”

## Issues raised by EB47

## Response by Panel

<p>Analyze possible issues related to generation of waste gas of multiple types and their inter-linkages in the complex industry like integrated iron &amp; steel plant</p>	<p><b>New applicability condition:</b> Heat demand in the iron and steel production facility must be met using waste gases (with the exception of the processes that technically cannot use waste gas) Otherwise, it has to be demonstrated that all amount of fossil fuels or electricity used under the project scenario design for any purposes, would also be used under the baseline scenario design and the baseline scenario design was optimized in terms of use of the waste gas. This should be demonstrated using manufacturer’s original design specifications and technical layout diagrams for the iron and steel facility, certified as optimized in terms of energy and mass balance by an independent expert.</p>
<p>Review the applicability condition requiring that the power generated in the project activity is used within the industrial facility and/or exported to the grid by the industrial facility</p>	<p><b>New applicability condition:</b> The methodology is applicable if the additional power produced by the Project Activity does not substitute a captive power plant.</p>

# NM0292: “Baseline and monitoring methodology for new grid connected power plant using waste gas fired Combined Cycle Gas Turbine technology instead of more GHG intensive technology ”

## Issues raised by EB47

Review the rationale behind the requirement of determination of baseline efficiency based on the top 15% efficient power plants

## Response by Panel

To be in line with another methodologies, now the top 20% plants will be analysed to determine the baseline efficiency

## **EB48 – Annotated agenda item 11a**

### **Proposed new methodology based on NM0294**

# NM0294: "Avoidance of landfill gas emissions by in-situ aeration of landfills"

## Baseline scenario

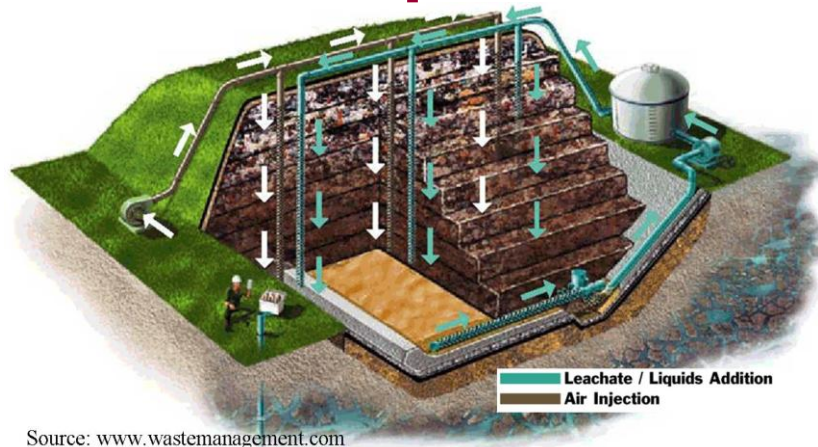
CH<sub>4</sub> CH<sub>4</sub> CH<sub>4</sub>



Closed Landfill

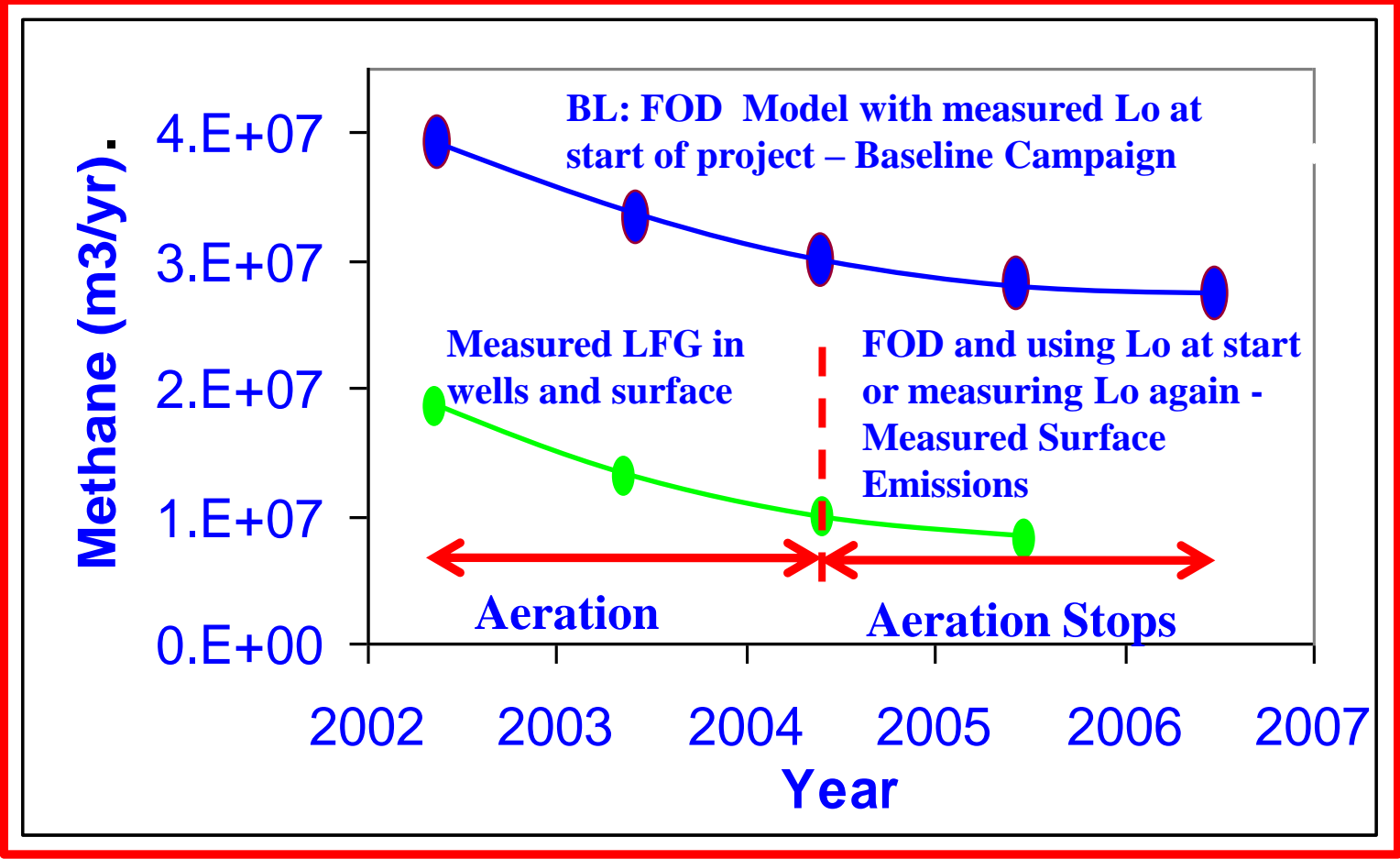
## Project scenario

CH<sub>4</sub>



In-situ aeration

# NM0294: "Avoidance of landfill gas emissions by in-situ aeration of landfills"



# NM0294: “Avoidance of landfill gas emissions by in-situ aeration of landfills”

1. **Baseline emissions:** are estimated based on the FOD model using Lo (Potential methane generation capacity of the waste) before the start of the project activity. Baseline campaign (3 months): methane emissions shall be measured prior to the start of the aeration of the landfill. The ratio between the actual methane measured and the methane estimated using the FOD model should be used to adjust the estimated baseline emissions using the FOD model.
2. **Project emissions:** during air injection phase project emissions will be measured (vented and surface emissions). During post-injection phase project emissions will be the maximum between measured emissions (surface emissions) and emissions estimated based on the FOD model using either Lo at the start of the project activity or or measuring Lo once after the end of the air-injection phase.

# EB48 – annotated agenda item 13

## Requests for clarification

# **EB48 – annotated agenda item 14**

## **Requests for revision**

# AM\_REV\_110: Amendment to expand applicability to new adipic acid facilities (AM0021)

The project proponent provided for several safeguards to (i) minimize the risk of leakage of displacement of production of adipic acid in Annex-I countries by adipic acid produced in Non-Annex-I countries (adopted by MP34 but not approved by EB in final guidance), and (ii) by ensuring that CER revenues cannot be used to lower the sales price of AA below the cost of production.

Against this background, the discount is proposed in CERs is as follows: Use baseline emission factor of 0.25 t N<sub>2</sub>O /t AA. After the first five years of the crediting period, the cap on the baseline emissions is increased by 90%, from 0.25 to 0.025 t N<sub>2</sub>O /t AA

# AM\_REV\_110: Amendment to expand applicability to new adipic acid facilities (AM0021)

## Proposal by the Meth panel

The Meth Panel recommends as a simple solution for new plants using a fix baseline emission factor of 0.05tN<sub>2</sub>O/ton AA produced. The reasons to use this value are the following:

- Inclusion of primary nitrous oxide abatement (corresponding to a destruction rate of 90%) shall be considered as business as usual technology which should be part of any new adipic acid plant;
- The emission factor as defined above still provides enough revenue to cover the investment and operating costs of a primary abatement unit; according to the consultant's report, the CDM benefits associated to a destruction rate of 90% of N<sub>2</sub>O emissions in a standard one stage destruction unit would still represent two to three times the cost of the abatement;
- The emission factor does not remove the incentive to reach a maximum N<sub>2</sub>O destruction efficiency. There is still an incentive to implement two stages destruction processes which could destroy almost 100% of the emissions;
- Reducing the amount of CERs in such a way would drastically limit any incentive to displace any direct or indirect production from other sources.

# EB48 – annotated agenda item 15

## Revision to approved methodologies

# **EB48 – Annotated agenda item 15a**

## **Revision to AM0031**

## Revision to AM0031 – AM\_REV\_0142

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In response to AM\_REV\_0142 the panel recommends the Board to approve a revision to AM0031.

The methodology AM0031, “Baseline Methodology for Bus Rapid Transit Projects”, is applicable to project activities that reduce emissions through the construction and operation of a Bus Rapid Transit (BRT) system for urban road based transport. The methodology is also applicable for extensions or expansions of existing BRT systems (adding new routes and lines).

## Revision to AM0031 – AM\_REV\_0142

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**The revision expands the applicability of the methodology:**

- **Electricity was included as an option for the transport systems in the baseline and/or project scenario;**
- **The use of biofuels by the project and/or baseline transport systems was also allowed;**
- **The baseline public transport system and other public transport options were expanded to include rail-based systems.**

# **EB48 – Annotated agenda item 15b**

## **Revision to AM0034**

## EB48 –Revision of AM0034

AM0034 is applicable to project activities that install a secondary N<sub>2</sub>O abatement catalyst inside the ammonia burner of a nitric acid plant, underneath the precious metal gauze pack.

The editorial revision in AM0034 was presented in EB46 changing the name of annex-1 recommending use of international standard EN14181 from “good practices” to “monitoring procedures to be followed”.

The Board agreed not to approve an editorial revision and requested that more flexibility should be provided to project participants in selecting appropriate monitoring practices, including national and international performance standards.

# EB48 –Revision of AM0034

An external consultant was appointed by the secretariat. The expert opinion can be summarized as follows:

“EN 14181 reflects the latest known regulation regarding the quality assurance of Automated Measuring Systems (AMS) and it is advisable to implement that definition also in other countries”.

Automated measuring systems are rather complex in its use and unless good practices are enforced, there is a significant risk that results will have little or no significance with great impact on CERs issued.

In light of the consultant’s opinion the Meth Panel suggests that the name of the annex 1 be modified as previously recommended, with a clear provision inviting the project proponents to propose the adoption of other national or international standards that provide similar guidance.

Additionally, the editorial revision also includes in-situ analysers in the Automated Measuring System based on a request for deviation.

# **EB48 – Annotated agenda item 15c**

## **Editorial revision to AM0036**

## Editorial Revision to AM0036 – AM\_CLA\_0152

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The methodology AM0036, “Fuel switch from fossil fuels to biomass residues in boilers for heat generation”, is applicable to project activities that switch from use of fossil fuels to biomass residues, in existing and, where applicable new, boilers.

The editorial revision clarifies that:

- (i) In case of fossil fuels co-fired with biomass, the fossil fuel amount shall not exceed 50% of the total fuel fired on an energy basis; and,
- (ii) RDF (Refused Derived Fuel) and RPF (Refused Plastic Fuel) should be considered as fossil fuels.

# **EB48 – Annotated agenda item 15d**

## **Editorial revision to AM0061**

## Editorial revision to AM0061 – AM\_REV\_0150

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**AM0061 “Methodology for rehabilitation and/or energy efficiency improvement in existing power plants” is applicable to project activities that implement rehabilitation and/or energy efficiency improvement measures in an existing fossil fuel fired power plant for electricity generation.**

**The draft editorial revision replaces the term “nameplate” power production capacity by the term “design” power production capacity.**

# **EB48 – Annotated agenda item 15e**

## **Revision to ACM0006**

# Revision to ACM0006 – Request for Deviation / New power-only methodology

**ACM0006 “Consolidated methodology for electricity generation from biomass residues” is applicable to electricity generation (cogeneration or not) using biomass residues.**

**The panel recommends the Board to approve a revision to the approved methodology ACM0006 as a consequence of:**

- (i) EB 47, paragraph 23, based on a request for deviation; and,**
- (ii) the new “power only” methodology recommended by the panel for the Board’s approval.**

# Revision to ACM0006 – Request for Deviation / New power-only methodology

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The draft revision introduces a new equation for scenario 13 in substitution to equation 15.

The revision restricts the applicability of ACM0006 only to cogeneration projects, as a new “power only” methodology is separately recommended for approval by the panel in this meeting.

## **EB48 – Annotated agenda item 16**

### **Guideline for the reporting and validation of plant load factors**

# Guideline for the reporting and validation of plant load factors

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The assessment of additionality via investment analysis for project activities applying ACM0002, AMS-I.D, and other methodologies related electricity production, may require the determination of a plant load factor for the project activity.

The methodologies referred to above do not provide guidance on how to determine plant load factors as this parameter is not required for the ex-post calculation of emissions reductions.

# Guideline for the reporting and validation of plant load factors

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**In view of that, the Board requested the panel to review the approved consolidated methodology ACM0002 to arrive at an accurate plant load factor taking into account the variability of the wind parameters and gaps of data.**

**This request was raised during the consideration of requests for issuance under project activities where the quantity of electricity actually generated by the wind farms was higher than the estimated electricity generation in the registered CDM-PDD.**

# Guideline for the reporting and validation of plant load factors

The guidelines establish that the plant load factor shall be defined ex-ante in the CDM-PDD according to one of the following three options:

- (1) The plant load factor provided to banks and/or equity financiers while applying the project activity for project financing, or to the government while applying the project activity for implementation approval;
- (2) The plant load factor determined by a third party contracted by the project participants (e.g. an engineering company);
- (3) The plant load factor determined in accordance with the any subsequent guideline prepared by the Meth Panel and approved by the Executive Board.

# Guideline for the reporting and validation of plant load factors

In assessing whether a plant load factor has been defined correctly in a CDM-PDD, a DOE shall verify whether it derives from the above requirements.

DOEs are responsible for the validation of the veracity of statements and information provided in CDM-PDDs for which they are undertaking validation.

To achieve this DOEs shall determine whether the defined value in the CDM-PDD has been determined in accordance with best practices by a credible source. The DOE shall also cross checks with available data for projects employing similar technology and operating in similar conditions.

# Guideline for the reporting and validation of plant load factors

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**In accordance with option 3.c of the guideline, the Board may wish to request the Meth Panel to prepare guideline for determination of load factor for wind power plants / other renewable energy power plants, in consultation with external expert/s, as required.**

## **EB48 – Annotated agenda item 17**

**New “Consolidated methodology for electricity generation from biomass residues in power-only plants”**

# Consolidated methodology for electricity generation from biomass residues in power-only plants

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**The Board at EB 37 requested the panel to undertake a review of ACM0006**

**In response to EB's request, the panel agreed to propose two new methodologies based on ACM0006:**

- **The first one applicable to power-only plants;**
- **A second one applicable to heat and power plants.**

# Consolidated methodology for electricity generation from biomass residues in power-only plants

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A final step of this task is to revise AM0036 in order to remove an overlap with the existing ACM0006, and also to make it consistent with the new set of biomass residues methodologies.

After all, there will be three new methodologies covering heat and power generation from biomass residues.

# Consolidated methodology for electricity generation from biomass residues in power-only plants

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## Applicability

The methodology is applicable to project activities that generate electricity in biomass residue (co-)fired power-only plants.

A power-only plant is a power plant to which the following conditions apply:

- All heat engines of the power plant produce only power and do not co-generate heat; and
- The thermal energy produced in equipment of the power plant is only used in heat engines and not for other processes

# Consolidated methodology for electricity generation from biomass residues in power-only plants

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The project activity may include the following activities or, where applicable, combinations of these activities:

- Installation of new biomass residues (co-)fired power-only plants (greenfield power projects);
- Installation of new biomass residues (co-)fired power-only plants, which replace or are operated next to existing power-only plants (power capacity expansion projects);
- Improvement of energy efficiency of existing biomass residues (co-)fired power-only plants (energy efficiency improvement projects);
- Total or partial replacement of fossil fuels by biomass residues (fuel switch projects).

# Consolidated methodology for electricity generation from biomass residues in power-only plants

## Some important applicability conditions:

- **Fossil fuels may be co-fired in the project plant. However, the amount of fossil fuels co-fired shall not exceed 50% of the total fuel fired on an energy basis;**
- **No power and heat plant operates at the project site during the crediting period;**
- **If any heat is generated: The project does not influence the operation of the heat generation equipment; and, The heat generation equipment does not influence the project plant; and, The amount of fuel used in the heat generation equipment can be monitored and clearly differentiated from any fuel used in the project activity.**

# Consolidated methodology for electricity generation from biomass residues in power-only plants

- No more restrictions in terms of the combinations of P's and B's scenarios to which the methodology is applicable.
- This significantly broadens the applicability of the methodology considering power-only scenarios.

## Baseline Selection and Demonstration of Additionality

- The new methodology is based on the revised version of the Combined Tool;
- Additional guidance with respect to baseline for biomass residues use. A more detailed assessment is made taking into account multiple baseline scenarios for different categories of biomass residues.

# Consolidated methodology for electricity generation from biomass residues in power-only plants

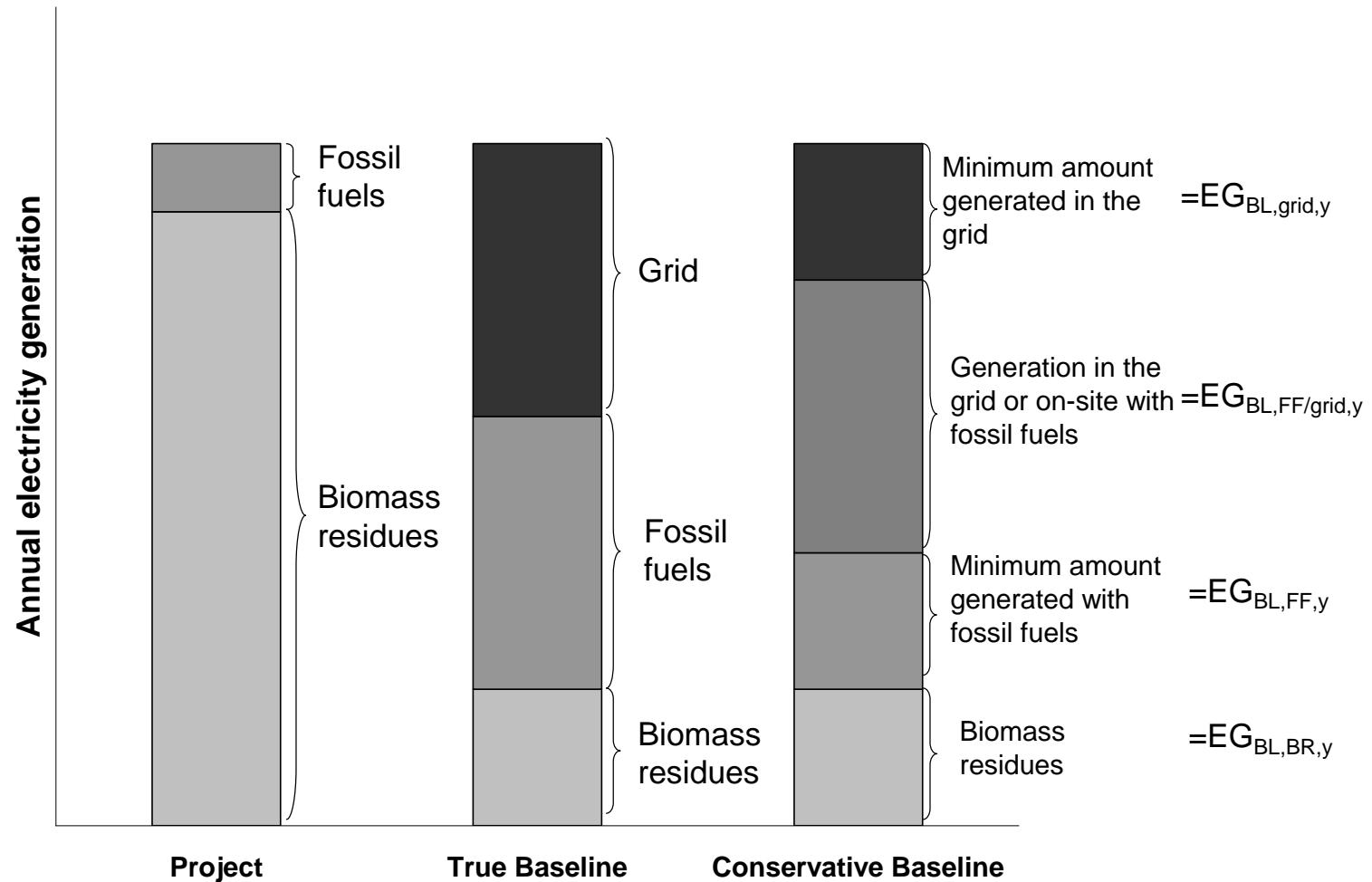
## Emissions Reductions

- Emissions reductions are no longer calculated by making an incremental analysis, but a complete electricity balance comparing baseline and project scenarios.
- **Project emissions include:** Emissions from fossil fuel consumption at the project site; Emissions from transportation of biomass residues; CH<sub>4</sub> emissions from combustion of biomass residues; Emissions from anaerobic treatment of wastewater.

# Consolidated methodology for electricity generation from biomass residues in power-only plants

- **Baseline emissions include:** Emissions from fossil fuel power plants; Emissions from grid-connected power plants; and, CH<sub>4</sub> emissions from anaerobic decay / uncontrolled burning of biomass residues;
- The main challenge is to quantify the amount of electricity produced in each baseline power plant, especially for cases involving a combination of on-site co-fired power plants and grid generation in the baseline.

# Consolidated methodology for electricity generation from biomass residues in power-only plants



# Consolidated methodology for electricity generation from biomass residues in power-only plants

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- **Leakage emissions:** Emissions from the diversion of biomass residues from other uses to the project plant as a result of the project activity.
- **A conservative approach is taken:** In case project proponents cannot demonstrate that diversion does not occur, emissions are calculated based on the most intensive fossil fuel available in the region/country.

## **EB48 – Annotated agenda item 18**

**Revision to “Combined tool to identify the baseline scenario and demonstrate additionality”**

# Revision to the Combined Tool

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**The revision to the tool addresses issues related to:**

- **Two requests considered by the panel: Request for clarification AM\_CLA\_0120, Request for deviation on ACM0006; and,**
- **New “Consolidated methodology for electricity generation from biomass residues in power-only plants” recommended for approval in the context of ACM0006 revision.**

# Revision to the Combined Tool

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**The tool currently is restricted to situations in which all potential alternative baseline scenarios to the proposed project activity are available options to the project participants.**

## **Why that restriction is there?**

**The tool currently does not provide procedures for a benchmark analysis to consider situations in which project participants may decide not to undertake the investment in the project, and third parties would make an investment that would deliver similar services instead.**

# Revision to the Combined Tool

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The revision aims at removing this restriction in the applicability condition, thus making the applicability of the tool broader.

The main change is related to the investment analysis step, that was amended to cover alternative scenarios where the project participants would not undertake an investment (benchmark analysis).

The barrier analysis as well as the common practice analysis are not affected by the revision.

# Revision to the Combined Tool

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**A new concept was needed in the revised tool: mutually exclusive versus non-mutually exclusive investments.**

**This concept plays a central role in the assessment of additionality and selection of the baseline scenario if an investment analysis is undertaken.**

**Alternatives are mutually exclusive if the implementation of one alternative scenario would physically prevent the other alternative scenarios from being executed.**

**This does not mean mutually exclusive based on economic reasons, e.g. due to limited capital availability.**

# Revision to the Combined Tool

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**The distinction between alternative scenarios which are mutually exclusive and alternative scenarios which are not mutually exclusive affects the outcome of the investment analysis.**

**In the case where all alternative scenarios are mutually exclusive, the economically or financially most attractive alternative can be regarded as the baseline scenario.**

**However, this approach does not work if the alternatives are not mutually exclusive.**

**The revised tool aims at taking that fact into account.**

# Revision to the Combined Tool

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## The Board may please note that

**If:**

- One of the alternative scenarios under consideration is that project participants do not undertake an investment but third parties do; and,
- The alternatives scenarios under consideration are mutually exclusive.

Then, the revised tool comes to the conclusion that the project activity is not additional if it is more attractive than the financial benchmark.

# Revision to the Combined Tool

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This means that the tool would arrive at the conclusion that, for those cases, even though there are alternatives which are more profitable than the project activity, the fact that the project is more profitable than a benchmark renders the project not additional.

## **EB48 – Annotated agenda item 19**

**Tool to determine the baseline efficiency  
of thermal or electric energy generation  
systems**

# Tool to determine the baseline efficiency of thermal or electric energy generation systems

The tool describes various procedures to determine the baseline efficiency of an energy generation system, for the purpose of estimating baseline emissions.

## Scope and Applicability:

This tool is applicable to energy generation systems that a) generate **only electricity (and no heat)**; or b) produce **only thermal energy (and no electricity)**.

The tool:

- is not applicable to **cogeneration systems and waste heat recovery systems**;
- can be applied only if **load is the main operating parameter that influences the efficiency.**

# Tool to determine the baseline efficiency of thermal or electric energy generation systems

## Options to estimate the baseline efficiency:

- a) Use the manufacturer's load-efficiency function
- b) Establish a load-efficiency function based on measurements and a regression analysis
- c) Establish the efficiency based on historical data and a regression analysis
- d) Use the manufacturer's efficiency values
- e) Determine the efficiency based on measurements and use a conservative value
- f) Use a default value

**Note: Options (a) to (e) are applicable only to energy generation systems that use a single fuel type.**

# Tool to determine the baseline efficiency of thermal or electric energy generation systems

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## Call for public comments launched by EB45:

on the various aspects of the draft tool, especially highlighting the issues with regards to its practical applications and user friendliness for project proponents.

**10 comments received before the deadline.**

Few comments are addressed in the tool, however inclusion of some other would lead to many complexities, therefore not included.

## **EB48 – Annotated agenda item 20**

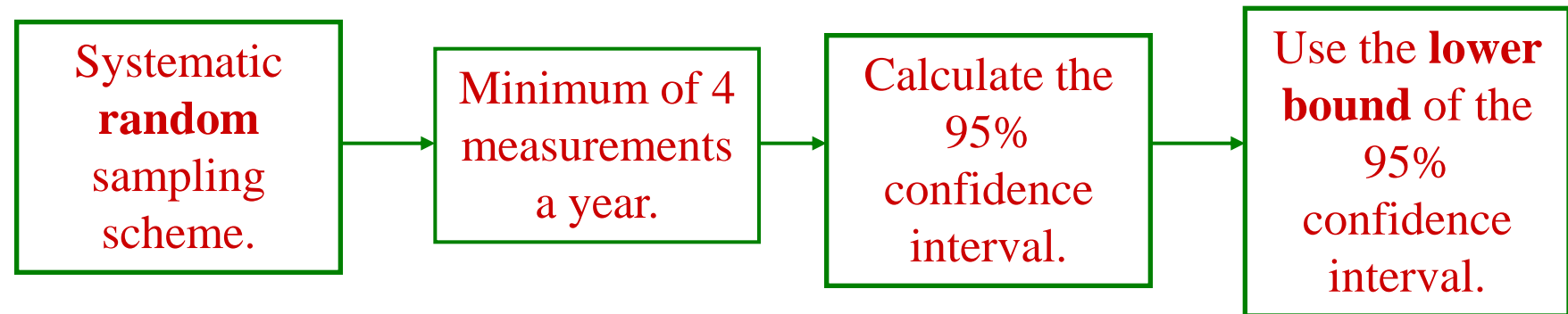
### **Guidelines to calculate the fraction of Methane in the landfill gas from periodical measurements**

# Guidelines to calculate the fraction of methane in the landfill gas from periodical measurements

## Background

The Board noted that the revision to **ACM0001**, approved at EB47, to allow only the option of **continuous measurement of methane content of the landfill gas**, addressed the issues for new projects to be registered under the methodology, however the issue of **periodic monitoring** has to be addressed for the **projects which are under validation/ registration or already registered, or for those projects which will use the older version due to applicable grace period.**

## Guidelines

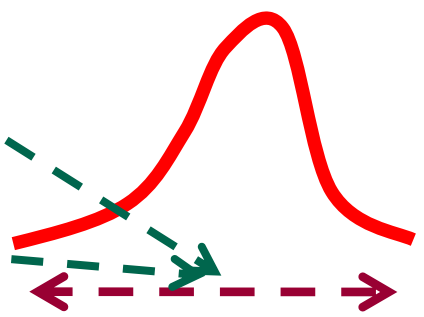


# Guidelines to calculate the fraction of methane in the landfill gas from periodical measurements

## Lower Bound for a 95% CI

$$W_{CH4,lb,y} = \mu_{WCH4,y} - t \cdot \frac{\sigma_{WCH4,y}}{\sqrt{n_m}}$$

$$\sigma_{WCH4,y} = \sqrt{\frac{\sum_{m=1}^{n_m} (W_{CH4,m,y} - \mu_{CH4,y})^2}{n_m - 1}}$$



Sample size	t value 95% CI
1	12.7
2	4.30
3	3.18
4	2.78
5	2.57
6	2.45
7	2.37

t-distribution is used in estimating the mean of a normally distributed population when the sample size is small.



# Example Project Using Systematic Random Sampling

Description	Mean	SD	Lower 95% Bound	Upper 95% Bound	LFG Flow (m3/yr)	CH4 Flow (m3/yr)	% Diff from Estimate Based on Daily
Paired Daily	<b>0.55</b>	0.044	0.46	0.64	3,326,628	1,830,555	0.0
Group 1 (4 Pts)	0.57	0.034	<b>0.52</b>	0.63	3,326,628	1,730,777	<b>-4.3%</b>
Group 2 (4 Pts)	0.52	0.080	<b>0.40</b>	0.65	3,326,628	1,317,274	<b>-27.2%</b>
Group 3 (4 Pts)	0.57	0.032	<b>0.51</b>	0.62	3,326,628	1,708,587	<b>-5.6%</b>
Group 4 (4 Pts)	0.53	0.036	<b>0.48</b>	0.61	3,326,628	1,585,888	<b>-12.4%</b>
Group 5 (4 Pts)	0.51	0.079	<b>0.39</b>	0.67	3,326,628	1,286,088	<b>-28.9%</b>
4 Highest (Cherry Picking)	0.63	0.003	<b>0.63</b>	0.64	3,326,628	2,086,007	<b>15.3%</b>