

---

## **EB56 – Annotated agenda**

### **3 (b) Methodologies for baselines and monitoring plans**



---

## **EB56 – Annotated agenda item 17 (a)(i)**

### **New Methodology Based on NM0312:**

**“Production of diesel using a mixed feedstock of gasoil and vegetable oil”**

Available to the members of the Board as annex 1 of MP 45 meeting report



## New Methodology Based on NM0312

---

**The project activity under this methodology is:**

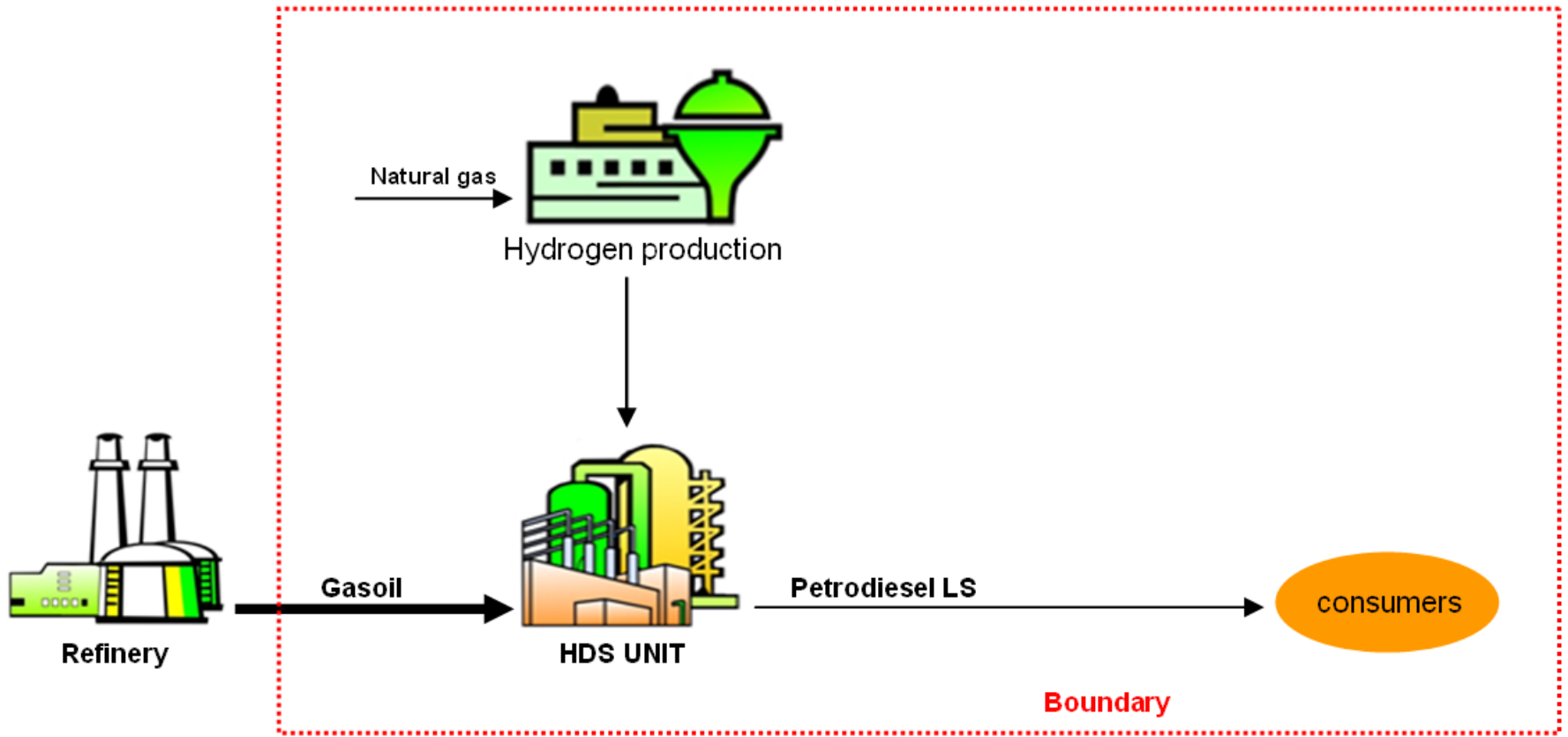
- **Production of diesel by using a mixture of gasoil and vegetable oil as feedstock to an existing refinery**

**That is the methodology applies to project activities that produce petro/renewable diesel, by switching the feedstock from 100% gasoil to a mixture of gasoil and vegetable oil in an existing refinery.**



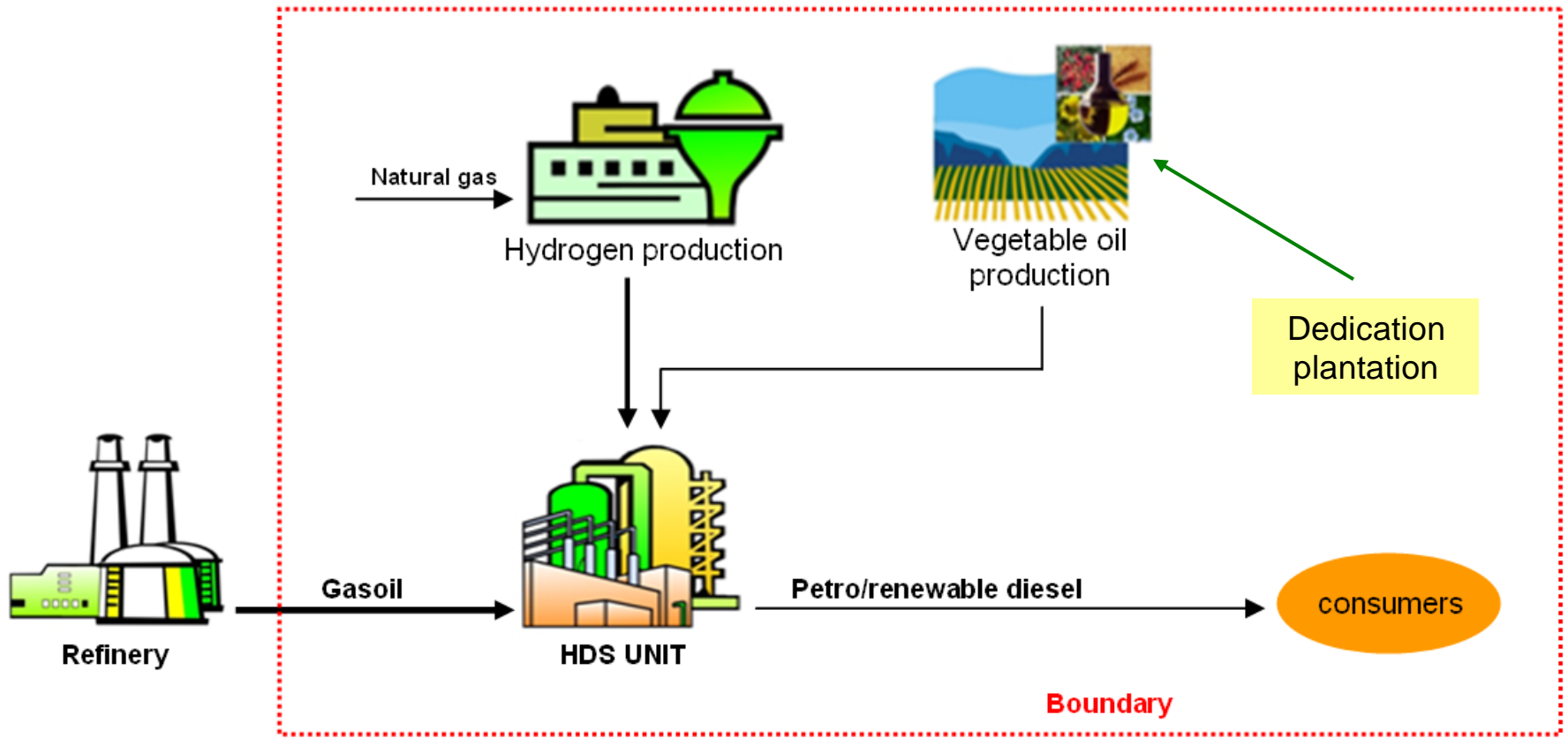
# New Methodology Based on NM0312

## BASELINE



# New Methodology Based on NM0312

## PROJECT



### Selected important applicability conditions:

- Existing refineries only with at least 3 years historical production based on 100% gasoil input;
- The final diesel is used in existing stationary sources and/or in captive fleets in the host country, all having a contract with the producer not allowing them to claim CERs; and
- The vegetable oil is produced on dedicated plantations, meeting all requirements of “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” or on a land area that is included in the project boundary of one or several registered A/R CDM project activities.



## New Methodology Based on NM0312

---

### Baseline emissions:

- **Baseline emissions include the emissions associated with the consumption of petrodiesel by the consumers which is displaced by the use of renewable diesel;**

### Project emissions:

- **Production of excess hydrogen (H<sub>2</sub>) that is required in the project scenario to be used in the HDS unit in comparison to the baseline scenario;**
- **Transportation of oil seeds and vegetable oil;**
- **Energy consumption for the production of vegetable oil;**
- **Anaerobic treatment of wastewater from the production of vegetable oil;**
- **Cultivation of land to produce oil seeds in dedicated plantations (this source shall not be included if the total area of dedicated plantation is registered as one or several A/R CDM project activities).**



---

## **EB56 – Annotated agenda item 17 (a)(ii)**

### **New Methodology Based on NM0320:**

**“Modal shift in transportation of cargo from road transportation to water or rail transportation”**

Available to the members of the Board as annex 2 of MP 45 meeting report

---



## New Methodology Based on NM0320

---

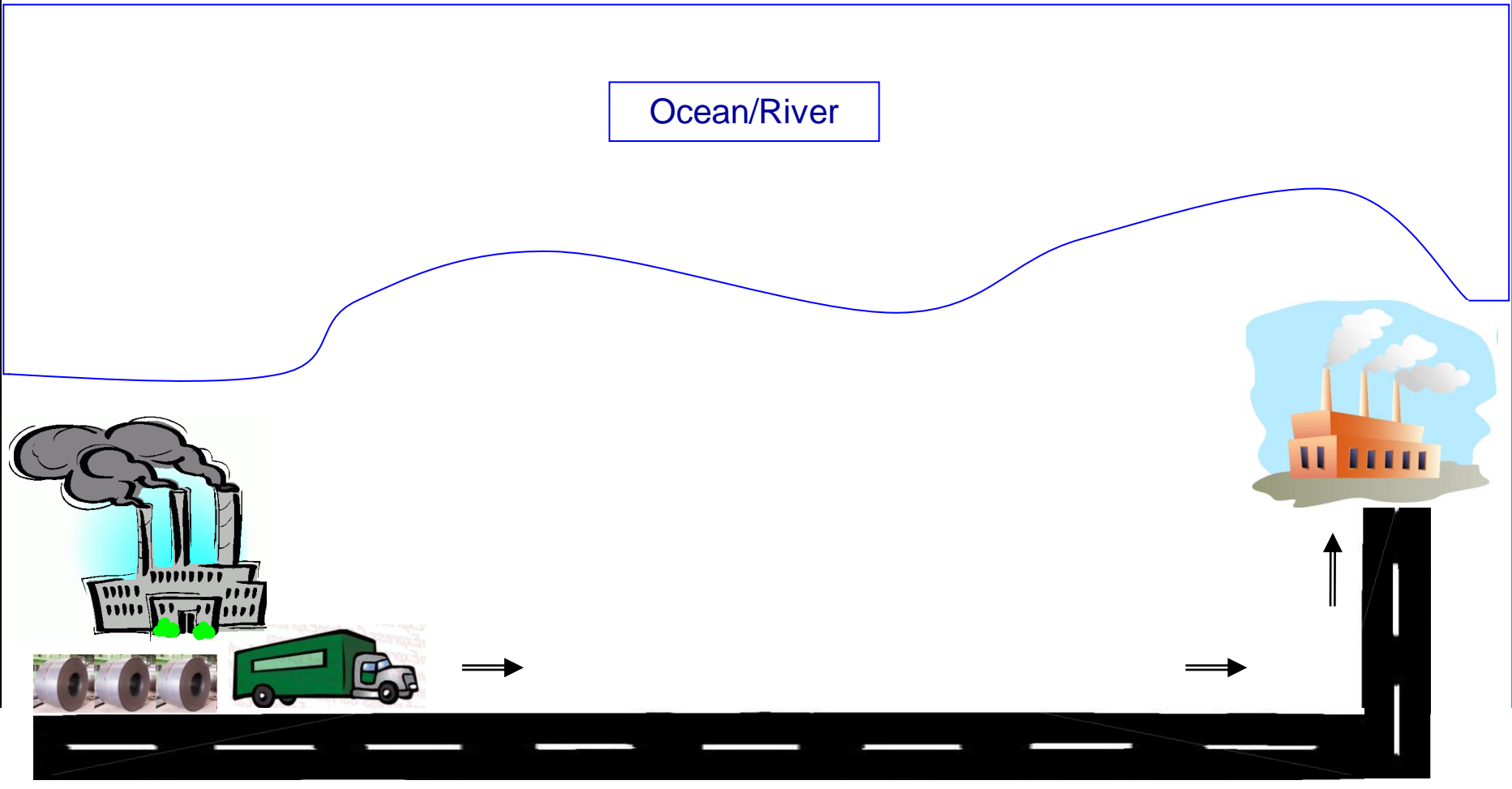
**The project activity under this methodology is:**

- **Modal shift in transportation of specific cargo (excluding passengers) from road transportation using trucks to water transportation using barges or ships or rail transportation**



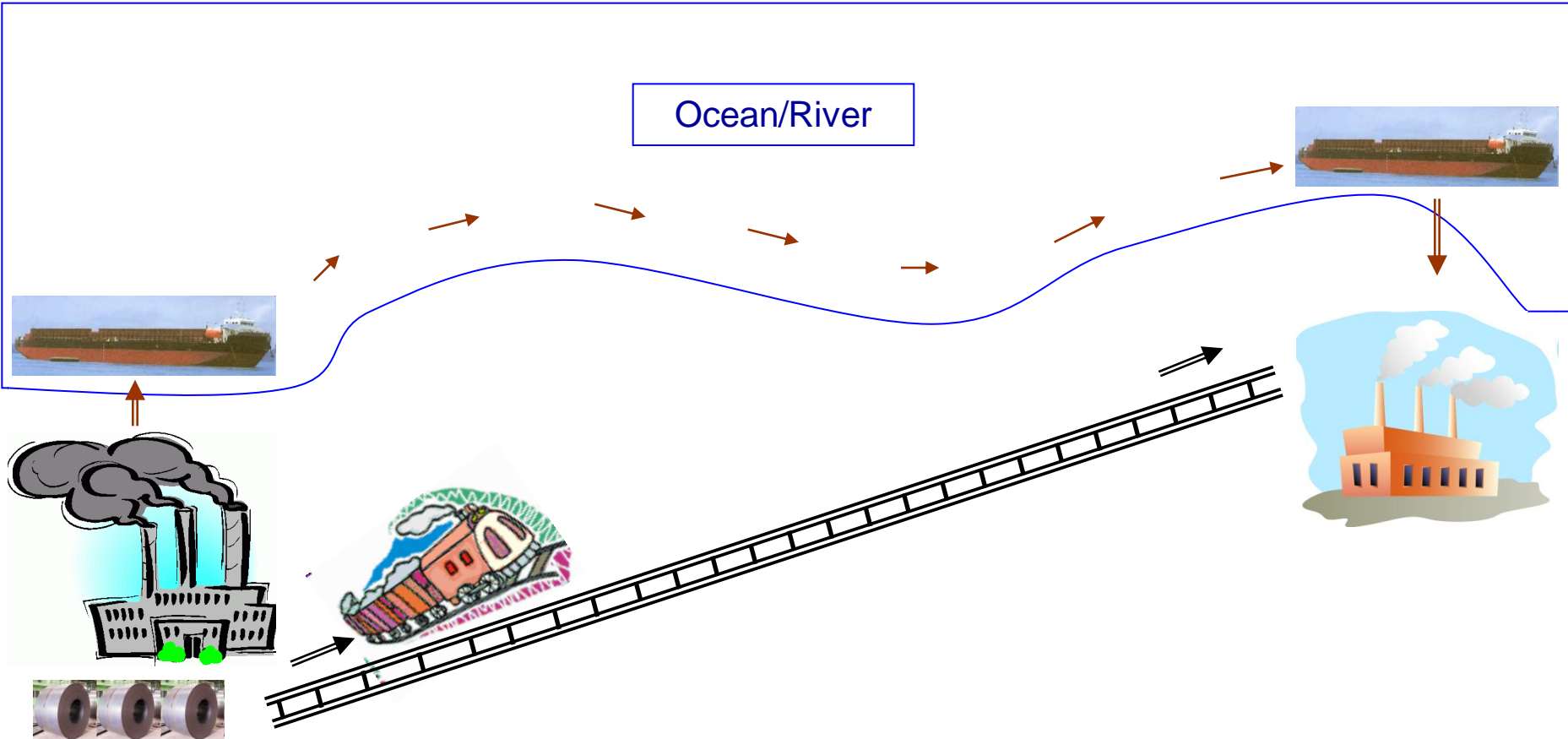
# New Methodology Based on NM0320

## BASELINE



# New Methodology Based on NM0320

## PROJECT



### Selected important applicability conditions:

- **At least one of the following new investments is needed: direct investment in new infrastructure for water transportation or for rail transportation or refurbishment/replacement of existing water and rail transportation infrastructure or equipments, with transport capacity expansion;**
- **Project cargo type, project transportation mode, and transportation routes are defined in the CDM-PDD at the validation of the project activity and no change is allowed thereafter;**
- **In the case of gaseous fossil fuels and biofuels, it can be demonstrated that equal or more gaseous fossil fuels and biofuels are used in the baseline scenario than in the project activity;**
- **The vegetable oil is produced on dedicated plantations, meeting all requirements of “Tool for the identification of degraded or degrading lands for consideration in implementing CDM A/R project activities” or on a land area that is included in the project boundary of one or several registered A/R CDM project activities.**



## New Methodology Based on NM0320

---

### Baseline emissions:

- **Baseline emissions include the emissions from fuel consumption for cargo transportation;**

### Project emissions:

- **Fuel and/or electricity consumption for cargo transportation**



---

## **EB56 – Annotated agenda item 22 (a)**

### **Revision to ACM0002:**

**“Consolidated baseline methodology for grid-connected electricity generation from renewable sources”**

Available to the members of the Board as annex 3 of MP 45 meeting report

**To clarify a term mentioned in the existing ACM0002, the draft revision provides the following definition:**

**Existing reservoir:**

**A reservoir is to be considered as an “existing reservoir” if it has been in operation for at least three years before the implementation of the project activity.**

**\*The same revision is proposed for a similar SSC methodology.**



---

## **EB56 – Annotated agenda item 22 (b)**

### **Revision to ACM0006:**

**“Consolidated methodology for  
electricity and heat generation from  
biomass residues”**

Available to the members of the Board as annex 4 of MP 45 meeting report

---



# Revision to ACM0006

---

## Background

- Existing ACM0006 too complex and rigid, despite its 23 scenarios;
- Many requests for revision;
- EB 37 requested review and deconsolidation of ACM0006 (Consolidated methodology for electricity generation from biomass residues);
- EB 52 adopted the first deconsolidation for power-only (ACM0018: Consolidated methodology for electricity generation from biomass residues in power-only plants);
- Heat-only is dealt with under methodology AM0036 (Fuel switch from fossil fuels to biomass residues in heat generation equipment).



# Revision to ACM0006

---

## The revision

The revised methodology is applicable to project activities that operate **biomass-residues (co-)fired power-and-heat plants**, including greenfield projects, capacity expansion projects, energy efficiency improvement projects, and fuel switch projects.

The proposed revision to ACM0006 addresses power-and-heat cases:

- It **simplifies the applicability conditions** by substituting the scenario-based approach by a single algorithm;
- It **expands the applicability** of the methodology to a much larger set of scenarios without pre-defining them.



# Revision to ACM0006

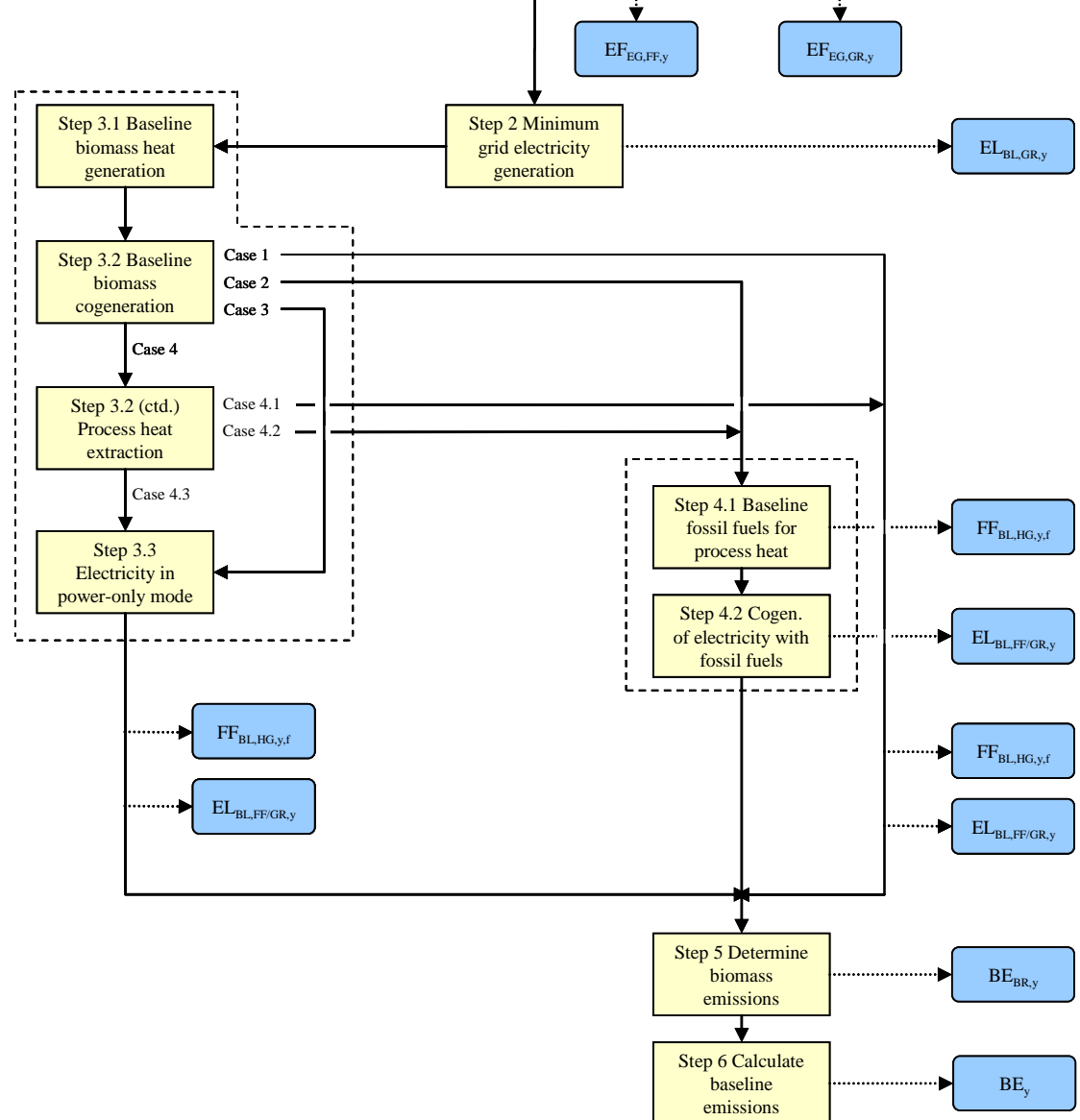
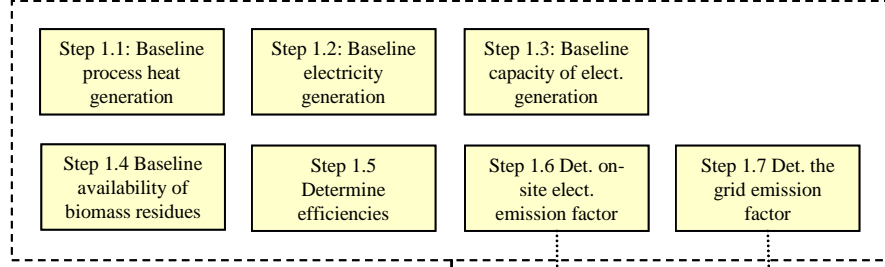
---

## Baseline emissions

The algorithm is based on a conservative and flexible approach.

- Monitoring of power and process heat demands in the project;
- Identification of the configuration that would be used in the baseline to supply those demands;
- Identification of the minimum quantity of electricity that would be generated in the grid in the baseline;
- Determination of power and process heat that would be produced in the baseline using biomass residues;
- Determination of the quantity of fossil fuels that would be required in the baseline to close the power and process heat balances.





# Revision to ACM0006

---

## Project emissions

- Fossil fuel consumption at the project site;
- Grid-connected fossil fuel power plants in the electricity system;
- Off-site transportation of biomass residues;
- If applicable, CH<sub>4</sub> emissions from combustion of biomass residues for electric power and heat generation at the project site; and
- If applicable, CH<sub>4</sub> emissions from anaerobic treatment of wastewater.

## Leakage

Increase in emissions from fossil fuel combustion or other sources due to diversion of biomass residues as a result of the project activity.



### Further work on biomass methodologies

- Continue working on and improving other existing methodologies for energy generation using biomass residues, e.g. **AM0036** (Fuel switch from fossil fuels to biomass residues in heat generation equipment) and **AM0042** (Grid-connected electricity generation using biomass from newly developed dedicated plantations), with the goals of ensuring the consistency in the approaches used for biomass project activities, as well as increasing the usability of these methodologies.



---

## **EB56 – Annotated agenda item 22 (c)**

### **Revision to ACM0013**

**“Consolidated baseline and monitoring methodology for new grid connected fossil fuel fired power plants using a less GHG intensive technology”**

Available to the members of the Board as annex 5 of MP 45 meeting report

---



### The draft revision addresses issues raised in AM\_CLA\_0188, namely:

- (i) Clarifies that the referential point in time for historical data, required in the calculation of baseline emissions, is the date of submission of the PDD for validation of the project activity;

**Reference year *v*.** The *reference year v* is the most recent year prior to the date of submission of the PDD for validation of the project activity, for which the required data from the power plants to be included in the sample group for the emissions benchmark (as per guidance in the baseline emissions section hereunder) is available. In any case, the *reference year v* cannot begin more than 2 years prior to the date of submission of the PDD for validation of the project activity.

- (ii) Includes a definition for cogeneration plants;

**Cogeneration plant.** For the purpose of this methodology, a *cogeneration plant* is a plant that:

- (i) Simultaneously generates heat and power through combustion of fuels, and
- (ii) Provides useful thermal energy to end-users which use the heat for other purposes than power generation (e.g. industrial users, district heating, etc).



- (iii) Broadens the applicability of the methodology to power plants that fire other fuel categories, than the main fuel, up to 3% on an energy basis for start-up or auxiliary purposes; and
- One fossil fuel category should be used as main fuel in the project power plant. In addition to this main fossil fuel category, small amounts of other fossil fuel categories can be used for start-up or auxiliary purposes,<sup>2</sup> but they shall not comprise more than 3% of the total fuel used annually on an energy basis;
- (iv) Includes minor editorial improvements.



---

# **EB56 – Annotated agenda item 22 (d)**

## **Revision to ACM0017**

### **“Production of biodiesel for use as fuel”**

Available to the members of the Board as annex 6 of MP 45 meeting report

---



### The draft revision :

- clarifies that the methodology is not applicable for the dedicated plantations established on peatlands;
- clarifies that the possibility to account for the CO<sub>2</sub> emissions resulting from changes in soil carbon stocks as zero applies only to perennial plants, while calculating project emissions associated with the cultivation of lands to produce oil seeds; and
- improves the methodology editorially.



---

## **EB56 – Annotated agenda item 23**

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

Available to the members of the Board as annex 9 of MP 45 meeting report

---



## Combined tool

---

The draft revision adds three new alternative scenarios to account for the situations where:

- S2: Where applicable, no investment is undertaken by the project participants but third party(ies) undertake(s) investments or actions which provide comparable outputs or services to users of the project activity, *for example*:
- *In the case of a Greenfield power project, an alternative scenario may be that the project participants would not invest in another power plant but that power would be generated in existing and/or new power plants in the electricity grid.*
- S3: Where applicable, the continuation of the current situation, not requiring any investment or expenses to maintain the current situation, such as, *inter alia*:
- *The continued venting of methane from a landfill;*
  - *The continued release of N<sub>2</sub>O from adipic or nitric acid production.*



# Combined tool

---

(continued)

S4: Where applicable, the continuation of the current situation, requiring an investment or expenses to maintain the current situation, such as, *inter alia*:

- *The continued use of an existing boiler involving expenses for operation and maintenance;*
- *The continued use of a specific fuel mix for power generation in an existing power plant.*

Step 3 (Investment analysis) of the revised CT provides guidance on the financial/economic analysis of the new alternative scenarios.



---

# **EB56 – Annotated agenda item 24**

## **Definition of abnormal campaign – AM0034**

Available to the members of the Board as para 27 of MP 45 meeting report

---



# Abnormal campaign

---

## Proposal

Abnormal campaign is defined as an event when:

- 1) The gauze does not achieve an ammonia conversion efficiency of 90% for at least 90% of the time duration of the design campaign;  
or
- 2) Physical damage to the primary catalyst is observed, resulting in replacement of the catalyst.

For historical campaigns occurring before implementation of the project activity if more than two campaigns in the five historical campaigns immediately preceding baseline campaign meet the above definition, only the two of them characterized with the lowest nitric acid production shall be deemed abnormal.



---

## **EB56 – Annotated agenda item 25**

### **Information note on the**

**“Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”**

Available to the members of the Board as annex 8 of MP 45 meeting report

---



## Background

- The Board at its forty-sixth meeting approved the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of the crediting period”.
  - The Board requested the Meth Panel to assess approved methodologies to check their consistency with the tool and advise the Board on possible implications of revising those approved methodologies requiring reassessment of the baseline scenario at the renewal of the crediting period of a registered project activity.
  - The panel assessed 11 methodologies (ACM0001, ACM0002, ACM0006, ACM0010, ACM0012, AM0001, AM0028, AM0029, AM0034, AM0045, AM0051) to check their consistency with the tool, based on urgency in terms of forthcoming requests for renewal of the crediting period and the frequency at which the methodology is used in projects.
  - This information note summarizes the issues identified while reviewing the above mentioned methodologies and proposes potential solutions.
- 



## The issues identified:

### (i) The issue of updating the baseline without updating the baseline scenario

- The Sub-step 2.1 of the tool requires updating the current baseline emissions for the subsequent crediting period without reassessing the baseline scenario, based on the latest approved version of the methodology applicable to the project activity.
- Many approved methodologies require reassessing the baseline scenario at the renewal of crediting period. Furthermore, updating the baseline emissions without reassessing the baseline scenario is technically not possible in some cases. *For example, a fuel or feedstock used in the baseline may not be available anymore at the renewal of the crediting period or a certain baseline technology may not be used anymore at all in the sector because a new technology has emerged during the crediting period. In this case, the continued assumption of the same baseline scenario (i.e. the same fuel, feedstock or technology) could potentially result in the calculation of unrealistic baseline emissions.*
- The reassessment of the baseline scenario is not a reassessment of the additionality. In particular, for projects where the original baseline scenario consists of an alternative investment, the update of the baseline scenario at the renewal of the crediting period has to take into account that in the baseline a new plant would have been built which would continue to operate.



## The issues identified:

### (ii) The issue of end of lifetime

- The Sub-step 1.3 of the tool requires that the current baseline needs to be updated if the end of technical lifetime of the baseline equipment is earlier than the end of the crediting period for which renewal is requested.
- Most approved methodologies comply with this by limiting the crediting of emission reductions to the end of the technical lifetime of the baseline equipment, in line with earlier guidance on this matter by the Board (EB 08, Annex 1 and EB 22, Annex 2).

### (iii) Sections of the methodology to be used to update the CDM-PDD at the renewal of crediting period

- The procedures for renewal of the crediting period of a registered CDM project activity state that the project participants shall update those sections of the project design document (CDM-PDD) relating to the baseline, estimated emission reductions and the monitoring plan using an approved baseline and monitoring methodology. The panel notes that this guidance may not be fully clear with regard to which exact sections of the CDM-PDD this refers to. The panel therefore recommends the EB to clarify that all sections of the CDM-PDD should be updated except for the section which assesses the additionality of the project activity.



## Information note on the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”

---

The results from the assessment of the selected 11 methodologies:

<b><i>Methodology</i></b>	<b><i>Identified issues</i></b>	
	<b><i>Baseline scenario</i></b>	<b><i>Lifetime</i></b>
ACM0001	X	
ACM0002	X	X*
ACM0006	X	X*
ACM0010	X	
ACM0012	X	X*
AM0001	X	X
AM0028	X	
AM0029	X	
AM0034	X	
AM0045	X	
AM0051	X	

x - issues identified, x\* - added after the MP meeting

---



---

## **EB56 – Annotated agenda item 26**

**Note prepared by the Meth Panel in response to the request contained in paragraph 25 of the report of the fifty-fourth meeting of the Board on the “Tool to calculate the emission factor for an electricity system”.**

Available to the members of the Board as annex 10 of MP 45 meeting report

---



## The Meth Panel:

- (a) Agreed that the use of ex post dispatch analysis data when available is the most accurate approach to determine the operating margin emission factors and should be used whenever possible; however
- (b) Considered that it may not be appropriate to mandate this method as a priority in the tool due to potential inconsistencies with methodologies where the displacement of grid-electricity is determined only at the annual level;
- (c) Is of the opinion that it is not possible to use ex ante dispatch data for the calculation of the simple operation margin or the simple adjusted operating margin emission factor; and
- (d) Conceives that further analysis would be needed to determine if the use of ex ante dispatch analysis is suitable compared with other methods of estimating operating margin.



---

## **EB56 – Annotated agenda item 27**

**Update on the work related to first-of its-kind and common practice**



---

**Thank you for your attention**

