

## Agenda item 4.1 (b)

Paragraph 31 (b) of the annotated agenda

# Revision to the “TOOL16: Project and leakage emissions from biomass” and to biomass related methodologies

**CDM EB 113**

Bonn, Germany, 8 to 11 March 2022



## Background

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- EB 110:
  - Considered the draft revised “Glossary: CDM terms” that contained **revised definition of "renewable biomass"**;
  - Requested the MP to **revise existing approved methodologies and methodological tools**, as appropriate.
- MP86:
  - Proposed a draft revised version of the TOOL16 (Project and leakage emissions from biomass) and launched a call for public inputs;
  - No comments were received.



## Purpose

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- Revise the TOOL16 → **include a comprehensive approach** to determine project emissions;
- Methodologies could **draw on the elements of the tool** by citing the tool;
- Update default factors based on the **2019 Refinement** to the 2006 IPCC Guidelines for National Greenhouse Gases Inventories.



# Proposed solutions – Project emissions (PE)

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## Current version

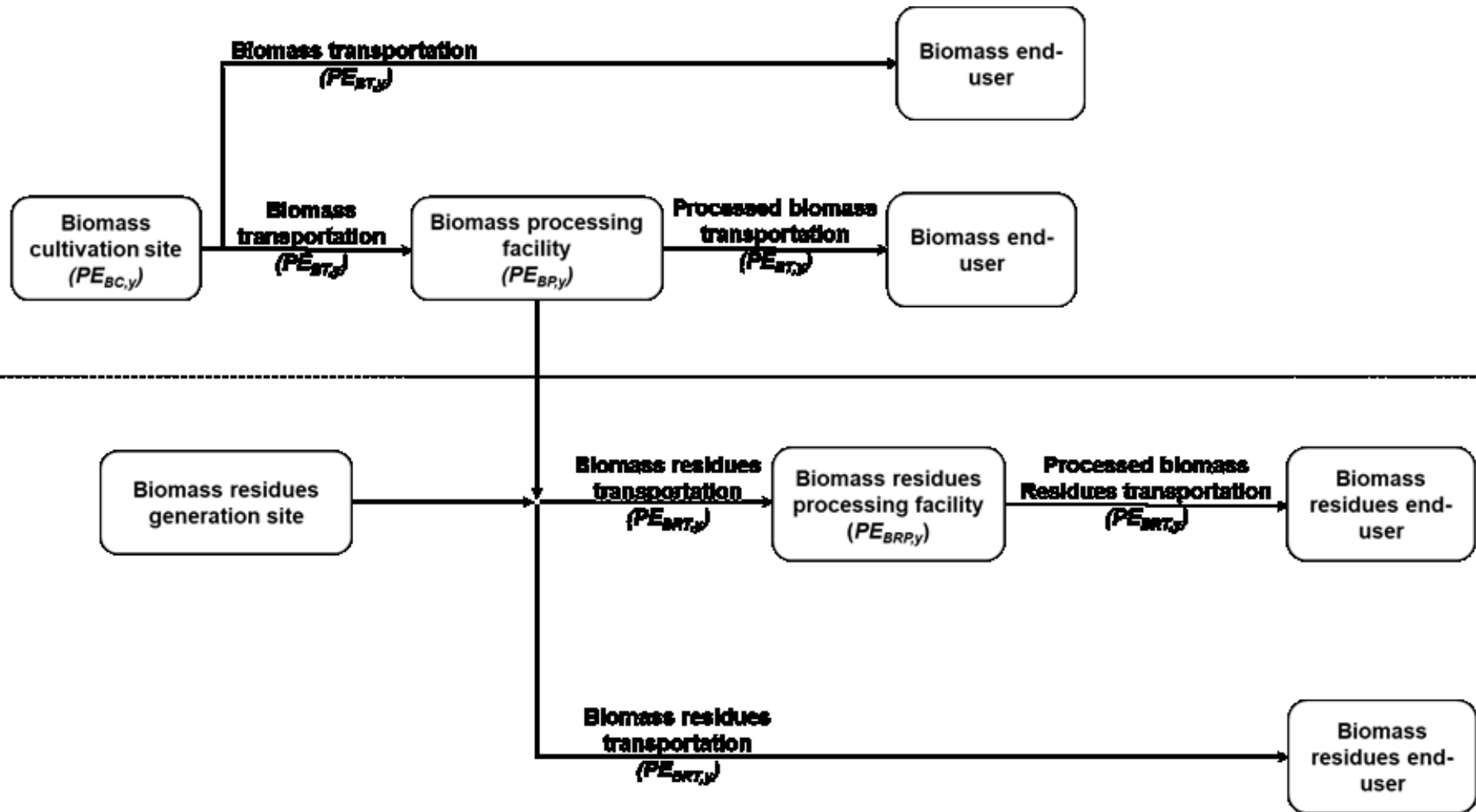
- PE cultivation of biomass ( $PE_{BC}$ ):
  - Loss of soil organic carbon;
  - Soil management;
  - Energy consumption (cultivation + processing)
  - Clearance or burning of biomass;
  - Transportation of biomass;
- PE utilization of biomass residues ( $PE_{BU}$ )
  - Energy consumption (thermal and mechanical processing of biomass residue);
  - Transportation of biomass residues.

## Proposed revision

- PE cultivation of biomass ( $PE_{BC}$ ):
  - Loss of soil organic carbon;
  - Soil management;
  - Energy consumption (cultivation + processing)
  - Clearance or burning of biomass;
- PE transportation of biomass ( $PE_{BT}$ );
- PE processing of biomass ( $PE_{BP}$ );
  - Energy (electricity + fuel) + Biomass decay + Composting + Anaerobic digester + Wastewater treatment + Additives;
- PE transportation of biomass residues ( $PE_{BRT}$ );
- PE processing of biomass residues ( $PE_{BRP}$ ).



# Proposed solutions – Project emissions (PE)



# Proposed solutions – Project emissions (PE)

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- Inclusion of:
  - Equations and methods to calculate project emissions;
  - Simplified options to determine emissions from:
    - Transportation of biomass and/or biomass residues;
      - Microscale: emissions negligible;
      - Small-scale: negligible for transportation below 200 km;
      - Large-scale: apply net-to-gross adjustment factor of 10%
    - Emissions from additives (energy needed for production and transportation) used to process the biomass and/or the biomass residues:
      - Ratio additives/biomass processed  $\leq 2\%$ : no need to account for emissions;
      - Ratio  $> 2\%$  and  $\leq 10\%$ : account only emissions from energy needed for production of additives (fuel and electricity);
      - Ratio  $> 10\%$ : account emissions from energy needed for production of additives (fuel and electricity) and transportation;



# Proposed solutions – Leakage (LE)

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## Current version

- LE shift of pre-project activities ( $LE_{BC}$ ):
  - Indirect land-use changes outside of the boundary;
- LE due to the diversion of biomass residues ( $LE_{BR,Div}$ ):
  - Identification of alternative scenario of biomass residues use in the absence of the project

## Proposed revision

- LE shift of pre-project activities ( $LE_{BC}$ ):
  - Indirect land-use changes outside of the boundary;
- LE due to the diversion of biomass residues ( $LE_{BR,Div}$ ):
  - Identification of alternative scenario of biomass residues use in the absence of the project;
- LE due to the collection, transportation and processing of biomass residues ( $LE_{BRP}$ )



## Proposed solutions – revision of methodologies

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- Methodologies revised:
  - **Large-scale:** AM0036, AM0089, ACM0006, ACM0017, ACM0018;
  - **Small-scale:** AMS-I.A., AMS-I.C., AMS-I.F., AMS-I.I.
- Project emissions section will be updated to:
  - Provide clarity on **which emission sources** need to be included to calculate project emissions;
  - **Remove methodological options** that are included in the draft revised TOOL16;
- Leakage section will be updated to:
  - Quote the draft revised TOOL16 to **identify and justify the inclusion or removal** of emission sources;





## Impacts

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- Provide clarity on the **emission sources that may need to be included in the calculation of project emissions** from projects involving the use of biomass or biomass residues for large-scale, small-scale and micro-scale CDM project activities.
- **Improve consistency** when determining project emissions and leakage by making reference to the requirements of the draft revised TOOL16;



## Subsequent work and timelines

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- The MP agreed to launch a call for public inputs
  - Any input received will be discussed with the MP and forwarded to the Board for its consideration.



## Recommendations to the Board

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- The MP recommends that the Board adopts the draft revised TOOL16 and the draft revised methodologies, to be made effective at the time of the Board's approval.

