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Institut für angewandte Ökologie
Institute for Applied Ecology

Development of a methodological tool to calculate the grid emission factor

HWWA Side-event

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Methodological tools

- Methodological tools can be referred to by methodologies
- Broadly applicable, easy to use
- Methodological tools approved by the EB:
  - ⇒ Tool for the assessment and demonstration of additionality
  - ⇒ Combined tool to identify the baseline and demonstrate additionality
  - ⇒ Tool to determine methane emissions avoided from dumping waste at a solid waste disposal site (IPCC FOD model)
- Methodological tools in development:
  - ⇒ Emissions from cultivation of biomass
  - ⇒ Methane emissions from flaring
  - ⇒ Grid emission factor (based on ACM0002)
  - ⇒ ...

Scope / objectives of a new tool

- Revisiting ACM0002 approach, based on lessons learned
- No fundamental changes (e.g. BM/OM)
- Simplification where possible
- Improve clarity on data sources and requirements
  - ⇒ Inconsistent application of ACM0002 in PDDs
  - ⇒ Data seemingly not reported and/or verified
- Specific methodology limitations
  - ⇒ Hydro retrofit
  - ⇒ Projects involving emission reductions in interconnected grids
- Best practice examples / Excel Spreadsheets?

Envisaged improvements (1)

- Operating margin (OM) calculation
  - ⇒ Dispatch data analysis not used
  - ⇒ Preference in choice of method not fully clear
  - ⇒ Aggregated versus plant specific data
- Ex-ante / ex-post choice
  - ⇒ Ex-post almost never used
  - ⇒ Remove ex-post method to avoid gaming?
- Build margin (BM) calculation
  - ⇒ Consideration of small units / “significant” retrofits
  - ⇒ Start date of plants (not defined)
  - ⇒ Assumptions on operating hours of plants needed
  - ⇒ Default values?

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Envisaged improvements (2)

- Address double counting
  - ⇒ Exclude registered CDM projects from BM calculations?
  - ⇒ Keep registered CDM projects in OM calculations?
- Definition of grid boundary and imports/exports
  - ⇒ Physical / contractual flows
  - ⇒ Emission factor for imports (plant or grid?)
  - ⇒ Multi-grid central plants (e.g. India)
- Weight of OM and BM at renewal of the crediting period

Envisaged improvements (3)

- Two options for calculating emissions
  - ⇒ Actual fuel consumption
  - ⇒ Electricity generation + plant efficiency
  - ⇒ (Range of) default values for plant efficiencies?
- Simplified approach for small quantities of electricity?
- Separate tool for **consumption** of electricity?

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Conclusions

- Clearer guidance, less ambiguity
- Only one grid emission factor should be used in PDDs in the same grid!
- Simplification where possible (e.g. default values)
- Centralized provision of grid data or the grid emission factor very useful

  ⇒ DNAs? Secretariat? EB?

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Thank you for your attention!

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