

Agenda item 4.1.

Paragraph 24 of the annotated agenda

Methodological approaches for calculating emission reductions from project activities, resulting in the reduced use of non-renewable biomass in households

CDM EB 102

Bonn, Germany, 25 to 28 March 2019



CMP 14 encouraged the Board to **review methodological approaches for calculating emission reductions** from project activities, resulting in the **reduced use of non-renewable biomass in households.**



Purpose

To present the following background to the issue:

- a) An overview of **past decisions and guidance** provided by the CMP and the Board **on methodologies** for the reduced use of NRB (e.g. clean cookstoves) and the **status of CDM project activities and PoAs** applying such methodologies;
 - b) Status of the **ongoing methodological work** related to clean cookstoves.
- To receive Boards guidance on the appropriate course of action to respond to the mandate from the CMP



- An old version of “AMS-I.C. Thermal energy for the user” had covered displacement of non-renewable biomass
 - a) IPCC default value for CO₂ emissions from wood burning was applied by projects
- EB 21 (September 2005) revised the provision in response to decision 17/CP.7 (i.e. the eligibility of land use, land-use change and forestry project activities under the CDM is limited to afforestation and reforestation)
 - a) net **increase** of carbon pools **should not** be taken into account in the calculation of emission reductions
 - b) net **decrease** of carbon pools **should be** taken into account in the calculation of emission reductions



- EB37 (in 2008) approved “**AMS-I.E.** Switch from non-renewable biomass for thermal applications by the user” and “**AMS-II.G.** Energy efficiency measures in thermal applications of non-renewable biomass” with two key parameters included:
 - ✓ *EF projected_fossilfuel*: Emission factor for the fossil fuels projected to be used for substitution of non-renewable woody biomass by similar consumers (default 63.7 t CO₂/TJ)
 - ✓ Fraction of woody biomass that can be established as non-renewable biomass (fNRB)



Project pipeline for the reduced use of NRB in households

- “The Achievements of the CDM” **highlighted the SD benefits** of the clean cookstove project activities:
 - *Over one million efficient cookstoves*
 - *Direct impact on the lives of the users in particular women and children.*
- With 69 PoAs registered, clean cookstoves are by far the most popular PoA type. 303 CPAs have been included in these PoAs and, in addition, 42 project activities are registered.
 - a) More than 4.7 million CERs have been issued for clean cookstoves



Issues, ongoing work and potential areas for further work

- Issues are listed based on literature review and recent stakeholders' submissions (non exhaustive).

Issues	Ongoing work	Potential further work
1. Uncertainty in estimates of emission reductions have not been included.	Default values, surveying and other monitoring methods are being continuously improved by the Board.	Issue applies to all CDM projects , in particular those using sampling methods. No specific measure is proposed for this issue (in this CN).
2. Default factors for biomass consumption from baseline stoves at the household level has been developed only for a few countries .	For some countries, conservative default values has been developed, using the procedure for development of top-down SB.	Where DNAs make request for top-down SBs, the Board has developed a process to consider and approve them. No specific measure is proposed for this issue.



Issues, ongoing work and potential areas for further work

Issues	Ongoing work	Potential further work
3. Default factors for fNRB are not conservative.	The issue has been addressed. Conservative default value of 0.3 is included in the new TOOL30. Almost all of the previously approved national fNRB factors have expired.	No specific measure is proposed for this issue.
4. Monitoring of retention rates of stoves and stove stacking is not fool proof. Refined approaches to incorporate the use of data loggers may be required.	The Board has mandated work to MP to develop best practice examples in cookstove methodologies.	No specific(new) measure is proposed for this issue.



Issues, ongoing work and potential areas for further work

Issues	Ongoing work	Potential further work
5. The use of fossil fuel CO2 emission factors as surrogates for biomass combustion have no scientific basis.	Currently no work is being carried out.	The Board may wish to mandate the MP to further consider the issue.
6. Non-CO2 GHG emissions (CH4 and N2O) are not considered .	Currently no work is being carried out.	This issue linked to item 5. The Board may wish to mandate the MP to further consider the issue.
7. Approaches to incorporate black carbon are not included.	Currently no work is being carried out.	Black carbon is not a GHG included under the KP. No specific measure is proposed for this issue.
8. CDM methodologies do not cite up-to-date harmonised standards for stove test (e.g. ISO)	The issue could be addressed (by expanding) existing mandates for best practice examples.	The Board may wish to mandate the MP to consider the issue for revision of methodologies.



Recommendations to the Board

The secretariat recommends that the Board request the MP and Secretariat to prepare a **concept note** for its consideration at a future meeting, addressing **issues 5, 6 and 8** in the table.

- **Issue 5:** The use of fossil fuel CO₂ emission factors as surrogates for biomass combustion have no scientific basis.
 - EF_{projected_fossilfuel} (with a default value of 63.7 t CO₂/TJ) as compared wood emission factor (i.e. 112 t CO₂/TJ),
- **Issue 6:** Non-CO₂ GHG emissions such as methane and nitrous oxide emissions are not considered.
- **Issue 8:** CDM methodologies to cite up to date harmonised standards for stove test (e.g. ISO)



Stakeholders' inputs

One input was received from Project Developer (PD) Forum:

→ *Current approach of using an emission factor based on fossil is an arbitrary and punitive discount on the emission reductions.*

→ *The issue also is of material concern to many of PD Forum members, who despite the current market conditions are actively seeking to raise investment for these important technologies.*



Proposal (issue) 5: The use of fossil fuel CO₂ emission factors as surrogates for biomass combustion has no scientific basis.

- **PD Forum agrees with the assessment** made by the secretariat, and support the use of an emission factor based on wood for non-renewable biomass. If the use of a wood based emission factor is positively decided, PD Forum encourages the Board to swiftly implement the changes to relevant methodologies, in order for PD Forum members and vulnerable communities to start benefitting from the change;

Proposal (issue) 6: Non-CO₂ greenhouse gas emissions such as CH₄ and N₂O emissions are not considered in the current methodologies.

- **PD Forum strongly supports this proposal** and suggest the adoption of IPCC default values, where available, to estimate the resulting emission reductions. These emissions are significantly reduced by project activities that reduce the amount of biomass burned. Current methodologies do not credit project activities such as efficient cook stoves with this climatic benefit, even though the IPCC has already adopted default values for methane and nitrous oxide from the combustion of wood.



Subsequent work and timelines

Subject to the mandate from the Board, the MP will prepare a **concept note** for the consideration of the Board.

- ✓ Work will be carried out, keeping in mind the timelines to allow the Board to report on the matter in its annual report to the CMP (i.e. well before Sept. 2019).



This work to be done for this mandate could be undertaken **under the existing activity on “*Simplification of methodologies*” under objective 1(c): “*Develop simplified and user-friendly standards and procedures that increase efficiency and ensure environmental integrity*”** of the CDM two-year business and management plan 2018–2019.

