

CDM-EB106-AA-A06

Concept note

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

Version 01.0



United Nations
Framework Convention on
Climate Change

TABLE OF CONTENTS	Page
1. PROCEDURAL BACKGROUND.....	3
2. PURPOSE	3
3. KEY ISSUES AND PROPOSED SOLUTIONS	3
3.1. Overview of the recent work related to the reduced use of non-renewable biomass in households.....	3
3.2. Potential areas for further methodological work	4
4. IMPACTS.....	5
5. SUBSEQUENT WORK AND TIMELINES.....	5
6. BUDGET AND COSTS	5
7. RECOMMENDATIONS TO THE BOARD	5

1. Procedural background

1. The Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP), at its fourteenth session, encouraged the CDM Executive Board (hereinafter referred to as the Board) to review methodological approaches for calculating emission reductions from project activities, resulting in the reduced use of non-renewable biomass (NRB) in households (decision 4/CMP.14, para. 4).
2. In response to decision 4/CMP.14, para. 4, the Board, at its 105th meeting, considered methodological approaches for calculating emission reductions from project activities resulting in the reduced use of NRB in households. The Board agreed to replace the default fossil fuel emission factor (i.e. the emission factor for the substitution of non-renewable woody biomass by similar consumers) with region-specific default values, and to include a bottom-up option that enables the project participants to estimate the fossil fuel emission factor for their project activity or programme of activities (PoA). The Board also agreed to include the standard ISO 19867-1:2018 as an option for stove efficiency testing. These decisions are reflected in the revisions of the methodologies "AMS-I.E.: Switch from non-renewable biomass for thermal application by the user" and "AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass" approved by the Board at its 105th meeting.
3. The CMP, at its fifteenth session, acknowledged the work of the Board in reviewing methodological approaches for calculating emission reductions achieved by project activities that result in reduced use of NRB in households. Further, the CMP encouraged the Board to continue to review the methodological approaches referred to above, in particular with respect to the default baseline assumptions applied.

2. Purpose

4. The purpose of this concept note is to present an overview of the recent work conducted by the Board on methodologies for the reduced use of NRB in households and explore potential areas of further methodological work to respond to the mandate from the CMP.

3. Key issues and proposed solutions

3.1. Overview of the recent work related to the reduced use of non-renewable biomass in households

5. The Board, at its 105th meeting, adopted the revisions of the methodologies "AMS-I.E.: Switch from non-renewable biomass for thermal application by the user" and "AMS-II.G.: Energy efficiency measures in thermal applications of non-renewable biomass", introducing the following key changes:
 - (a) To replace the default fossil fuel emission factor (i.e. the emission factor for the substitution of non-renewable woody biomass by similar consumers) with region-specific default values;
 - (b) To include a bottom-up option that enables the project participants to estimate the fossil fuel emission factor for their project activity or PoA;

- (c) To include the standard **ISO 19867-1:2018** as an option for stove efficiency testing.
6. In addition, based on the agreed mandates, the Methodologies Panel and the secretariat have been working on the following areas:
- (a) **Monitoring of retention rates of stoves and stove-stacking:** The Board has mandated work to Methodologies Panel to address stove-stacking issues in cookstove methodologies. The work is ongoing;
 - (b) **The default factors for biomass consumption from baseline stoves:** For some countries, conservative default values for baseline wood fuel consumption per household/person values have been developed (fewer than 10). Where designated national authorities (DNAs) make request for top-down development of standardized baselines (SB), the Board has developed a process to consider and approve them;
 - (c) **The default fraction of non-renewable biomass (fNRB):** For some countries, default values for fNRB have been developed (fewer than 5). Where DNAs make request for top-down development of SB, the Board has developed a process to consider and approve them.

3.2. Potential areas for further methodological work

7. Potential areas of further work based on inputs from stakeholders, the Methodologies Panel and experience gained by the secretariat in assessing projects/PoAs include the following (list not exhaustive):
- (a) **Calculating fNRB values:** As per the Board (EB 90) decision, default country-specific fNRB values¹ developed by the Board top-down have expired except in the case of two countries (Grenada and Haiti). While the Board (EB 90) decided that SB procedures should apply for updating fNRB values and the Board (EB 97) adopted a new tool for calculating fNRB values (“TOOL30: Calculation of the fraction of non-renewable biomass”), only four countries² have developed or are in the process of developing new default country-specific fNRB values using TOOL30, following the SB procedure. The following issues have been identified:
 - i. A conservative default value of 0.3 for fNRB is included in the newly approved TOOL30. In the absence of the country-specific default values, project participants have to either use this default value (i.e. 0.3) or calculate fNRB values for their own project activities/PoAs. However, the calculation of fNRB values requires the collection of local data related to biomass consumption and production. In particular, obtaining the data for mean annual increment (MAI) of forest areas and other wooded land areas as well as the data on the extent of non-accessible areas has been indicated as a challenge. Further improvements to the tool (e.g. more guidance for determining MAI value – for example, based on the latest data from the 2019 Refinement to the 2006 IPCC Guidelines for National

¹ <<https://cdm.unfccc.int/DNA/fNRB/index.html>>.

² Uganda (ASB0002-2017), Rwanda (ASB0041-2018), Ethiopia (ASB0044-2019), Myanmar (TSB0015 under development).

Greenhouse Gas Inventories or other comparable sources) may be explored;

- ii. Some project participants face difficulty as they indicated in the registered PoA-DD that they would use “default fNRB value at component project activity level” with the expectation that default values will be available, as opposed to project participants who indicated fNRB value at PoA level. In the latter case, coordinating and managing entities can continue to apply the fNRB value for component project activities to be added to the PoA until the renewal of the PoA. Some flexibility to PoA rules may be explored to find a level playing field for all PoAs;

- (b) **Developing a collaboration platform** among various stakeholders, including researchers, experts, practitioners and project participants, where the stakeholders can informally share data and information and can have informal discussions on relevant topics.

4. Impacts

8. Improvements in methodological approaches to the calculation of emission reductions for reduced use of NRB in households will facilitate the implementation of CDM project activities and PoAs in the household cookstove sector, which have strong relevance for least developed countries and other regions that are underrepresented in the CDM.

5. Subsequent work and timelines

9. Subject to the mandate from the Board, work will be carried out, keeping in mind the timelines to enable the Board to report on the matter in its annual report to the CMP (i.e. well before September 2020).

6. Budget and costs

10. The work to be done for this mandate could be undertaken under the existing activity on “Response to methodological requests from the Board” under objective 1(c) “Develop simplified and user-friendly standards and procedures that increase efficiency and ensure environmental integrity”, with a resource allocation as referred to in table 5 on page 17 of the CDM two-year business and management plan 2020–2021 (EB 104, annex 1).

7. Recommendations to the Board

11. The secretariat recommends that the Board consider the concept note and provide guidance for further work.

CDM-EB106-AA-A06

Concept note: Methodological approaches for calculating emission reductions from project activities, resulting in the reduced use of non-renewable biomass in households
Version 01.0

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
01.0	27 April 2020	Published as an annex to the annotated agenda of EB 106.

Decision Class: Regulatory
Document Type: Information note
Business Function: Methodology
Keywords: biomass, calculations, fraction of non-renewable biomass, household appliances
