

ASB0002

Standardized baseline

Fuel switch, technology switch and/or methane destruction in the charcoal sector of Uganda

Version 02.0



United Nations
Framework Convention on
Climate Change

1. Introduction

1.1. Background

1. This standardized baseline provides **standardized values** and **a** positive list for fuel switch, technology switch **and/or** methane destruction in the charcoal production sector.

1.2. Objectives

2. By applying this standardized baseline, project participants can demonstrate the additionality and emission reductions calculations for fuel switch, technology switch and methane destruction project activities in the charcoal production sector.

2. Scope, applicability, and entry into force

2.1. Scope

3. This standardized baseline is based on the following proposed new standardized baseline:
 - (a) "PSB0001: proposal for a new Standardized Baseline for charcoal projects in the clean development mechanism" submitted by the designated national authority (DNA) of the Republic of Uganda.
 - (b) **Proposal for the update of the standardized baseline ASB0002**
4. For more information regarding the proposed new standardized baseline as well as their consideration by the CDM Executive Board please refer to [<http://cdm.unfccc.int/methodologies/standard_base/index.html>](http://cdm.unfccc.int/methodologies/standard_base/index.html).
5. The proposed updated standardized baseline is developed according to version 02 of the "Guidelines for the establishment of sector specific standardized baselines". It applies to the following measures: fuel and feedstock switch, switch of technology with or without change of energy source (including energy efficiency improvement), and methane destruction, and any combination of these measures.
6. This standardized baseline provides standardized values to calculate baseline emissions and a positive list of technologies. The project activities implemented using technologies in the positive list are deemed automatically additional.

2.2. Applicability

7. This standardized baseline is applicable to the Republic of Uganda.
8. The standardized baseline can only be used in conjunction with the latest approved version of the small-scale methodology AMS-III.BG "Emission reduction through sustainable charcoal production and consumption" **or the latest approved version of the small-scale methodology AMS-III.K "Avoidance of methane release from charcoal production"**. **The measures may be all applied for a project or only one or two of the measures may fit to a project. For example, an improved kiln reduces emissions without fuel switch and methane destruction.**

2.3. Entry into force

9. Immediately upon adoption of the standardized baseline by the CDM Executive Board.

2.4. Validity of this standardized baseline

10. This standardized baseline is valid for three years from the date of its adoption by the CDM Executive Board.

3. Parameters, values and positive list

11. The provisions in the methodologies AMS-III.BG and AMS-III.K for determining the respective values of the parameters listed in Table 1 below do not apply. Instead, project participants shall use the standardized values provided in the Table 1 below.

Table 1 Standardized values

Parameter	Unit	Description	Standardized Values	Source
$f_{NRB,BL,wood}$	Fraction	Fraction of biomass of type i used in the absence of the project activity that can be established as non-renewable biomass	0.82	Default values of fraction of non-renewable biomass can be retrieved at: http://cdm.unfccc.int/DNA/fNRB/index.html
M_d	tonne of CH ₄ /tonne of raw material	Factor to account for any legal requirement for capture and destruction of methane in the charcoal production facility	0	Based on the data provided in PSB0001
$SMG_{y,b}$	tonnes CH ₄ /t charcoal product	Specific methane generation for the baseline charcoal generation process in the year y if AMS III BG is applied	0.030	Based on the data provided in PSB0001 and AMS-III.BG.
SMG_b	tonnes CH ₄ /t Raw Material	Specific methane generation for the baseline charcoal generation process in the year if AMS III K is applied	0.011	Based on the data provided in PSB0001.

12. The provisions on the demonstration of additionality in the methodology AMS-III.BG do not apply. Instead, the project participants shall demonstrate that the project activity corresponds to one of the technologies specified in Table 2 below.

Table 2. Positive list of technologies

Name of the technology	Description
Casamance Kiln	The Casamance kiln is an earth mound kiln equipped with a chimney. The chimney allows a better control of air flow. The hot flue gas is partly redirected into the kiln which enhances pyrolysis.

Adam retort sedentary kiln	The Adam retort sedimentary kiln is a retort kiln. It redirects the flue gases back to the carbonization chamber. It burns the volatiles and the tar components almost completely. The retort is suitable for semi-industrial production.
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Name of the technology	Description
Carbo twin retort	This kiln is a semi-continuous production module. It consists of two carbonization chambers. The pyrolysis vapours from one chamber are combusted to heat the other chamber.
Pyro 7 retort sedentary kiln with or without briquetting process	This kiln is also a retort kiln. It uses two chambers: one for pre-combustion, one for the production of charcoal. It is usually made of metal. It also incorporates air flow control and a chimney.
Sam 1 retort kiln	The Sam1 Brick Retort operates much in the same way as the Adam Retort. The major difference is that the fire box is within the retort as opposed to the external fire box. The heat losses to the walls of the fire box are minimized. The result is that it takes a shorter time and less fire wood to be fired.
Namibian metallic retort kiln	This kiln is a retort kiln made from a metallic drum. It redirects the flue gases back to the carbonization chamber. It burns the volatiles and the tar components almost completely. The volume is 1 m ³ with a load of 119 kg. The 26% mass yield produces high charcoal quality within 1 day carbonization time.
Collapsible casamance kiln	The Casamance kiln is an earth mound kiln equipped with a chimney. The chimney allows a better control of air flow. The hot flue gas is partly redirected into the kiln which enhances pyrolysis. This type of kiln is designed with a chimney set up from several parts Thus this chimney can be easily transported.

Document information

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