

ASB0017

Standardized baseline

Rwanda grid emission factor

Version 01.0



United Nations
Framework Convention on
Climate Change

TABLE OF CONTENTS		Page
1. INTRODUCTION		3
2. SCOPE, APPLICABILITY, AND ENTRY INTO FORCE.....		3
2.1. Scope and applicability		3
2.2. Entry into force and validity		3
3. NORMATIVE REFERENCES		3
4. DEFINITIONS.....		3
5. PARAMETERS AND VALUES.....		4

1. Introduction

1. This standardized baseline provides the values for grid emission factors (i.e. the carbon dioxide (CO₂) emission factors) for the electricity system of Rwanda.

2. Scope, applicability, and entry into force

2.1. Scope and applicability

2. The scope of this standardized baseline covers the grid emission factors for the electricity system of Rwanda derived using the ex ante data vintage option of the “Tool to calculate the emission factor for an electricity system” (version 04.0) based on 2011–2013 data vintage.
3. Clean development mechanism (CDM) project activities and programmes of activities (hereinafter referred as project activities) can apply this standardized baseline under the following conditions:
 - (a) The project activity is implemented in Rwanda and is connected to the project electricity system;
 - (b) The CDM approved methodology that is applied to the project activity requires the determination of CO₂ emission factor(s) through the application of the “Tool to calculate the emission factor for an electricity system” (hereinafter referred to as “the tool”).
4. Project participants who do not wish to use this standardized baseline may alternatively estimate their own values for the grid emission factor, by applying the latest applicable version of the tool.

2.2. Entry into force and validity

5. This standardized baseline enters into force upon adoption by the CDM Executive Board on 26 October 2015. This standardized baseline is valid from 26 October 2015 to 25 October 2018.

3. Normative references

6. This standardized baseline is based on the proposed new standardized baseline PSB0018 “Rwanda grid emission factor” submitted by the designated national authority (DNA) of Rwanda.
7. This standardized baseline is derived from version 4.0 of the tool.
8. For more information regarding proposed new standardized baselines as well as their consideration by the CDM Executive Board, please refer to:
<http://cdm.unfccc.int/methodologies/standard_base/index.html>.

4. Definitions

9. The definitions contained in the Glossary of CDM terms shall apply.

10. **Project electricity system** - the spatial extent of the power plants that are physically connected through transmission and distribution lines to supply electricity to the national power grid of Rwanda.
11. The definitions contained in the tool shall apply.

5. Parameters and values

12. This standardized baseline provides ex ante values for the parameters mentioned in table 1 and table 2.
13. Table 1 specifies values without including off-grid power units in the project electricity system and table 2 specifies values which include off-grid power units in the project electricity system. Table 1 is applicable to all types of project activities, while project activities implementing grid-connected renewable power plants may alternatively use the values in table 2 for their first crediting period.

Table 1. Grid emission factors for use by a CDM project activity that uses the ex ante data vintage option of the tool without including off-grid power units in the project electricity system

Parameter	Unit	Description	Applicable project types	Applicable values		
				First crediting period	Second crediting period	Third crediting period
<i>EF_{grid,OM,y}</i>	tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system	All project activities	0.767	0.767	0.767
<i>EF_{grid,BM,y}</i>	tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system	All project activities	0.401	0.401	0.401
<i>EF_{grid,CM,y}</i>	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	Wind and solar power generation project activities	0.676	0.676	0.676
<i>EF_{grid,CM,y}</i>	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	All project activities except wind and solar power generation project activities	0.584	0.493	0.493

Table 2. Grid emission factors for use by a CDM project activity that uses the ex ante data vintage option of the tool by the inclusion of off-grid power units in the project electricity system

Parameter	Unit	Description	Applicable project types	Applicable values for first crediting period
$EF_{grid,OM,y}$	tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system	All project activities	0.771
$EF_{grid,BM,y}$	tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system	All project activities	0.438
$EF_{grid,CM,y}$	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	Wind and solar power generation project activities	0.688
$EF_{grid,CM,y}$	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	All project activities except wind and solar power generation project activities	0.604

Document information

Version	Date	Description
01.0	26 October 2015	Initial publication. This standardized baseline is approved by CDM Executive Board in accordance with the "Procedure for development, revision, clarification and update of standardized baselines" (CDM-EB63-A28-PROC).

Decision Class: Regulatory
 Document Type: Standard
 Business Function: Methodology
 Keywords: standardized baselines