



**Proposed standardized baseline recommendation form
(Version 02.0)**

**INFORMATION TO BE COMPLETED BY THE TWO SELECTED MEMBERS OF THE PANEL/ WORKING GROUP OR THE
PANEL/WORKING GROUP**

Title of the proposed standardized baseline:	Cape Verde Grid Emission Factor
Reference number of the proposed standardized baseline:	PSB007
Name(s) of the Party or Parties to which the proposed standardized baseline applies:	Republic of Cape Verde
DNA submitting the proposed standardized baseline:	Ministério do Ambiente, Habitação e Ordenamento do Território (Ministry of Environment, Housing and Land Management), Cape Verde
Name(s) of the proponent(s) of the proposed standardized baseline: <i>(Parties, project participants, international industry organizations or admitted observer organizations)</i>	Secretariat of the Ecowas Centre for Renewable Energy and Energy Efficiency (i.e. ECREEE) Under strong assistance of UNFCCC CDM Regional Collaboration Centre in Lome, Togo In collaboration with Cape Verde Ministry of Tourism, Industry and Energy, national utility company Electra, and private renewable company Cabeolica.
History of the submission:	1) 28/11/2013: first submission was received 2) 12/03/2014: second submission was received 3) 12/08/2014: third submission was received 4) 02/10/2014: fourth submission was received 5) 30/06/2015: fifth submission was received
Date (DD/MM/YYYY) when the recommendation is completed:	09/12/2015
Approach for the development of the proposed standardized baseline:	
<input checked="" type="checkbox"/> The "Guidelines for the establishment of sector specific standardized baselines" (Version 2.0) <input type="checkbox"/> A methodological approach contained in an approved baseline and monitoring methodology (Please specify below the exact reference (number, title and version) of the approved methodology) <input checked="" type="checkbox"/> A methodological approach contained in an approved methodological tool "Tool to calculate the emission factor for an electricity system" (version 04.0.0) <input type="checkbox"/> The "Guideline: Establishment of standardized baselines for afforestation and reforestation project activities under the CDM"	
Important conditions under which the proposed standardized baseline is applicable:	

Clean development mechanism (CDM) project activities or programmes of activities (hereinafter referred to as project activities) can apply this standardized baseline under the following conditions:

- i. The project activity is implemented on any of the following islands of Cape Verde and is connected to the project electricity system;
 - a) São Nicolau;
 - b) Boa Vista;
 - c) Maio;
 - d) Fogo;
 - e) Brava
 - f) Sal,
 - g) Sao Vicente,
 - h) Santo Antao, and
 - i) Santiago
- ii. The project activity applies small-scale CDM methodologies that require a grid emission factor.

Summary description of the proposed standardized baseline:

1. The scope of this standardized baseline covers the baseline emission factors and the positive list of renewable electricity generation technologies.
2. The approach from the “Guidelines for the establishment of sector specific standardized baselines” (version 02.0) (hereinafter referred to as the SB guideline) with default threshold value of 80 per cent is used for the determination of baseline emission factors in the case of five out of nine islands i.e. São Nicolau, Boa Vista, Maio, Fogo and Brava.
3. For the remaining four islands – Sal, Sao Vicente, Santo Antao and Santiago –“Tool to calculate the emission factor for an electricity system” (hereinafter referred to as the grid tool) is used to determine baseline emission factors (i.e. operating margin, build margin and combined margin emission factor).
4. The positive list of technologies is determined using the “Methodological tool: Demonstration of additionality of small-scale project activities” and the “Methodological tool: Demonstration of additionality of microscale project activities” prescribed under small-scale CDM methodologies.
5. Review of the submissions resulted into the following grid emission factor values (See Table 1 to Table 5 below) and the positive list of renewable electricity generation technologies (See Table 6 below):

Table 1: Emission factor for grid electricity system on the island of Sal, Cape Verde

Parameter	Unit	Description	Applicable project types	Applicable values		
				First crediting period	Second crediting period	Third crediting period

$EF_{grid,OM,y}$	tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system	All project activities	0.595		
$EF_{grid,BM,y}$	tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system	All project activities	0.0		
$EF_{grid,CM,y}$	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	Wind and solar power generation project activities	0.446		
$EF_{grid,CM,y}$	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	0.297	0.149	0.149

Table 2: Emission factor for grid electricity system on the island of Sao Vicente, Cape Verde

Parameter	Unit	Description	Applicable project types	Applicable values		
				First crediting period	Second crediting period	Third crediting period
$EF_{grid,OM,y}$	tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system	All project activities	0.587		
$EF_{grid,BM,y}$	tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system	All project activities	0.0		
$EF_{grid,CM,y}$	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	Wind and solar power generation project activities	0.440		
$EF_{grid,CM,y}$	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	0.294	0.147	0.147

Table 3: Emission factor for grid electricity system on the island of Santo Antao, Cape Verde

Parameter	Unit	Description	Applicable project types	Applicable values		
				First crediting period	Second crediting period	Third crediting period
$EF_{grid,OM,y}$	tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system	All project activities	0.651		

$EF_{grid,BM,y}$	tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system	All project activities	0.580		
$EF_{grid,CM,y}$	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	Wind and solar power generation project activities	0.634		
$EF_{grid,CM,y}$	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	0.616	0.598	0.598

Table 4: Emission factor for grid electricity system on the island of Santiago, Cape Verde

Parameter	Unit	Description	Applicable project types	Applicable values		
				First crediting period	Second crediting period	Third crediting period
$EF_{grid,OM,y}$	tCO ₂ /MWh	Operating margin CO ₂ emission factor for the project electricity system	All project activities	0.573		
$EF_{grid,BM,y}$	tCO ₂ /MWh	Build margin CO ₂ emission factor for the project electricity system	All project activities	0.523		
$EF_{grid,CM,y}$	tCO ₂ /MWh	Combined margin CO ₂ emission factor for the project electricity system	Wind and solar power generation project activities	0.560		
$EF_{grid,CM,y}$	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	0.548	0.536	0.536

Table 5: Emission factors for grid electricity systems of the Cape Verdean islands of São Nicolau, Boa Vista, Maio, Fogo, and Brava

No.	Island	Baseline emission factor (tCO ₂ /MWh)
1.	São Nicolau	0.744
2.	Boa Vista	0.629
3.	Maio	0.724
4.	Fogo	0.718

5.	Brava	0.670
----	-------	-------

Table 6. List of renewable electricity generation technologies that are automatically additional in Cape Verde (positive list)

No.	Proposed technologies
1	Any grid connected renewable energy technology up to 5 MW of installed capacity that are included in approved small scale CDM methodologies
2	Solar photovoltaic or solar thermal electricity generation up to 15 MW of installed capacity
3	On-shore wind power up to 15 MW of installed capacity

Recommendation to the Board:

- To approve the draft standardized baseline
 Not to approve the draft standardized baseline

Reasons for not approving the proposed standardized baseline:

Any other issues arising from the review of the proposed standardized baseline:

Document information

Version	Date	Description
02.0	1 December 2013	The document title has changed from “CDM recommendation form for proposed standardized baselines” (F-CDM-PSB-REC) to “Proposed standardized baseline recommendation submission form” (CDM-PSBR-FORM). Revision to <ul style="list-style-type: none"> • Reflect updated requirements in the “Procedure: Development, revision, clarification and update of standardized baselines”; • Include an editorial improvement.
01.0	23 March 2012	Initial publication.

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