



CDM proposed standardized baseline form (Version 01.0)

(To be used by a designated national authority (DNA) when submitting a proposed standardized baseline in accordance with the "Procedure for submission and consideration of standardized baselines".)

SECTION 1: GENERAL INFORMATION

DNA submitting this form:	Republic of Botswana
Developer of the standardized baseline: <i>(Parties, project participants, international industry organizations or admitted observer organizations)</i>	UNEP Risoe together with the Secretariat of the Southern African Power Pool supported by GFA ENVEST
Party or Parties to which the standardized baseline applies:	The Republic of Botswana, The Democratic Republic of the Congo (DRC), The Kingdom of Lesotho, The Republic of Mozambique, The Republic of Namibia, The Republic of South Africa, The Kingdom of Swaziland, The Republic of Zambia, Zimbabwe
Sector to which the proposed standardized baseline applies: <i>(the sector according to the definition of sector in the "Guidelines for the establishment of sector specific standardized baselines")</i>	Any sector involving the emissions from the relevant Project Electricity System either in baseline and/or project scenario, including Sectoral Scope I: "Energy Industries," as defined by the UNFCCC.

SECTION 2: LIST OF DOCUMENTS TO BE ATTACHED TO THIS FORM *(please check)*

- ☒ An assessment report presenting how the data was collected, processed and compiled to establish the proposed standardized baselines;
- ☒ Where the proposed standardized baseline applies to a group of Parties, letters of approval of all the DNAs of the Parties to which the standardized baseline applies;
- ☒ Additional documentation supporting the submission (e.g. relevant data, documentation, statistics, studies, calculation tables, etc.), when applicable.

Name of authorized officer signing for the DNA:	Mr. Thabang Leslie Botshoma
Date and signature for the DNA:	16 August 2012
Name and contact details of the focal point(s) for any follow up communication: <i>(all communication regarding procedural or technical issues will be sent to the focal point(s))</i>	Mr. Thabang Leslie Botshoma Director of Meteorological Services, Department of Meteorological Services Ministry of Environment, Wildlife and Tourism PO Box 10100 Gaborone, Botswana tbotshoma@gov.bw Phone: (267)395 6281 Fax: (267)395 6282

SECTION BELOW TO BE COMPLETED BY THE UNFCCC SECRETARIAT

CDM-PSB ID number:	
Date when the form was received at UNFCCC	

PROPOSED STANDARDISED BASLINE
(CDM-PSB) - Version 01.0



CDM – Executive Board

secretariat:	
Have <u>all</u> Parties for which the standardized baseline is applicable fewer than 10 registered CDM project activities as of 31 December 2010? (Y/N):	
CDM-PSB ID number and version: <i>(to be completed by UNFCCC)</i>	



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**CLEAN DEVELOPMENT MECHANISM
PROPOSED STANDARDIZED BASELINE
(CDM-PSB)
(VERSION 01.0)**

“GRID EMISSION FACTOR FOR THE SOUTHERN AFRICAN POWER POOL”

16 August 2012

Version 01.0

Source

The Standardized Baseline (SBL) was developed using the methodological tool Methodological Tool ‘Tool to Calculate the Emission Factor for an Electricity System’ Version 02.2.1, CDM EB63.

Type of standardized baseline approach

The standardized baseline is developed for:

- ☐ Additionality demonstration;
- ☐ Baseline identification;
- ☒ Baseline emission estimation.

Please note that one, two or all three items can be checked.



SECTION A: STANDARDIZED BASELINE DEVELOPED USING THE “GUIDELINES FOR THE ESTABLISHMENT OF SECTOR SPECIFIC STANDARDIZED BASELINES”

This section should only be completed when the standardized baseline is developed using the “Guidelines for the establishment of sector specific standardized baselines”.

Applicability of the standardized baseline

Please provide the following information:

- The host country(ies) or region(s) within a host country to which the standardized baseline is applicable. In case of region(s) within a host country, please document transparently the geographical boundaries of the region (e.g. provinces, electric grids, etc).
- The sector(s) to which the standardized baselines is applied. Note that a sector refers to a segment of a national economy that delivers defined output(s) (e.g. clinker production, domestic / household energy supply). The sector is characterized by the output(s) O_i it generates.
- The output(s) to which the standardized baseline is applied, i.e. the goods or services with comparable quality, properties, and application areas (e.g. clinker, lighting, residential cooking).
- The measure to which the standardized baseline is applicable:
 - ☐ Fuel and feedstock switch; or
 - ☐ Switch of technology with or without change of energy source (including energy efficiency improvement); or
 - ☐ Methane destruction; or
 - ☐ Methane formation avoidance.

Additionality demonstration

Please explain how the “Guidelines for the establishment of sector specific standardized baselines” were applied to demonstrate additionality and develop a positive list of project activities that are deemed additional. Follow the steps and guidance of the “Guidelines for the establishment of sector specific standardized baselines”. Document all underlying data, data sources, assumptions, calculation steps and outcomes in a clear and transparent manner.



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Baseline identification

Please explain how the “*Guidelines for the establishment of sector specific standardized baselines*” were applied to identify the baseline for the measures. Follow the steps and guidance of the “*Guidelines for the establishment of sector specific standardized baselines*”. Document all underlying data, data sources, assumptions, calculation steps and outcomes in a clear and transparent manner.

Baseline emission factor estimation (if applicable)

Please explain how the “*Guidelines for the establishment of sector specific standardized baselines*” were applied to determine a baseline emission factor. Follow the steps and guidance of the “*Guidelines for the establishment of sector specific standardized baselines*”. Document all underlying data, data sources, assumptions, calculation steps and outcomes in a clear and transparent manner.

Use of the standardized baseline with an approved methodology

Please explain how the standardized baseline will be used with the relevant approved methodology(ies) or an approved tool, i.e. which (parts of) the approved methodology(ies) or the approved tool are replaced by the standardized baseline. Note that a standardized baseline derived from the “*Guidelines for the establishment of sector specific standardized baselines*” will usually replace the sections on demonstration of additionality, identification of the baseline scenario and the determination of baseline emissions, while the methodology sections on applicability, project boundary, project emissions, leakage emissions and provision to monitor project and leakage emissions may not be affected by the use of the standardized baseline. If an approved methodology is not available, a new methodology should be submitted to be used with the standardized baseline, following the relevant procedures (“*Procedure for the submission and consideration of a proposed new baseline and monitoring methodology for large scale CDM project activities*” or “*Procedures for the submission and consideration of a proposed new small scale methodology*”).

Validity of the standardized baseline

Please state the period of time for which the standardized baseline is valid. Please note that Appendix I of the “*Guidelines for the establishment of sector specific standardized baselines*” provide interim values for data vintage and the frequency of update.



SECTION B: STANDARDIZED BASELINE DEVELOPED USING A METHODOLOGICAL APPROACH CONTAINED IN AN APPROVED METHODOLOGY OR TOOL

This section should only be completed when the standardized baseline is developed using a methodological approach to estimate baseline emissions contained in an approved methodology or tool. An example for this is the application of the “Tool to calculate the emission factor for an electricity system” to estimate the emission factor for a electric grid.

Applicability of the standardized baseline

Please state the host country(ies) or region(s) within a host country to which the standardized baseline is applicable. In case of region(s) within a host country, please document transparently the geographical boundaries of the region (e.g. provinces, electric grids, etc).

Botswana, DRC, Lesotho, Mozambique, Namibia, South Africa, Swaziland, Zambia, Zimbabwe

Baseline emission estimation

Please explain how the methodological approach contained in the approved methodology or tool was applied to estimate the baseline emissions of a project activity in (a) country(ies) or region. Follow the steps and guidance of the approved methodologies or tools. Document all underlying data, data sources, assumptions, calculation steps and outcomes in a clear and transparent manner. Note that the underlying methodology or tool has to provide a methodological approach to derive the baseline emissions for a country or region in order to apply this step. This applies, for example, to the methodological tool “Tool to determine the emission factor of an electricity system”.

Version of the ‘Tool to determine the emission factor of an electricity System’ was followed. The report presenting the calculations, the data used for calculations and the application in calculations is enclosed.

The data was provided by the national power companies and by the Southern African Power Pool Coordination Centre. The consistency of the collected data was crosschecked by the DOE with data sources in the process of the ‘validation’ of the GEF.

Use of the standardized baseline with an approved methodology

Please explain how the standardized baseline will be used with the relevant approved methodology(ies) or approved tool, i.e. which (parts of) the approved methodology(ies) or the approved tool are replaced by the standardized baseline.

The SBL may be used for any methodology and/or tool which refers to the ‘Tool to Calculate the Emission Factor for an Electricity System’.



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Validity of the standardized baseline

Please state the vintage of the parameters used to derive the standardized baseline, in accordance with the requirements contained in the approved methodology or tool.

The data vintage for calculating the Grid Emission Factor (GEF) is 2008, 2009 and 2010. Additionally, in accordance with the requirements of the tool, vintages of 2006 and 2007 were used for determination of Low-Cost/Must-Runs.

It is proposed that the SBL shall be valid for a maximum period of 3 years from the date of adoption, but shall be updated if new transmission lines are commissioned that connect additional countries to the existing Project Electricity System (PES).



REFERENCES AND ANY OTHER INFORMATION

Supporting Documentation:

- Calculation of the Emission Factor for the Electricity System of the Southern African Power Pool (SAPP), as performed by GFA ENVEST GmbH and endorsed by the SAPP Coordination Center
- SAPP GEF calculations in IGES format (excel spreadsheet)
- Validation Statement from Carbon Check
- Findings report from Carbon Check
- Assessment report from Carbon Check Pty.
- Letters of Endorsement by Relevant DNAs to Electricity System of the Southern African Power Pool (SAPP)
- Letter of Endorsement by DNA of Malawi, member of SAPP

History of the document

Version	Date	Nature of revision(s)
01.0	23 March 2012	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Methodology		