

 <b>Approved standardized baseline update recommendation form</b> <b>(Version 01.0)</b>	
<b>INFORMATION TO BE COMPLETED BY THE TWO SELECTED MEMBERS  OF THE PANEL/WORKING GROUP OR THE PANEL/WORKING GROUP</b>	
<b>Title/Subject:</b>	Request for update of ASB0034, version 01.0
<b>Reference (number, title and version) of the approved standardized baseline to which the request for update is made:</b>	ASB0034: Grid emission factor for West African Power Pool (version 01.0)
<b>Reference number of the request for update:</b>	ASU_006
<b>DNA submitting the request for update:</b>	Republic of Togo
<b>Name(s) of the proponent of the proposed updated standardized baseline:</b> <i>(Parties, project participants, international industry organizations or admitted observer organizations)</i>	Mr. Thiyu K. ESSOBIYOU Direction de l'Environnement 247, Rue des Nîmes B.P: 4825 Lomé-TOGO Tél:(+228) 22 21 33 21 Mobile: (+228) 90 91 96 77 E-mail: <a href="mailto:denv_togo@yahoo.fr">denv_togo@yahoo.fr</a> ; <a href="mailto:essobiyou@hotmail.com">essobiyou@hotmail.com</a> ; <a href="mailto:julesazakpo7@gmail.com">julesazakpo7@gmail.com</a> ; <a href="mailto:julesazakpo@yahoo.fr">julesazakpo@yahoo.fr</a>
<b>History of the submission:</b>	1) 16/12/2020: first submission was received 18/12/2020: initial assessment was finalized 20/01/2021: Additional information was requested from the DNA via email. 2) 05/02/2021: second submission was received 10/02/2021: its assessment was finalized 10/02/2021: its QA/QC assessment was finalized
<b>Date (DD/MM/YYYY) when the recommendation is completed:</b>	10/02/2021
<b>Summary of the request for update:</b>	
<p>A Clean Development Mechanism (CDM) project activity and programmes of activity (hereinafter referred as project activity) may apply this standardized baseline under the following conditions:</p> <ul style="list-style-type: none"> <li>(a) The project activity is implemented in any one of the WAPP member countries i.e. Benin, Burkina Faso, Côte d'Ivoire, Ghana, Mali, Niger, Nigeria, Senegal and Togo and is connected to the WAPP;</li> <li>(b) The CDM approved methodology that is applied to the project activity requires the determination of CO<sub>2</sub> emission factor(s) through the application of the grid tool;</li> <li>(c) The project activity uses the ex-ante options for both the operating margin and build margin grid emissions factors, as described in the grid tool, and therefore no monitoring or recalculation of the emission factor during the crediting period is required.</li> </ul> <p>The latest approved and valid values of this standardized baseline are the only values of the CO<sub>2</sub> emission factor(s) that shall be applied for the project electricity system in the WAPP member countries listed under sub-para (a) above.</p>	

**Table 1. Grid emission factors for the electricity system of the WAPP**

Parameter	Unit	Description	Applicable project types	Applicable values		
				First crediting period	Second crediting period	Third crediting period
<b>EF<sub>grid, OM, y</sub></b>	tCO <sub>2</sub> /MWh	Operating margin CO <sub>2</sub> emission factor for the WAPP power system	All project activities	0.578		
<b>EF<sub>grid, BM, y</sub></b>	tCO <sub>2</sub> /MWh	Build margin CO <sub>2</sub> emission factor for the WAPP power system	All project activities	0.556		
<b>EF<sub>grid, CM, y</sub></b>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the WAPP power system	All project activities except wind and solar power generation	0.567	0.562	
<b>EF<sub>grid, CM, y</sub></b>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the WAPP power system	Wind and solar power generation project activities	0.573		

It is noted that the DNA has requested that the validity period of the proposed updated standardized baseline should be 5 years. Most of the approved standardized baselines carry a validity period of 3 years, however a handful have been approved with longer validity such as 7 years in the case of "ASB0008-2020: Methane Emissions from Rice Cultivation in the Republic of the Philippines (version 01.0)". When the validity proposed is longer than 3 years it needs to be justified by the DNA as per "Standard: Determining coverage of data and validity of standardized baselines".

The DNA justified its proposal for 5 years validity highlighting that;

- (a) WAPP has undergone a slow evolution of technologies as confirmed from review of previous submission of ASB0034<sup>1</sup> and current submission the share of natural gas has reduced by 20% with corresponding increase of 11% in the share of renewables (e.g. hydro, solar and wind) and increase 9% in the share of coal and diesel generation. Refer to following table for further details.

**Table 2. WAPP - Electricity generation by fuel type**

Fuel type	Data Vintage	
	2013	2019
Natural Gas	70.2%	50.0%
Hydro	21.0%	24.0%
Diesel	8.2%	12.4%
Oil	0.5%	5.5%
Coal	0.0%	0.2%
Solar	0.0%	7.5%

<sup>1</sup> Refer approval history of ASB0034 at [https://cdm.unfccc.int/methodologies/standard\\_base/2015/sb102.html](https://cdm.unfccc.int/methodologies/standard_base/2015/sb102.html)

Wind	0.0%	0.4%
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- (b) Further, the operating margin emission factor of WAPP grid has increased by 3 per cent and build margin emission factor has decreased by 2 per cent. This has resulted in overall increase in combined margin emission factor by 2 per cent during the past 6 years. Refer following table for further details.

**Table 3. WAPP grid emission factor**

Parameter	Unit	Description	Applicable values	
			ASB0034	Update request of ASB0034
EF <sub>grid, OM, y</sub>	tCO <sub>2</sub> /MWh	Operating margin CO <sub>2</sub> emission factor for the WAPP power system	0.559	0.578
EF <sub>grid, BM, y</sub>	tCO <sub>2</sub> /MWh	Build margin CO <sub>2</sub> emission factor for the WAPP power system	0.565	0.556
EF <sub>grid, CM, y</sub>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the WAPP power system for all projects except wind and solar for 1st crediting period, (WOM = 0.5, WBM = 0.5 for all crediting periods)	0.562	0.567
EF <sub>grid, CM, y</sub>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the WAPP power system for all projects except wind and solar for 2 <sup>nd</sup> and 3 <sup>rd</sup> crediting period, (WOM = 0.25, WBM = 0.75 for all crediting periods)	0.563	0.562
EF <sub>grid, CM, y</sub>	tCO <sub>2</sub> /MWh	Combined margin CO <sub>2</sub> emission factor for the WAPP power system for wind and solar projects, (WOM = 0.75, WBM = 0.25 for all crediting periods)	0.561	0.573

The assessment team noted that in 2013 the 5 years average share of low-cost must run power generation (constituting renewable sources) in WAPP grid was 25.24 per cent while in 2019 that has increased to 27.14 per cent. Further, as per "Update of the ECOWAS<sup>2</sup> revised master plan for the generation and transmission of electrical energy, volume 4"<sup>3</sup>, the WAPP grid by 2025 is expected to have 33% of its generation from renewable sources and by 2030 it is expected to increase to 38%. In essence, the energy mix in the WAPP region is changing, although barriers persist for rapid penetration of renewable energy, it is seen that decarbonization of the grid is under way.

Further, it is also noted from the 'WAPP GEF – Grid Emission Factor Report' that construction is ongoing to interconnect remaining WAPP member countries namely Sierra Leone, Liberia, Guinea, Guinea Bissau and The Gambia with the WAPP.

Taking into account the above dynamic nature of decarbonization in the WAPP grid, the assessment team proposes to maintain the default validity period of 3 years for the standardized baseline.

**Recommendation to the Board:**

- To approve the proposed updated standardized baseline

<sup>2</sup> Economic Community of West African States refer [Member States | Economic Community of West African States\(ECOWAS\)](#) for further details.

<sup>3</sup> [WAPP | West African Power Pool the specialized agency of ECOWAS \(ecowapp.org\)](#)

<input type="checkbox"/> Not to approve the proposed updated standardized baseline
<b>Reasons for not approving the proposed updated standardized baseline:</b>
Not applicable
<b>Any other issues arising from the assessment of the proposed updated standardized baseline:</b>
Not applicable

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**Document information**

<i>Version</i>	<i>Date</i>	<i>Description</i>
01.0	31 January 2018	Initial publication.
Decision Class: Regulatory Document Type: Form Business Function: Methodology Keywords: standardized baselines, update of standardized baseline		