

Agenda item 4.1(a)

Paragraph 22 of the annotated agenda

Update on Standardized Baselines Usage

CDM EB 105

Madrid, Spain, 25 to 28 November 2019



Procedural background

- MP80 took note of the status of the top-down and proposed bottom-up standardized baselines (SBs) under development;
- It considered the application of SBs in projects and PoAs and discussed possible barriers for greater use of SBs;
- Given the linkage to policy issues, it recommended that the Board consider the utilization of SBs and the barriers faced for wider uptake and provide guidance.



Statistics

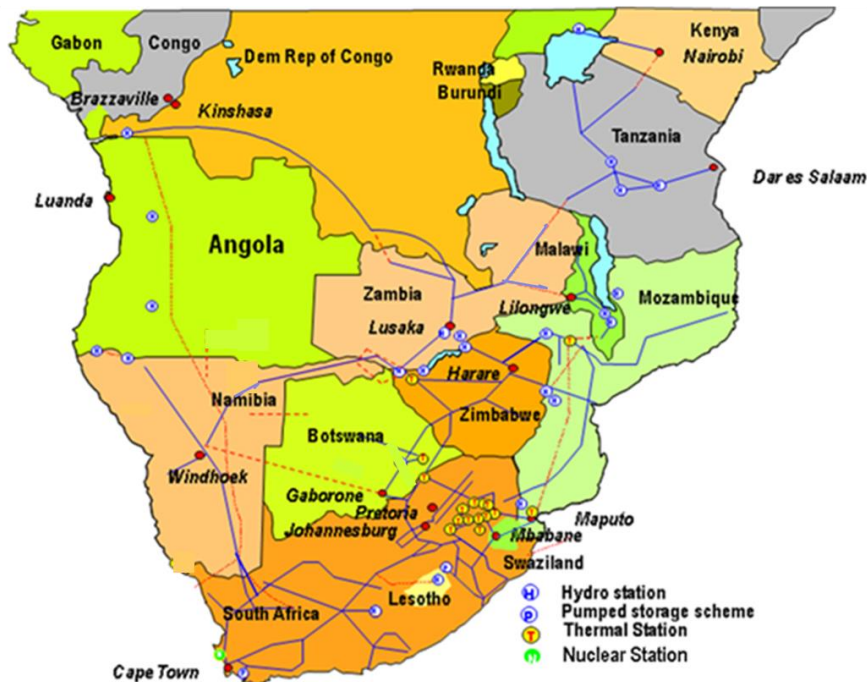
- **71 SBs submitted/developed, out of which 45 SBs approved**
 - **Top down and bottom up routes**
- **15 SBs currently active**
 - **Sectors covered:**
 - **Power (grid emission factor);**
 - **Cookstoves (baseline woody biomass consumption and fNRB);**
 - **Charcoal production;**
 - **Waste;**
 - **Wastewater;**
 - **Rice cultivation;**
 - **Rice mill power generation**
 - **A&R**

(as of 11 Nov. 2019)



Regional SBs

SAPP: 9 countries



WAPP: 9 countries



Yearly trends of submitted/developed SBs

	2012	2013	2014	2015	2016	2017	2018	2019 (until 11 Nov)
Bottom-up SBs	4	6	17	9	5	2	4	5
Top-down SBs			6		5	1	1	2
Update of SBs					1	3		
Clarification of SBs								1
Total	4	6	23	9	11	6	5	8

(as of 11 Nov. 2019)



Use of approved SBs for CDM projects/PoAs

- **For CDM projects**

- Direct use of approved SBs

(as of 01 Nov. 2019)

	No. of CDM projects/CPAs
ASB0001: GEF for SAPP	14
ASB0015: GEF for The Dominican Republic	1
ASB0019: GEF for Mauritius	3

- ✓ In addition, fNRB values were used in hundreds of projects/PoAs/CPAs for clean cookstoves before expiry of their validity
- ✓ >30 countries had endorsed the SBs for cookstoves
- ✓ Official from South Africa highlighted the importance of SAPP SB for decarbonisation in the region (at EB side event in April, 2018)



Use of approved SBs for CDM projects/PoAs

- **For CDM projects**

- Indirect use of approved SBs as a benchmark
 - ✓ For example, in case of PoA10474, “ASB0018: Baseline woody biomass consumption for household cookstoves in Burundi” served as a benchmark for that PoA, i.e. the CME compared their proposed value with the value of ASB0018 and chose a conservative value.



Use of approved SBs in climate funds/mechanisms

- **For GCF projects**

- ✓ FP105 “BOAD climate finance facility to scale up solar energy investments in Francophone West Africa LDCs” uses “ASB0034: Grid emission factor for West African Power Pool”;
- ✓ FP104 “Nigeria solar IPP support program” uses “ASB0034: Grid emission factor for West African Power Pool”;
- ✓ FP103 “Promotion of climate-friendly cooking: Kenya and Senegal” uses “ASB0035: Baseline woody biomass consumption for household cookstoves in Kenya” and “ASB0025: Cookstoves in Senegal”;
- ✓ FP080 “Zambia Renewable Energy Financing Framework” uses “ASB0040-2018: Grid emission factor for Southern African Power Pool”

- **For NAMAs**

- ✓ e.g. Philippines Rice NAMA developed by UNDP uses “ASB0008: Methane Emissions from Rice Cultivation in the Republic of the Philippines”

- **For IFI projects**

- ✓ e.g. Renewable energy projects financed by IDB use “ASB0042-2019: Honduran Grid Emission Factor”



Barriers faced with regard to the wider uptake of SBs

- While some SBs (e.g. SAPP grid emission factor) have significantly supported project development, many others have been underutilized or not used at all.
- Possible barriers may include:
 - a) A mandatory DOE assessment report at every renewal leading to transaction costs for the DNA.
 - Some donors funded the initial development but not renewal
 - b) Limited three-year validity of approved SBs
 - Narrow window of time for renewal leads to creation of new SBs (e.g. ASB0001 vs ASB0040 leading to complexities for DOE and PP)
 - c) Stringency of thresholds in some cases
- EB99 resolved validity issue, longer periods now allowed when justified under the SB procedure
 - a) EB99 however did not change DOE assessment requirements (i.e. same procedure for initial approval vs an update remained)



Stringency of thresholds: Road Testing RAC SB

- Road testing refrigerator news sales and refrigerator replacement (data courtesy GIZ and Energy Commission Ghana) under the tool 29: Determination of standardized baselines for energy-efficient refrigerators and air-conditioners
- 2440 models of refrigerators ranked (sales data was not available)

Threshold of models in sale in shops	number of models in sale below threshold	EEI	SEC	SEC thresholds for six volume classes		
90 th percentile	244	28.11	0.75	1.28	1.11	0.81
				0.69	0.66	0.63
80 th percentile	488	30.57	1.00	1.70	1.48	1.08
				0.92	0.88	0.84
Top 40%	960	42	1.5	2.55	2.22	1.62
				1.38	1.32	1.26

- 90th percentile is very rigorous (equivalent to EU class A++)

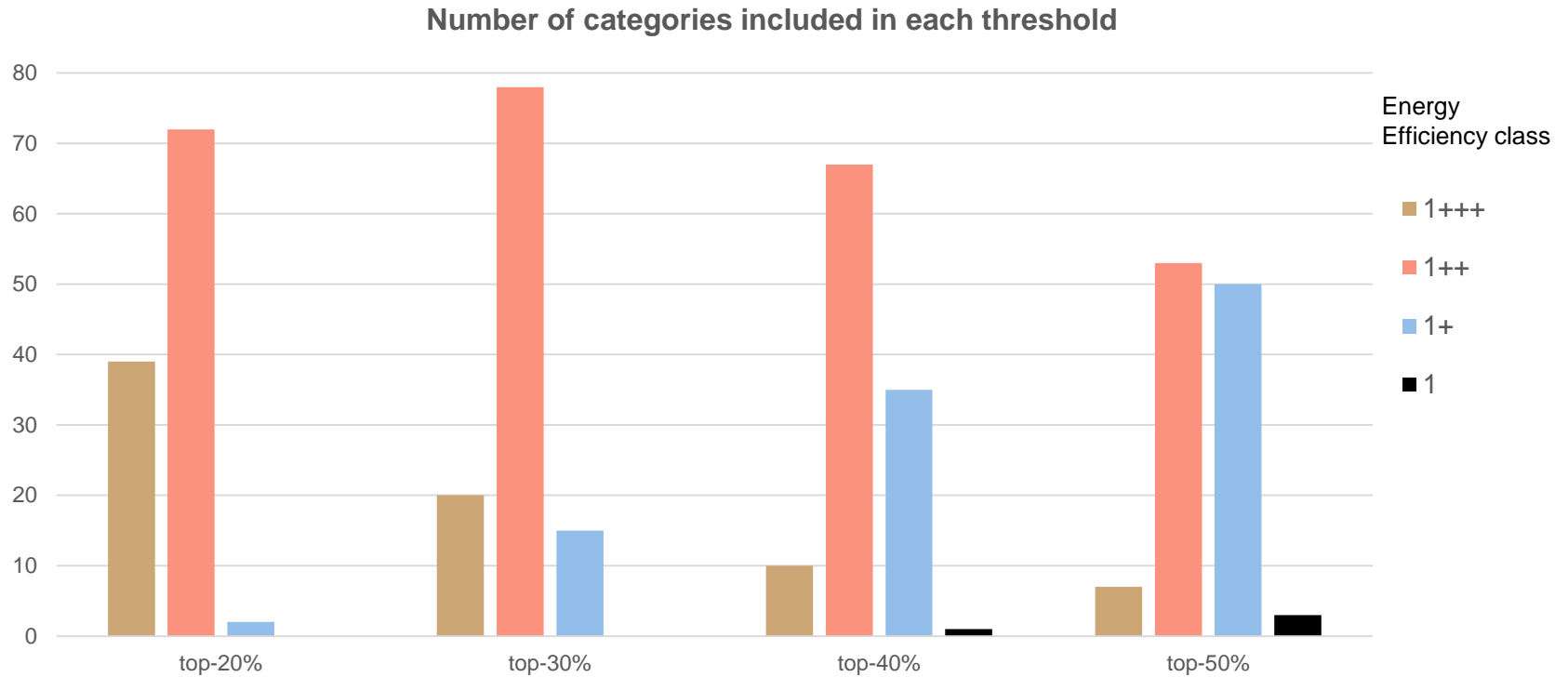


Stringency of thresholds :EE in Buildings

- SB under development with data from KOREA REPUBLIC
- TOOL31.Determination of standardized baselines for energy efficiency measures in residential, commercial and institutional buildings applied
- Threshold: average of the top-20% buildings with the lowest specific CO₂ emissions per building area (tCO₂/m²);
- Fuel and electricity consumed for the entire population of residential buildings;
- 113 different categories (based on province, climatic zone, size, new or existing building);



Stringency of thresholds :EE in Buildings



Stringency of thresholds :EE in Buildings

Level	Residential buildings	Non-residential buildings
	Required primary energy per unit area per year (kWh/m ² , year)	Required primary energy per unit area per year (kWh/m ² , year)
1+++	Less than 60	Less than 80
1++	60 ~ 90	80 ~ 140
1+	90 ~ 120	140 ~ 200
1	120 ~ 150	200 ~ 260
2	150 ~ 190	260 ~ 320
3	190 ~ 230	320 ~ 380
4	230 ~ 270	380 ~ 450
5	270 ~ 320	450 ~ 520
6	320 ~ 370	520 ~ 610
7	370 ~ 420	610 ~ 700

Red box: level of Top 20% SBLs,
Blue box: Domestic mandatory standard



Updates of SB

- Two types of SBs
 - a) **Mandatory:** SAPP and WAPP

“...The latest approved and valid values of this standardized baseline are the only values of the CO2 emission factor(s) that shall be applied for the project electricity system in the SAPP member countries listed...”
 - a) **Voluntary:** Other grid emission factor SBs

“...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 grid tool...”
- **SAPP (Southern African Power Pool)**
 - ASB0001 approved on 31 May 2013
 - ASB0001's validity extended for one more year (until 30 May 2017)
 - ASB0040-2018 approved on 07 Oct 2018 (the same scope but different SB number)
- **WAPP (West African Power Pool)**
 - ASB0034 approved on 27 Feb 2017



Updates of SB

PS Requirements regarding SB selection at validation/registration

- 49. The PPs may select a SB that has been approved by the Board if it is **valid**¹¹ and applicable.....
- Footnote 11: The **valid version** of a SB is **its latest version, or a previous version** if the submission of the RfR of the proposed CDM project activity.....is still within the grace period of the previous version(s) for use.....”.
- 50. Notwithstanding para 49 above, the PPs shall select an approved SB and the selection of the SB is mandatory.....
- 52. If a PDD has been published for GSC when no applicable approved SB was valid, and if.....an applicable approved SB whose selection is mandatory has become valid, the RfR may be submitted without selecting the SB.... within 240 days after the SB became valid.



PS Requirements regarding SB selection at monitoring/verification

- 262. ...the PPs shall apply, in the first MR of the first CP, the version of the applied SB that contains the **more conservative standardized value(s)**....between those in the latest version applicable on the first day of the first MP and those in the latest version applicable on the last day of the first MP.
- In the subsequent MRs for the first CP, the PPs shall apply:
 - (a) The same version of the SB as the one applied in the first MR.....or
 - (b) The latest version of the SB applicable on the first day of each MP, if the registered CDM PA applies an approved constant SB....

Updates of SB

- 263.if the selected type of CP is renewable, the PPs shall apply, in the first MR for the second and third CPs, the version of the applied SB that contains **the more conservative standardized value(s)** ... between those in the latest version applicable on the submission date of the request for RCP and those in the latest version applicable on the first day of the first MP in the new CP.
- In the subsequent MRs for the second and third CPs, the PPs shall apply:
 - (a) The same version of the SB as the one applied in the first MR of the respective CP, if the registered CDM PA applies:
 - (i) An approved constant SB...; or
 - (ii) An approved dynamic SB...; or
 - (b) The latest version of the SB applicable on the first day of each MP, if the registered CDM PA applies an approved constant SB....



Updates of SB

- PS requirements assumes successive updates of SBs. However, SBs may not be regularly updated due to many reasons. As a result, SBs used by PPs may become expired during validation/registration or during monitoring/verification
- For mandatory SB, if there is no updated version, PPs may face difficulty as they cannot calculate their own value.
- For voluntary SB, if there is no updated version, PPs have an option to calculate their own value but would need to invest additional efforts (costs).



Recommendation to the Board

- The MP recommends that the Board consider the information and provide guidance.
- Possible areas may include **more flexibility** in rules for:
 - a) DOE assessment report at renewal
 - Guidance on how to treat application of new SBs vs updated SBs (for the same parameter, same geographic coverage)
 - b) Window of period for update
 - c) Thresholds

