

Agenda item 3.4.

Paragraph 21 of the annotated agenda, Annex 4 to MEP 016 meeting report

Information note: Analysis of matters raised by the Supervisory Body at its 22nd meeting on the “Draft mechanism methodology: Energy efficiency measures in household cooking”

Article 6.4 Supervisory Body – **SBM Briefing on the outcomes of MEP 016**
Bonn, Germany, **29 September 2026**



SBM022 considered the draft “Mechanism methodology: Energy efficiency measures in household cooking” (A6.4-MEP014-A04) and requested the Methodological Expert Panel (MEP) to review its recommendation and provide its views on:

- (a) Benefits and drawbacks of considering reversal risk and the application of non-permanence provisions for improved cookstove activities, independent of the existing A6.4 rules and regulations, taking into consideration the best available science and practical implications;
- (b) The rationales on the 4.5 per cent threshold of “households in the target population with a functional cooking technology that is assessed to have the same or a higher efficiency as the project cookstoves (i.e., equivalent to the project cookstoves)” as set out in paragraph 13(j) of the proposed methodology and whether this is possible under A6.4 rules and regulations. The MEP should further consider: (i) the benefits and drawbacks of expanding the scope of exclusions in paragraph 46(a) and (ii) whether the assumptions take into account potential non-linear growth rates of autonomous adoption; and



SBM022 considered the draft “Mechanism methodology: Energy efficiency measures in household cooking” (A6.4-MEP014-A04) and requested the Methodological Expert Panel (MEP) to review its recommendation and provide its views on:

- (c) Whether the approach in paragraph 57(a), associated with paragraph 52(i) of the version 01.0 of the “Standard: Setting the baseline in mechanism methodologies” (A6.4-STAN-METH-004) (hereinafter referred to as the “Baseline Standard”), is appropriate in specific instances where data exhibits heavily skewed distributions, and whether alternative approaches such as calculating “the median performance of all the best performing comparable activities including and beyond the selected percentile” may be a more representative metric.



Purpose

To address the mandate given by the SBM at its 22nd meeting to the MEP.



Agenda item 3.4.

Paragraph 21 of the annotated agenda, Annex 4 to MEP 016 meeting report

Para. 22(a): non-permanence provisions

- Provision of the scientific background
- Consideration of precedents (CDM) and current practices and context (other carbon crediting programmes and ICVM)
- Implications (both quantitative and qualitative)
- Discussion on benefits and drawbacks of accounting for non-permanence risk
- Other potential approaches (in the Appendix)



Para. 22(b): Rationales on the 4.5 per cent threshold

- Background
- Compliance with A6.4 rules
- Rationales for the 4.5% threshold
- Benefits and drawbacks of expanding the scope of exclusion (other than activities registered under A6.4 and other carbon crediting mechanisms)
- Consideration of non-linear growth of autonomous adoption

Para. 22(c): use of “weighted average” of the top 20%

- Regulatory background
- Discussion

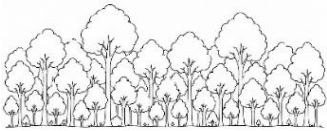
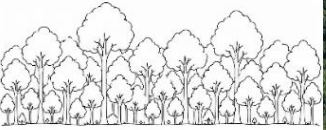


Para. 22(a): Scientific basis for non-permanence

- Clean cooking generates emission reductions (only for fNRB share), corresponding to preservation of above-ground biomass carbon stocks (instead of this biomass being lost).
- Quantification is indirect: reduced biomass consumption and fNRB are used because affected carbon stocks are diffuse and not practically monitorable or attributable directly
→ use of flux-based method.
- Preserved carbon stocks remain exposed to natural and human-induced risks (e.g. wildfire, drought and land conversion); if lost, credited emission reductions can be reversed.
- Reversal risk is present irrespective of monitoring or control over the reservoir;
- Over-/under-crediting and non-permanence are distinct issues and should be addressed separately.



Key issues and proposed solutions

	Start	Year X of crediting period	Year Y of crediting period
Baseline	 	 	 
A6.4 Activity	 	 	 
Description	Same	Less non-renewable biomass use → carbon stocks loss prevented → Higher carbon stock in A6.4 activity	1/3 rd of carbon stocks preserved lost (e.g. conversion of the forest to cropland)



Para. 22(a): Precedents and current practice

- CDM did not address non-permanence because it used a fossil-fuel baseline as a workaround→ not a direct precedent for Article 6.4 which uses a true biomass baseline.
- Other crediting programmes take different approaches: some exempt clean cooking from reversal provisions, while VCS applies a standard 5% deduction that bundles reversal with other leakage effects.
- ICVCM: recognizes non-permanence risks for displacement of NRB, but concluded that systematic assessment and appropriate measures were not yet feasible for clean cooking.
- Proposed Article 6.4 approach: would introduce reversal-risk assessment for clean cooking using jurisdictional default values (thus avoiding activity-level reservoir monitoring which is not practical).



Para. 22(a): Proposed approach and implications

- Use default reversal-risk factors at the same geographical aggregation as fNRB (national);
 - no activity-level monitoring, reporting or post-crediting monitoring of reservoir;
 - A6.4ERs transferred to reversal-risk buffer pool according to woody biomass savings (NRB fraction) and reversal risk;
 - Simple approach to avoid material transaction costs for activity participants.
- Illustrative modelling: buffer-pool deductions could reduce A6.4ERs issued by roughly 6% to nearly 60%, depending on activity type and assumed reversal-risk contribution;
- Lower credit volumes: lower revenue per stove unless higher A6.4ER prices compensate; potential shifts towards other activities or carbon-crediting programmes.



Para. 22(a): Benefits and drawbacks of accounting for reversal risks

- Benefit: preserves the environmental integrity of A6.4ERs and avoids overstating cumulative emission reductions over time;
- Benefit: consistent treatment of activity types subject to reversal risk avoids → no artificial cost advantage to clean cooking (relative to other permanent/non-permanent activities);
- Drawback: lower credit volumes and potentially higher required prices → may reduce the attractiveness / feasibility of clean cooking activities under A6.4;
- Drawback: potential shift towards other activities or crediting programmes: could affect participation by some host Parties and delivery of clean-cooking SD co-benefits;
- Net market impact: uncertain (would depend perspectives and preferences of activity participants, host Parties and buyers).



Para. 22(a): Other potential approaches (see Appendix) – (do not constitute recommendations)

- Mandatory buffer contribution for authorized A6.4ERs; optional for MCUs: preserves integrity for units used for compensation/neutralization claims, but creates differentiated claims (and would require registry rules);
- Buffer contribution funded from other activities: preserves integrity and shifts costs, but burden on other activities (also needs reconciling contributions provided and required);
- Nest clean cooking within a jurisdictional carbon-crediting activity to handle reversal risk;
- Fossil-fuel baseline,
- Crediting only non-CO₂ reductions
- Adjusting other uncertainty requirements
- Temporary/phased-in buffer contribution (with modalities to be elaborated)



Key issues and proposed solutions

- **Para. 22(b): Rationales for the 4.5% threshold**
 - Intended to represent autonomous improved-cookstove adoption;
 - Is assessed using representative household/market data.
 - Follows the performance-based additionality demonstration (as per Additionality Standard)
 - Relies on evidence that better-performing activities are highly likely to be additional.
 - Intended to provide at least a 90% probability that the activity is additional.
 - Explicitly excluding cookstoves installed under Article 6.4 activities is consistent with the objective of measuring autonomous uptake;
 - Broader exclusions (private grants/donations or bilateral/multilateral aid) could broaden applicability but create verification and additionality risks.
 - Stock-based threshold: agnostic to linear, exponential or other uptake patterns
 - Available literature did not provide evidence of non-linear autonomous uptake if rapid autonomous uptake occurred



Key issues and proposed solutions

- **Para. 22(c): Use of “weighted average” for the top 20%**
- Baseline Standard: ambitious benchmark based on the 20th percentile or less of the best-performing comparable activities; benchmark calculated as their weighted average
- Clean cooking: a heavily skewed performance distribution → small number of very efficient technologies can have a disproportionate influence → strongly conservative baseline.
- MEP tested alternatives:
 - weighted averages of the top 30% and 40%; median; geometric mean of the top 20%;
 - not aligned with the current Baseline Standard.
 - downward-adjusted historical-emissions approach;
- Median of the top 20%: less stringent baseline than “downward adjusted historical emissions” but require amending the Baseline Standard (not compliant with the current framework)



Key issues and proposed solutions

- **Para. 22(c): Use of “weighted average” for the top 20%**

Type of baseline and description	Indicative crediting baseline cookstove efficiency (<i>in per centage</i>)	Baseline standard compliance [yes/no]
36(ii) Ambitious benchmark (<i>weighted average of the top 20 per cent</i>)	16.6	Yes
Benchmark- <i>weighted average of the top 30 per cent</i>	15.0	No
Benchmark- <i>weighted average of the top 40 per cent</i>	14.2	No
Benchmark- <i>applying the median of the top 20 per cent</i>	11.8	No
Benchmark- <i>applying the geometric mean of the top 20 per cent</i>	14.8	No
36(iii) Existing actual or historical emissions approach adjusted downwards	14.0	Yes

- Median of the top 20%: less stringent baseline than “downward adjusted historical emissions” but require amending the Baseline Standard (not compliant with the current framework)



Subsequent work and timelines

- None



To consider this information note when considering the MEP recommendation on:

- (a) the “Draft mechanism methodology: Energy efficiency measures in household cooking”, and
- (b) the “Draft mechanism methodology: Cooking energy transitions”.



Stakeholder inputs

- None received

