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Document reference number and title: (Recommendation from the MEP to SBM020) Draft mechanism methodology: Energy efficiency measures in household cooking (version 01.0)				
Item	Section no. (as indicated in the document)	Paragraph/Table/Figure no. (as indicated in the document)	Comment (including justification for change)	Proposed change (including proposed text)
1	COVER NOTE	38	Self-reporting plus visual inspection alone cannot establish use frequency reliably. SUMs are operationally affordable below USD 30 per device and have been deployed at scale in cookstove projects. The over-crediting literature attributes a substantial share of past Paragraph 32 to survey-based usage claims unsupported by direct measurement.	Replace with: 'User households are activity households with a functioning project cookstove confirmed through Stove Use Monitor (SUM) sampling or, for activities below 25,000 tCO ₂ e per year credited, annual usage surveys complemented by independent third-party visual inspection.'
2	COVER NOTE	42	The current single conservative deduction systematically under-deducts for imported-stove activities, which dominate African rural deployment (the methodology's primary geography). Locally manufactured and imported stoves have materially different embodied-emission profiles and treating them identically misrepresents the activity scenario. GS RECH V5.0 implements a dual-pathway rule which can serve as published precedent.	Introduce dual-pathway embodied-emissions accounting: (i) locally manufactured cookstoves apply a host-Party grid emission factor multiplied by estimated mass-energy intensity per stove unit; (ii) imported cookstoves apply a multinational supply-chain emission factor capturing manufacturing and international transport. Default emission factors to be tabulated in the methodology by Annex.

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3	COVER NOTE	44	The reversal-risk framing is loose as drafted. The reservoir at risk is forest biomass, not the fuel reduction. Clarification protects conceptual coherence. Immediate cancellation is the operational trade-off that exempts participants from 100-year monitoring obligations they cannot realistically deliver, so retention is operationally critical. Buffer rate calibration should reflect that deforestation pressure varies significantly across host parties and biomes.	Tighten language to clarify reservoir scope: Retain alternative approach with immediate cancellation. Add a calibration provision linking buffer rate to locally specific deforestation pressure parameters from the reversal risk assessment tool. Proposed text: "Reversal risks apply to the affected greenhouse gas reservoir (above-ground forest biomass), not to the credited fuel consumption reduction itself. This methodology shall not be applied for issuance of A6.4ERs subject to non-permanence provisions until the reversal risk tool referenced in paragraph 44 has been adopted by the Supervisory Body and published. Activity participants who validate under this methodology before that date shall update their PDD to reflect the published tool at first verification."
4	COVER NOTE	48	Without volumetric thresholds, paragraph 48 leaves uncertainty methodology selection to the activity proponent, biasing toward the simpler approach. Tiered thresholds align analytical rigour to credit volume and provide operational clarity to designated operational entities. The IPCC 2006 methane emission factor for charcoal combustion (200 kg/TJ, range 70 to 600) is the dominant uncertainty driver and warrants Monte Carlo at scale.	Specify volumetric thresholds: error propagation acceptable for activities below 25,000 tCO ₂ e per year credited; Monte Carlo recommended in the 25,000 to 100,000 tCO ₂ e per year range; Monte Carlo required above 100,000 tCO ₂ e per year. Already-conservative parameters remain excluded from the analysis as drafted.
5	INTRODUCTION	7 (o)	Once per week is incompatible with the over-crediting evidence cited in the methodology's own rationale at paragraph 26. With low usage frequency, the difference between baseline and activity calculation methods drives apparent emission reductions rather than the activity intervention itself, as the MEP note flags. Three cooking events per week aligns with empirical cookstove use literature in low-income rural settings (Wilson et al. 2016; Thomas et al. 2013). GS RECH v 5.0 applies a stove-stacking deduction approach which is an established VCM precedent for the proposed deduction factor.	Replace '[once] per week' with: 'at least three cooking events per week, evidenced by Stove Use Monitor (SUM) sampling, or daily cooking events evidenced by direct fuel consumption measurement (Kitchen Performance Test or continuous metering).' Add an explicit stove-stacking deduction factor (DSS-y) applied to baseline emissions, calibrated against pre-activity survey data on parallel cooking technology use. Default deduction: 15% where the pre-activity survey shows at least one baseline stove still functional in user households at year 1; 20% where two or more baseline stoves remain functional. Independent measurement of baseline stove use via SUMs overrides the default deduction.

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6	INTRODUCTION	11	The applicability is unduly narrow. Improved biomass cookstoves in mountainous and cold-climate rural areas (Andes, Himalayan foothills, Atlas, Ethiopian highlands) serve heating as a co-function. Excluding heating creates an artificial scope gap that pushes legitimate activities into separate methodologies. Space heating is already addressed later in the methodology (e.g. Section 14 and Appendix 3 para. 21) but not reflected in the applicability conditions or in the cover note. Section 1 (paragraph 1), Section 4 (paragraph 11) and Cover Note paras 7 and 11 should explicitly recognise space heating as a secondary service of project cookstoves so that the applicability framing is consistent with the methodology's own treatment downstream.	Revise the scope under paragraph 1 of Section 1, applicability under paragraph 11 of Section 4 and align Cover Note paras 7 and 11 to acknowledge that project cookstoves frequently provide secondary thermal services such as space heating in cold rural areas, so that the applicability conditions match how space heating is already handled in Section 14 and Appendix 3. Proposed text: "Cookstoves distributed by Article 6.4 activities, called 'project cookstoves' in this mechanism methodology, may also provide secondary thermal services such as space heating in cold rural climates.."
7	APPLICABILITY	13 (b)	The +/- 20% bracket allows substantial fuel-share drift while maintaining methodology applicability. This creates a loophole where partial fuel switching can occur without triggering the separate fuel-switch methodology referenced in cover note paragraph 6. The strict same-fuel rule preserves the rationale for separating efficiency-only and fuel-switch interventions into distinct methodologies.	Delete the bracketed +/- 20 per cent partial exemption. Retain only the strict same-fuel rule.
8	APPLICABILITY	13 (d)	The poverty-level demonstration allows national or sub-national poverty indices but does not specify the level of disaggregation. This enables cherry picking: A proponent could pick a single low-income city or ward that clears the threshold while the surrounding province is much wealthier. This cherry-picking risk undermines the attempt to standardise additionality through a poverty filter. Maximum disaggregation should be the highest sub-national administrative tier (province/state/region), not municipalities, cities, districts, wards or villages.	Cap the level of sub-national disaggregation at the highest sub-national administrative tier (e.g. state or province in a federal system; region in a unitary state). Cities, districts, municipalities and lower units should not be permitted as the unit of poverty demonstration. Proposed text: "Where national or sub-national poverty indices are used, the unit of demonstration shall not be more granular than the highest sub-national administrative tier of the host Party (e.g. State, Province or Region). Demonstrations at the city, district, municipality, ward or village level are not permitted."

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9	APPLICABILITY	13 (e)	The methodology rationale rests on rural low-income deployment with limited purchasing power and persistent biomass dependence (Appendix 7). UMIC and HIC inclusion stretches the additionality logic beyond the empirical basis. Activities in China and similar UMIC contexts are incompatible with the sectoral additionality assumption. LMIC inclusion makes sense to allow targeting of poor regions in countries such as India. Thus, applicability should be restricted to LICs and LMICs as classified by the World Bank in the year of validation. References: • World Bank Country and Lending Groups (FY classification)	Restrict country eligibility to LICs and LMICs (World Bank classification, latest published vintage at validation). Exclude UMICs and HICs from applicability irrespective of sub-national poverty scores. Proposed text: "The Article 6.4 activity shall be located in a host Party that, at the time of validation, is classified by the World Bank as a Low-Income Country (LIC) or Lower-Middle-Income Country (LMC). Activities located in Upper-Middle-Income Countries or High-Income Countries are not eligible under this methodology, irrespective of sub-national poverty scores."
10	APPLICABILITY	13 (e) (ii)	The MPI threshold of 0.2 is acceptable but the methodology should reference OPHI/UNDP guidance directly and clarify whether the threshold applies to the target population score or to the host region's published MPI score. Without clarification, proponents may compute their own MPI from project surveys without comparability to the global MPI. Use of the 0.2 cut-off here should be tied to the published Global MPI dataset. Sub-national thresholds at municipal or city level allow targeting of poverty pockets within otherwise non-eligible jurisdictions, undermining the methodology rationale. Restricting aggregation to province or state level preserves the additionality logic while permitting genuine regional differentiation in federal structures. References: • UNDP, 2025 Global Multidimensional Poverty Index • OPHI, Global MPI 2025	Clarify that states/provinces are the lowest allowed levels of disaggregation. Ensure the MPI value used comes from the most recent UNDP/OPHI Global MPI publication for the relevant sub-national region, not from a project-conducted MPI calculation. Proposed text: "... the income level of the activity households is at or below the income threshold for poverty level established by the national government, or by the highest sub-national administrative level (province or state). Disaggregation at municipal / city level is not permitted. Where the Multidimensional Poverty Index (MPI) is used, the value applied shall be the most recent published value from the UNDP/OPHI Global MPI dataset (or its successor) for the highest sub-national administrative tier in which the activity is located. Project-computed MPI values shall not be accepted in lieu of the published value."

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11	APPLICABILITY	13 (g)	Requiring an identifier 'affixed to the cookstove' is welcome but does not cover fixed/built mud-based stoves with no metallic body for a sticker or engraved plate, and household-only ID cards kept centrally undermine traceability. The methodology should (i) admit built stoves with an embedded plate that is destroyed if the stove is broken open, and (ii) allow continuous monitoring through SUMs (Option 2 of paragraph 65) as the primary identification means where a permanent identifier cannot be reliably affixed.	Expand paragraph 13(g) and footnote 14 to allow two equally-acceptable identification approaches: (a) an identifier embedded in the stove body such that removal destroys the stove; or (b) continuous monitoring with a SUM whose serial number is recorded in the activity register and acts as the unique identifier. Household-only ID cards must not be accepted as the sole identifier. Proposed text: "Project cookstoves shall be linked to a household through a permanent unique identifier. The identifier shall be implemented through one of the following equally-acceptable means: (i) a tag or plate affixed or fired into the body of the cookstove in such a way that physical removal destroys the stove; or (ii) a stove use monitor (SUM) with a recorded serial number installed permanently on the cookstove. Household-only identification cards detached from the cookstove are not acceptable as the sole identifier. The activity participants shall maintain an identifier management system that maps each unique identifier to one and only one cookstove and one and only one household."
12	APPLICABILITY	13 (i)	The current minimum thresholds (20% plancha, 25% wood, 30% charcoal) are acceptable but could be more conservative if tightened by one ISO tier. Against ISO/TR 19867-3:2018, the 20% and 25% values correspond to Tier 2 and only the 30% charcoal value reaches Tier 3. Given the well-documented laboratory-to-field gap, Tier 2 stoves measured in the lab will often underperform in real use. Tightening to Tier 3 for wood-burning stoves ($\geq 30\%$) and Tier 4 for charcoal-burning stoves ($\geq 40\%$) would better ensure a genuine efficiency improvement under field conditions; if the existing values are retained, Appendix 7 should explicitly justify them against ISO 19867-3.	Consider tightening the minimum thresholds by one ISO tier: Tier 3 for wood-burning stoves ($\geq 30\%$) and Tier 4 for charcoal-burning stoves ($\geq 40\%$), measured under ISO 19867-1:2018 'high-power thermal efficiency'. If the existing values (20%/25%/30%) are retained, Appendix 7 should explicitly justify them against ISO/TR 19867-3:2018. Proposed text: "All project cookstove models shall achieve, when tested in accordance with ISO 19867-1:2018, a high-power thermal efficiency corresponding to at least ISO/TR 19867-3:2018 Tier 3 for wood-burning cookstoves ($\geq 30\%$) and Tier 4 for charcoal-burning cookstoves ($\geq 40\%$). Appendix 7 shall set out the field and laboratory evidence supporting these thresholds."

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13	APPLICABILITY	15	Real-world cooking activities frequently combine efficiency improvements with partial fuel switching. Locking the methodology into standalone-only operation creates an artificial barrier between adjacent intervention types that the future fuel-switch methodology will need to resolve. A placeholder commits the MEP to addressing this gap on a defined timeline, avoiding methodology fragmentation.	Add a placeholder: 'This methodology will be amended to specify interaction rules with the future fuel-switch methodology (AMS-I.E successor) within twelve months of the latter's adoption. Combination with other PACM methodologies is permitted where the other methodology specifies the interaction explicitly.'
14	BASELINE SCENARIO	32	While we agree with the approach of pre-activity scenario, cookstove markets shift rapidly with subsidy programmes, donor interventions and humanitarian distributions. A three-year window allows pre-activity baseline data to drift materially from actual conditions at activity start, biasing baseline emissions upward and over-crediting the intervention.	Reduce the maximum interval between the pre-activity survey and the start date of the first crediting period from three years to two years. Proposed text: "The pre-activity survey shall be undertaken within the two years prior to the start date of the first crediting period of the Article 6.4 activity."
15	BASELINE SCENARIO	38 (a)	As drafted, the bracket would invalidate any cookstove activity in regions where Verra, Gold Standard or other VCM projects have ever operated, covering most of East and West Africa. The provision creates an operational impossibility in the methodology's primary deployment geographies. The double-counting concern the bracket addresses is already covered through the consent and waiver requirements in paragraph 54 and Appendix 2.	Proposed text: Delete the bracketed exclusion. If retention is preferred, narrow to: 'Exclude technologies registered under another carbon crediting programme that is currently claiming the same emission reductions for the same household during the same crediting period.'
16	BASELINE SCENARIO	40-53	Option 2 better aligns with the literal RMP paragraph 36(ii) language on best-performing comparable activities and reflects local empirical context. But without guard rails, top-20-percentile selection can be gamed via cherry-picked comparable areas with low improved-cookstove penetration. The compromise preserves Option 2 in operational terms while protecting against gaming.	Adopt Option 2 with three guardrails: (i) the activity-specific benchmark shall not exceed Option 1 by more than 15% in fuel consumption terms; (ii) comparable areas are methodology-defined, not developer-selected; (iii) the top-20-percentile dataset is independently validated at the design phase by the DOE.

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17	BASELINE SCENARIO	62-63	The 90% cap conditional on customer support actions can be “gamed”. Documentation of support materials, toll-free channels and printed instructions can be produced administratively without evidence of actual support delivery to the household. The mechanism creates an incentive for paper compliance rather than substantive support delivery.	Delete the 90% option and the customer support distinction. Retain only the 75% cap for activities applying Option 1 survey-based monitoring (paragraph 64).
18	BASELINE SCENARIO	64	The 75% cap is consistent with empirical cookstove usage literature and serves as a conservative survey-based ceiling for small-scale activities. Without empirical evidence that 75% systematically over-estimates usage, dropping further is arbitrary and risks excluding legitimate small-scale activities. Activities at scale move to mandatory direct measurement, which addresses the over-crediting concern at the volume tier where it matters most.	Retain 75% as the survey-based ceiling for activities below 25,000 tCO ₂ e per year credited. Above this threshold, mandatory SUMs apply per proposal above.
19	BASELINE SCENARIO	65	Direct measurement via SUMs is the only monitoring approach that avoids over-crediting given evidence cited by the methodology itself. The 90% and 75% in Option 1 are too generous given the empirical literature on Hawthorne effects and self-reporting bias. SUM cost has fallen below the threshold where blanket survey-only monitoring is justifiable on cost grounds. Gold Standard MECD V2.0 Continuously Tracked Energy Consumption requirements show operational feasibility of direct-measurement cookstove monitoring at scale.	Adopt Option 2 as the default for activities crediting above 25,000 tCO ₂ e per year. Retain Option 1 (paragraphs 62 to 64) only for small-scale activities below this threshold, with the 75% cap applying regardless of customer support actions.

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20	BASELINE SCENARIO	67-68	A 1%/year linear downward adjustment is too lenient. With a baseline year of 2026, even a slow trajectory to the host Party's net-zero target requires more than 1%/year. India's net-zero target year is 2070 (44 years from baseline, ~2.3%/year). Nigeria (2060) and others (2050–2060) require higher rates still. Applying 1%/year for activities crediting into the early 2030s leaves baselines materially above any plausible national net-zero trajectory and risks issuance of A6.4ERs that are not Paris-aligned. We propose 2%/year, consistent with the slower of typical LIC/LMIC net-zero pathways. References: • India's Updated First NDC under the Paris Agreement (2070 net-zero) • Climate Action Tracker - Net-zero targets dashboard	Increase the annual downward adjustment from 1% to 2% of the baseline of year 1 (paragraph 67), with consequential edit in paragraph 68. As a fallback, set the rate equal to 100% divided by the number of years between the start of the first crediting period and the host Party's net-zero target year, whichever is higher. Proposed text: "For each calendar year after the first crediting year, a downward adjustment to the unadjusted baseline emissions shall be calculated by applying an annual reduction of 2 per cent relative to the baseline of year 1. Where the host Party has communicated a net-zero target year through its NDC or LT-LEDS, the rate shall be the higher of 2 per cent and 100 per cent divided by the number of years between the start of the first crediting period and the net-zero target year."
21	ACTIVITY SCENARIO	96	The methodology applies a default 25% downward Hawthorne adjustment (cap at 75% of the activity-KPT-based estimate). The only published field quantification, Simons et al. (2017) in Uganda, found that observed cooks used the project stove 53% more and the traditional stove 29% less while observers were present. The 53% inflation in observed project-stove use implies that unobserved use is roughly 1/1.53 of observed, i.e. approximately 35% lower; the simultaneous 29% suppression of traditional-stove use during observation amplifies the correction on net emission reductions. A 25% deduction is therefore not conservative against the only published field measurement. The Gold Standard RECH V5.0 applies 35% References: • Simons et al. (2017): Using unobtrusive sensors to measure and minimize Hawthorne effects: Evidence from cookstoves, JEEM 86, p. 68–80	Increase the default Hawthorne deduction from 25% to 35%, citing Simons et al. (2017) directly. Alternatively, eliminate the default and require Option 2 of paragraph 95 (direct SUMs measurement of the Hawthorne effect) for all activities. Restrict use of grey-literature studies for setting load-bearing defaults. Proposed text: "Where activities do not measure the Hawthorne effect directly using SUMs, project emissions shall be capped at 65 per cent of the value calculated from KPTs (i.e. a 35 per cent default Hawthorne deduction), based on the field quantification reported in Simons, Beltramo, Blalock and Levine (2017). Activities are encouraged to apply the SUMs-based measurement option (paragraph 95) in preference to the default."

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22	MONITORING REQUIREMENTS	New paragraph - household attrition, stove relocation, secondary-market resale	The methodology is silent on three real-world risks: (i) household relocation outside the project boundary; (ii) destruction of the cookstove by natural calamity (flood, earthquake); and (iii) resale on a secondary market, with stoves ending up in a different household or country. Without explicit treatment, sample-based KPTs may continue to credit a stove assumed to be in the registered household when it is not. GPS-tagging at registration with re-verification each monitoring period is necessary but not sufficient; the methodology must also specify the consequences when a registered stove is no longer at the registered location.	Add a Section 14 subsection on 'Stove attrition, relocation and resale' requiring: (a) GPS coordinates captured at registration and re-verified during each usage survey; (b) removal of the household from the Ψ y count from the date the stove fails location verification; (c) explicit treatment of secondary-market resale as an over-crediting risk to be deducted; and (d) an attrition register for stoves destroyed by force majeure. Proposed text: "Activity participants shall maintain a Stove Attrition and Relocation Register recording, for each project cookstove that fails GPS verification or visual inspection, whether it has been (i) relocated within the project boundary, (ii) relocated outside the project boundary, (iii) destroyed (with date and cause), or (iv) transferred to another household via sale or gift. Stoves in categories (ii)–(iv) shall be removed from the Ψ y count from the date of the event."

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23	APPENDIX 2	4 (and Appendix 3, para 9)	The Waiver Certificate must be 'signed by the head of the household or any adult resident'. In many LIC contexts where this methodology will primarily apply, adult illiteracy remains high; UIS data show adult literacy rates below 50% for women in several Sub-Saharan countries. A simple signature requirement therefore creates both an inclusivity problem and an audit-trail problem (a thumbprint or X-mark is harder to verify than a digital signature). The methodology already requires surveys to be in the local language (Appendix 3 paragraph 2.3) but is silent on the Waiver Certificate. A further concern is the phrase 'any adult resident', which would permit signature by a teenage or young-adult co-resident without the household head's consent, undermining the household-level intent of the waiver and exposing the activity to disputes at verification. All three issues should be fixed. References: • UNESCO Institute for Statistics - Literacy data	Oral consent with third-party witness is established practice in clinical research and humanitarian work in low-literacy environments. Permit alternative attestation methods (thumbprint witnessed by an enumerator and a third-party community witness, audio-recorded oral consent in the local language, or a digital signature) for illiterate adult signatories. Require the Waiver Certificate text to be provided in the language(s) spoken in the project boundary, and verbally explained to the signatory before signature/attestation. Tighten the signatory definition to the head of household, or a named delegated adult (typically spouse/partner) with documented authority. Proposed text: "The A6.4ERs Waiver Certificate shall be available in each language commonly spoken in the project boundary. Where the head of household or adult resident is unable to read or write, attestation may be provided by (i) a thumbprint witnessed by both the enumerator and a community witness independent of the activity; (ii) an audio-recorded oral consent in the relevant local language; or (iii) a digital signature captured via biometric device. The contents of the Certificate and the implications of its execution shall be verbally explained to the signatory in their language prior to attestation, and this verbal explanation shall itself be audio-recorded and archived as part of the documentation."
24	APPENDIX 4	2,5,7	Sampling provisions cross-reference a not-yet-published sampling tool. Same conditionality as for the reversal risk tool	Mirror the conditionality language proposed above for the sampling tool.