Public Inputs: PH_PM007 "Enhancing carbon removals through afforestation/reforestation" (Philippines)

From 8 April to 22 April 2026

Input #1

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Country	Japan

① Addition of Remote Sensing as a Biomass Quantification Method

- **Part of the document (Cover sheet/A/B/C/etc):** C. Summary of the methodology (Monitoring parameters and methods)
- **Page of the document:** 3
- **Comment on the page (including justification of the change):** In the draft methodology, the estimation methods for both the existing biomass before the project starts and the tree biomass after project implementation are strictly limited to the "direct measurement" of trees. However, relying solely on direct field measurements for vast afforestation/reforestation areas imposes significant MRV (Measurement, Reporting, and Verification) costs and labor burdens on project proponents. There is a strong concern that this will raise the barrier to entry for prospective projects.
- **Proposed change (including proposed text):** For the monitoring of biomass, we propose explicitly adding quantification methods using remote sensing technologies (such as LiDAR or high-resolution satellite imagery) as an alternative option to direct measurement. The utilization of remote sensing has become standard practice in the latest high-quality carbon credit protocols. For instance, Isometric (Reforestation v1.1) provides specific modules for quantifying aboveground biomass using Earth Observation and LiDAR in conjunction with ground plots. Similarly, VCS (VM0047) has recently allowed the use of remote sensing to estimate existing woody biomass at the start of a project under certain conditions. Permitting the use of these technologies in the JCM will allow for the simultaneous reduction of MRV costs and the improvement of calculation accuracy, leading to the development of more scalable afforestation projects. ***(Proposed text addition to the parameter description: "estimated using direct measurement of trees or remote sensing technologies such as LiDAR and high-resolution satellite imagery")***

② Stricter Baseline Setting (Consideration of Dynamic Baselines)

- **Part of the document (Cover sheet/A/B/C/etc):** G. Establishment and calculation of project reference level (G.1. / G.2.)
- **Page of the document:** 6-7
- **Comment on the page (including justification of the change):** This methodology assumes that biomass has not increased over the 10 years prior to the project as an eligibility criterion, and consequently fixes the project reference level (baseline removals) uniformly at "zero". However, there is a possibility that the project area may naturally regenerate and increase in biomass due to natural factors such as climate change or variations in precipitation. A fixed baseline of zero carries the risk of overestimating the "additional removals by the project" by crediting these naturally occurring growths. While we acknowledge there may be separate discussions regarding how strict the requirements should be, we would appreciate clarification on the background and rationale for adopting this fixed baseline approach.
- **Proposed change (including proposed text):** Latest methodologies such as VCS (VM0047) and Isometric (Reforestation v1.1) adopt a "dynamic baseline" (or dynamic

performance benchmark) approach to strictly isolate project additionality. This involves continuously observing and comparing similar non-project areas (control plots/pixels) using remote sensing. We believe that the JCM should also consider transitioning to a dynamic baseline evaluation utilizing control areas in the long term. For future revisions, we propose establishing a roadmap toward the implementation of dynamic baselines, or alternatively, strengthening the requirements for scientifically justifying the validity of the baseline when a fixed "zero" baseline is applied.

③ Necessity of Continuous Monitoring for Leakage (Displaced Emissions)

- **Part of the document (Cover sheet/A/B/C/etc):** H. Calculation of project net emissions or removals (Displaced emissions)
- **Page of the document:** 13-14
- **Comment on the page (including justification of the change):** Regarding displaced emissions (leakage) resulting from the shift of agricultural or wood collection activities outside the project area, the current approach deducts the estimated values entirely in the first year (t=1) of the project period based on prior estimations or surveys. However, the displacement of activities can occur dynamically at any point during the crediting period, making an upfront estimation highly uncertain and potentially non-conservative.
- **Proposed change (including proposed text):** The Isometric methodology mandates the establishment of a "Leakage Monitoring Zone" around the project boundary (e.g., a 5 km buffer) and requires continuous monitoring using satellite imagery at every verification event to account for activity-shifting leakage. For the JCM, we believe it is highly desirable to add requirements not only for initial ex-ante estimations but also for continuous remote-sensing-based monitoring of surrounding deforestation (activity displacement) at each verification timing. ***(Proposed action: Add a requirement for "continuous remote sensing monitoring of activity displacement in the area surrounding the project" to the monitoring plan, and introduce a mechanism to continuously deduct displaced emissions from the net removals if leakage is detected ex-post.)***

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Input #2

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Country	Japan

In Equation 11 and Equation 25 of this methodology, a threshold treatment is applied where 0.1 is subtracted from the calculated uncertainty. We understand that this design completely waives the deduction if the calculated uncertainty is 10% or less. For instance, if the uncertainty is 25%, the effective deduction rate is limited to 15%, and if the uncertainty is 8%, the deduction rate becomes zero. It is inferred that this "-0.1" design originates from the legacy CDM A/R methodology tool (AR-TOOL14).

However, in the recent Voluntary Carbon Market (VCM), demands for credit quality and integrity have been rising rapidly. Regarding the treatment of uncertainty, there is a notable trend toward establishing independent and more stringent frameworks rather than simply adopting designs from the CDM era. Key examples are provided below.

Verra VM0047 (Afforestation, Reforestation and Revegetation): The VM0047 methodology developed by Verra adopts a design that does not provide threshold exemptions for uncertainty deductions, instead consistently applying a minimum deduction of 10%. This is a conservative design based on the recognition of inherent uncertainty factors beyond sampling error, such as model errors in the selection of allometric equations, biomass expansion factors, and root-to-shoot ratios. Furthermore, the Core Carbon Principles (CCP) assessment by the Integrity Council for the Voluntary Carbon Market (ICVCM) calls for enhanced monitoring of uncertainty quantification and the application of allometric equations. Thus, strengthening uncertainty management has become a market-wide requirement.

ART TREES: The Architecture for REDD+ Transactions (ART) TREES standard employs a comprehensive uncertainty analysis using a 90% confidence interval based on Monte Carlo simulations (n=10,000). While CDM tools primarily focus on sampling error, TREES considers uncertainty factors more comprehensively by evaluating errors in both activity data and emission factors.

Based on the above, we propose the following measures to create high-quality JCM credits that earn market trust.

Proposal 1: We propose to abolish the "-0.1" threshold treatment in Equation 11 and Equation 25 and switch to a method that applies a minimum deduction of several percent regardless of how low the uncertainty is, similar to VM0047. Specifically, by modifying the current formula to ensure a minimum deduction remains, we believe that minimum conservativeness can be secured against uncertainty factors other than sampling error.

Proposal 2: Even if the current threshold is maintained, we propose expanding the scope of uncertainty calculation from sampling error alone to include comprehensive uncertainty derived from parameters such as those associated with the selection of allometric equations. We believe this will reduce the number of cases falling below the threshold and contribute to a substantive improvement in conservativeness.

Proposal 3: Should the above proposals not be adopted, we request that the scientific basis for determining that the "10% or less exemption" threshold is sufficiently conservative within the context of the project environment be explicitly stated in the methodology document. We believe that simply stating that past tools were followed does not provide a sufficient explanation in light of current technical standards and increasing market requirements.

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Input #3

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Section / Topic	Concern & Rationale	Proposed Revision	Corresponding JCM Draft Methodology Page Number
Project Typology	Project typology may benefit from clearer scope definition: The current draft appears primarily oriented toward what is essentially full plantation-style A/R, while grouping plantation and assisted natural regeneration together. In practice, these approaches can have different baseline, leakage, and monitoring implications. Clarifying the intended project scope — and whether different implementation contexts are meant to be covered — would improve methodological precision.	Clarify whether the methodology is intended primarily for full plantation-style A/R. If broader coverage is intended, consider introducing clearer sub-pathways or decision rules for plantation A/R, assisted natural regeneration, and other relevant planting contexts, with differentiated treatment of baseline, leakage, and monitoring where needed.	p.2, p.4
Forest Definition / Eligibility	Eligibility criteria could be more granular: The current draft excludes forests and wetlands and bars projects on areas cleared of forest within the prior 10 years, which is good, but does not yet appear to fully address degraded woody systems, partial canopy areas, or edge cases where prior land condition may be contested.	Clarify treatment of degraded lands, partially wooded areas, and prior woody biomass removal. Require stronger evidence that land was not intentionally degraded or cleared to create project eligibility.	p.2
Land Tenure	SFLMA Alignment: Philippine SFLMA guidelines limit tenure to 25 years. A methodology requiring longer fixed terms without renewal clauses creates a legal barrier.	Allow the crediting period to be contingent on and synchronized with the 25-year SFLMA term, including a procedural pathway for renewal.	N/A (not explicitly addressed)
GWP Standards	IPCC AR6 Update: The current PMS uses AR5 values. To maintain environmental integrity, non-CO2 gases (CH4,N2O) must reflect the latest science.	Update all Global Warming Potential constants in the input and calc_process_Burn tabs to IPCC AR6 standards.	p.11–12
Monitoring	Parameter specificity: Applying generic carbon fractions, BEFs, or root-to-shoot ratios across diverse species can distort biomass estimates and risk non-conservative crediting. While the current JCM draft states that allometric equations appropriate for the tree species should be used, clearer guidance on parameter selection would improve consistency and defensibility, particularly where species-specific values are available.	Where species-specific parameter values are available from recognized national or scientific sources, require their use for inputs such as wood density, BEF, carbon fraction, and root-to-shoot ratios. Where such values are not available, provide clearly defined conservative defaults or tiered parameter options.	p.3, p.8–10, p.15–16
Risk Buffer	Site-Specific Risk: A flat 15% buffer may be insufficient for high-risk zones.	Set 15% as a minimum floor, but require a risk assessment aligned with international guidelines to determine if a higher rate is needed.	p.4
Localization	The methodology does not clearly specify which Philippine regulatory or technical sources should guide locally sensitive implementation choices. Without clearer reference points, project assumptions on species selection, planting materials, management practice, and related parameters may be applied inconsistently and with weaker host-country alignment.	Clarify that relevant DENR/FMB administrative orders, implementing rules, and technical guidance may serve as recognized host-country references for species selection, planting material quality, plantation management, and other locally sensitive parameters, where applicable.	p.4: Eligibility Criterion 6 says species must be approved by the government of the Philippines. There is not much more explicit host-country technical referencing beyond that.

Baseline	The current approach appears to assume zero baseline removals where historical biomass has not increased. That may be conservative in some cases, but it may not adequately address cases where grassland, shrubland, or abandoned land may experience some business-as-usual regeneration. To align with international standards and ensure project integrity, the JCM draft should consider using approaches e.g. performance benchmark for area-based cases rather than a blanket zero-baseline assumption.	Insert a mandatory baseline calculation step or tab to quantify and subtract plausible business-as-usual sequestration where natural regeneration is possible. At minimum, restrict zero-baseline treatment to narrowly defined land types with demonstrated non-regeneration risk. The methodology may also consider a more dynamic baseline or benchmark-based approach, as reflected in some established international methodologies such as VM0047, where this is appropriate.	p.2, p.4, p.6–7
Crediting Logic	Current structure may still allow over-crediting where natural recovery is already underway: Because the methodology uses a simplified zero-reference-level logic, it may not adequately distinguish project-driven removals from wider landscape recovery trends.	Add a control-plot, matched-area, or benchmark-based option for projects in landscapes where spontaneous regeneration or policy-driven restoration is plausible.	p.7–8, p.15
Additionality	The current draft additionality framework appears to be too thin: The JCM draft relies mainly on eligibility screens such as no biomass increase over the prior 10 years and non-mandatory activity. This is arguably weaker than internationally recognized methods that combine regulatory surplus, investment analysis, common practice, and benchmark tests. The draft methodology should consider strengthening its additionality demonstration requirements to stay consistent with evolving international frameworks	Consider introduceing a more robust additionality framework combining: (1) regulatory surplus, (2) investment or barrier analysis, (3) common practice assessment, and where relevant, (4) a benchmark or control-based demonstration that project performance exceeds business-as-usual biomass trends.	p.4, p.6–7
Uncertainty	Uncertainty is deducted, but issuance consequences are not sufficiently stringent: The JCM draft deducts uncertainty from credited removals, which is positive, but it does not appear to impose a hard threshold beyond which estimates are too uncertain to be creditable.	Retain uncertainty deductions, but add a non-crediting threshold where estimation uncertainty exceeds an acceptable level. Also potentially require minimum confidence/precision standards at both validation and verification to ensure project quality	p.2–3, p.11, p.15
Site preperation	Site preparation rule is not fully operationalized: The methodology prohibits site preparation techniques that cause soil disturbance, but this is still broad and may be interpreted inconsistently.	Clarify allowed and prohibited site preparation practices, define disturbance thresholds, and require documentation of any biomass removal, burning, or soil inversion. Where disturbance occurs, require explicit accounting for affected carbon pools and related emissions.	p.2, p.4, p.7, p.9–10
Leakage	Leakage is recognized but not yet strongly standardized: The draft includes displaced emissions from wood collection, agriculture, and livestock, but relies heavily on “credible estimations or a representative survey.” This is directionally good, but still leaves substantial methodological discretion and could cause confusions at the project implementation stage	Develop a more structured leakage module with separate procedures for agricultural displacement, grazing displacement, wood collection displacement, and any market-mediated effects. Add conservative default factors where empirical destination/activity data are weak.	p.3, p.8, p.13–14