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February 21, 2025

Re: **Call for public inputs on a JCM proposed methodology "Energy Saving by Introduction of High Firewood Efficiency Cookstove to Replace Traditional Cookstove" (Cambodia)**

To Members of the Cambodia-Japan Joint Crediting Mechanism Committee,

CarbonAi is a world-leading developer of large-scale GHG reduction projects and software tools that ensure the integrity of GHG reduction data, support digital measurement, reporting and verification (DMRV) and generate exceptionally high-quality GHG outcomes. CarbonAi has developed a suite of hardware and software tools for the improved measurement and management of GHG reduction data associated with improved cookstove (ICS) projects, including a proprietary stove use meter (SUM), an app for the assignment and verifiable completion of cookstove-related tasks and a digital measurement, reporting and verification (DMRV) platform. These tools ensure that all project data is immutable, transparent and traceable back to the cookstove, thereby ensuring the highest integrity, highest quality emission reduction outcomes.

We are greatly encouraged by the development and release of the JCM proposed methodology, and included a number of comments below that will enhance the robustness of cookstove usage data and ensure high-integrity emission reduction claims. In particular, these suggestions would allow for the greater use of SUMs and DMRV tools to continuously monitor cookstove usage, recording precise, real-time stove usage data, enabling more precise and reliable calculation of energy consumption and emission reductions, and increasing the accuracy, transparency and auditability in emission reduction calculations.

We thank you for the opportunity to provide input on the JCM methodology. We would welcome the opportunity to discuss our feedback directly with the JCM methodology committee.

Sincerely,

Stephen Entwisle
Director, Cookstoves DMRCV
CarbonAi Inc.

COMMENT	FILE	DOCUMENT PART	INPUT ON PAGE	PROPOSED CHANGE
References to other documents are not included	JCM_KH_PM009_PM.pdf	No current reference	Including a section within this document will be beneficial to increase clarity of the external sources and references required to be followed to use this methodology. For example, the supplementary excel file references the CDM Standard for Sampling and Surveys for CDM Project Activities and Programmes of Activities must be applied for collection of data pertaining to several parameters and is not referenced in the guide.	Locate on Page 2 as a new section: This methodology is based on the latest published version of the following supporting standards, tools, and guidelines including: - KPT Protocol - CDM Standard for Sampling and Surveys for CDM Project Activities and Programmes of Activities - CDM TOOL 30 - CDM TOOL 33 - Standard for Water Boiling Test - MOFUSS

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Having different files can create confusion while reading the methodology	JCM_KH_PM009_PM.pdf	No current reference.	To improve clarity and use of all available tools, also reference that the document is not intended to be a stand-alone source. This will ensure that when reviewing the proposed methodology form (PDF), that essential complementary information and guidance provided in other documents are not missed.	Option 1: In page 2 as an introduction include: "This document is not a stand-alone resource, please see: JCM_KH_PM009_MPS.xlsx JCM_KH_PM009_ADD1.pdf for complementary information." Option 2: Include JCM_KH_PM009_MPS: Measurement methods and procedures in JCM_KH_PM009_ADD1.pdf as an appendix.
Not using common industry terminology can be confusing	JCM_KH_PM009_PM.pdf	C. Summary of the methodology: Calculation of reference emission item	The item "Discount factor to account for the potential source of emissions which may occur due to the use of biomass by non-project households/communities" is considered to account for project Leakage. By identifying this term as leakage, it will improve the methodology alignment to other published methodologies, thereby improving the methodology uptake.	Include the term Leakage as part of the summary description for this specific parameter

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Introduce Flexibility Mechanism to select a project specific, reference stove for the baseline	JCM_KH_PM009_PM.pdf	I. Data parameters fixed ex-ante: Weighted average efficiency of reference devices that are replaced by project devices (fraction) **Default value: 0.26**	We propose introducing a flexibility mechanism to provide the project developer with an alternative option to select the reference stove in the baseline. If a project device has an efficiency of 26%, there will be no improvement in efficiency compared to the Reference Stove of the baseline. This will result in limited uptake of the methodology in Improved Cookstove Programs, and reduce the potential impact of the JCM. Restricting the baseline technology to an improved cookstove could limit the methodology's effectiveness in promoting ICS adoption, as some ICS models may not significantly outperform the New Lao Reference Cookstove. Relying solely on the "Reference Cookstove" may be overly conservative, potentially undermining the financial viability of cookstove projects. To address this, we suggest incorporating dMRV solutions that accurately capture the use of the traditional three-stone fire stove.	Additional information: Alternativley use weighted average efficiency of baseline devices (three stone fire) that are replaced by project devices (fraction) Default value: 0.15

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			Field-deployed technologies that incorporate geolocation, photographic evidence, time-stamping and user identification, supported by end-to-end data auditability, can immutably demonstrate the use of the traditional three stone fire stove in the baseline condition. This will allow for precise, accurate and provable calculations of the full amount of GHG emissions reductions generated by the project and uphold conservative emission reduction principles by improved statistical analysis of collected data. While an improved cookstove with a minimum efficiency as the baseline could remain the default Reference Stove when accurate data is unavailable, the three-stone fire stove should remain a baseline choice through the Flexibility mechanism—provided that measurement approaches such as the referenced Water Boiling Test or Kitchen Performance Test are employed for a statistically valid sample of stoves.	

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			Fully integrated, end-to-end data from the reference and project cookstove, through data ingestion proved by geolocation, time-stamping, user ID and photographic evidence, uploaded automatically to a transparent DMRV platform allows all stakeholders to audit and verify that claimed emissions reductions are real, accurately calculated and verifiable.	
Introduce Stove Use Monitors (SUMs)	JCM_KH_PM009_MPS	TAB: PMS(input), Table 1 Cell I9: Measurement methods and procedures Monitoring Point (3). Proportion of commissioned projects	Including SUMs as a third option in Table 1. The SUMs measurement technology used to determine the proportion of commissioned project devices in active use over a set period, improves accuracy and reduces uncertainty when compared to a survey approach.	Include Option C in Table 1 Measurement methods and Procedures with the following description: "Directly measured using stove use monitors (SUMs) in a sample of users, following the latest version of the CDM Standard for Sampling and Surveys for Project Activities and Programmes of Activities, while achieving a 90/10 confidence precision for the proportion of devices in operation. SUMs will

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				confirm the proportion of stove usage.”
Editorial clarity with respect to Monitoring option (C)	JCM_KH_PM009_MPS	TAB: PMS (input) Table 1 Column label (f) Monitoring option	It is not clear what monitoring option (C) is refering to in Column (f), readers need to scroll to bottom of tab to find the information, no clear guidance is provided on whether these options are ranked in preference, e.g. if Option C is unavailable, can project develeopers use Option B?	Include Table 1 "*ex post parameters to be monitored*" as Section G in the file: JCM_KH_PM009_PM.pdf with appropriate description of monitoring options introduced at the beginning of the section