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## the latest ICVCM CCP Labelling Decision for Assessed Household Biodigester and Cook Stoves Methodologies

Beijing, Munich April 11, 2025

In early March, the Integrity Council for the Voluntary Carbon Market ([ICVCM](#)) has published its decisions about Core Carbon Principle (CCP) labelling of the most commonly used household biodigester and cookstoves methodologies. For a comprehensive summary of their assessment work at programme and project methodology level please see [here](#).

In the **category of household biodigester** four methodologies have been assessed with the following results:

1. Gold Standard - AMS-I.I. - Biogas/biomass thermal applications for households/small users, Versions 1-6, Rejected
2. Gold Standard - Methodology for Animal Manure Management and Biogas Use for Thermal Energy Generation, Version 1.-1.1, CCP-Approved
3. Gold Standard - AMS-I.E. - Switch from non-renewable biomass for thermal applications by the user, Versions 1 – 13, Rejected
4. Verra - AMS-I.E. - Switch from non-renewable biomass for thermal applications by the user Versions 1 – 13, Rejected

In the **category of efficient cookstoves** these five methodologies have been rated:

1. Gold Standard - Methodology for Metered & Measured Energy Cooking Devices, Versions 1 – 2, CCP-Approved
2. Gold Standard - The Gold Standard Simplified Methodology for Clean and Efficient Cookstoves, Versions 1 – 3, Rejected
3. Gold Standard - AMS-II.G. - Energy efficiency measures in thermal applications of non-renewable biomass, Versions 1-13.1, Rejected
4. Gold Standard “TPDDTEC” - Reduced Emissions from Cooking and Heating – Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 4.0, CCP-Approved
5. Verra (VCS), VM0050 - Energy Efficiency and Fuel-Switch Measures in Cookstoves, Version 1.0, CCP-Approved.

However, any approvals are subject to the methodologies meeting **ICVCM’s stricter quantification requirements**. These determine that

1. the fraction of Non-Renewable Biomass (fNRB) be calculated using the [MoFuSS model](#) (A GIS tool developed to quantify non-renewable fuelwood extraction) or the default Clean Development Mechanism 0.30 value (until 2025; after this date, projects must transition to MoFuSS). Under the new requirement, the average fNRB of CCP-eligible credits will likely be lower than 0.50. Previously, many projects used values of 0.90+, so this shift reduces the projected carbon credit supply considerably.
2. Monitoring must be conducted using Kitchen Performance Tests (KPTs), which simply means direct measurement of fuel use. It replaces older survey-based monitoring methods.

According to UPM research, 228 household-based Gold Standard projects apply CCP-approved methodologies. Thereof, 74 GS projects have been registered and 33 GS projects are already issuing carbon credits. Whereas under VCS only three projects apply CCP-approved methodology VM0050 but all of these are still under development and have not been registered or have had any issuances.

In theory, those household biodigester and cook stoves projects with CCP-approved methodologies could generate a large multi-million carbon credit stream. Yet in practice, as a result of the ICVCM decisions, none of these projects currently qualifies for CCP eligibility because of the rigid ICVCM quantification requirements.

After summarizing the basic facts of the latest ICVCM CCP labelling decisions, UPM would like to comment these in more detail to provide carbon market stakeholders with some more orientation and context.

### **Lack of guidance for carbon market participants about how to make use of the ICVCM CCP decisions**

UPM does fully endorse all efforts to increase the quality and integrity of climate action projects because this will help raising the necessary funds for stabilizing the climate, promoting sustainable development and improving the lives of the most vulnerable people and communities. To this end, we do also support the ICVCM's assessment of carbon crediting programs and methodologies and remain firmly committed to developing projects that meet these new quality requirements.

However, we miss a more precise and comprehensive assessment of the possible consequences of the ICVCM CCP decisions beyond the technical assessment work and would have liked more guidance by governance body ICVCM on how carbon market participants should best make use of ICVCMs assessments and what impact these decisions could have on carbon markets. For this reason, we think that is essential to take a deeper look into the details of the recent ICVCM CCP labelling decisions and put these into a wider perspective to avoid misinterpretations and overreactions that might do more harm than good.

### **Concerns about hasty bulk rejections of all projects without CCP-approved methodologies**

UPM's problem is less with the ICVCM CCP labelling decisions as such, which are mostly plausible and comprehensible to us, but rather with the likely reactions of many carbon market participants, as well as the media and the public to these. Our main concern from a project development practitioner's and carbon credit seller's point of view is that many carbon market participants, especially some end-user buyers and intermediaries with a lower level of technical project expertise, do instantly reject all carbon credits from projects without CCP-approved methodologies in an attempt to reduce perceived costs and reputational risks and do instead just accept those from projects with CCP-approved methodologies.

While in most cases there will be good intentions behind such foreseeable hasty response, e. g. ensuring real climate change mitigation impact, UPM believes that such generalized mass rejections of projects would be short-sighted and could have many highly problematic consequences.

### **Risk of unjustified banning of premium-quality projects with top-tier ratings**

If, for instance, all household biodigester projects not using the only CCP-approved “Gold Standard - Methodology for Animal Manure Management and Biogas Use for Thermal Energy Generation” are banned without prior notice and without making a project-specific assessment, some top-tier high-integrity projects with verifiable climate and SDG impact will be banned as well, even if they have received very positive ratings from leading rating agencies, such as BeZero, Calyx Global or Sylvera, for good reasons.

We will demonstrate this for the specific case of UPM and its Sichuan Household Biogas PoA which has distributed proven biogas digesters and convenient biogas cookstoves at the premises of nearly 400,000 low-income rural households in China’s Sichuan province.

### **The case of UPM’s Sichuan Rural Poor-Household Biogas Development Programme in China (CDM PoA 2898, GS 1239)**

Since vintage 2015, our PoA uses a combination of the following two methodologies under CDM and Gold Standard (GS):

- AMS-III.R. ver. 3 - Methane recovery in agricultural activities at household/small farm level for calculating GHG emissions savings from avoided CH<sub>4</sub> emissions due to animal manure treatment in biogas digesters distributed by the PoA and
- AMS-I.I. ver. 4 - Biogas/biomass thermal applications for households/small users for calculating GHG emissions savings from avoided CO<sub>2</sub> emissions due the fuel switch from coal to biogas.

AMS III.R. has not been assessed by ICVCM, so its use for household biodigester projects should still be fine, whereas AMS-I.I. has been rejected mainly due to over-crediting concerns related to inadequately high fNRB values related to claimed avoidance of biomass use.

### **The Sichuan Household Biogas PoA has always applied a very conservative approach to calculating GHG emissions reductions**

What is very important in this context is the fact that UPM’s Sichuan Household Biogas PoA is applying a very prudent approach for calculating CO<sub>2</sub> emissions savings under AMS-I.I. from the start. In contrast to many other household biogas programmes, UPM’s PoA does only focus on avoided coal use of participating smallholder households, while not considering avoided biomass consumption at all because this would have been very difficult to measure in an exact and reliable manner.

This conservative GHG emissions reductions calculation approach is also one of the main reasons why Calyx Global has given this PoA a tier 1 rating for GHG mitigation performance among just a few out of more than 200 household biogas and cook stoves projects rated so far. And that’s why the controversial debate about exaggerated fNRB values and related over-crediting concerns does not apply to UPM’s PoA.

For more details about this PoA’s Calyx Global rating, please refer to UPM’s recent news release.

### **A spontaneous blanket rejection of this premium-quality PoA and its GS VERs would be an unfair discrimination**

In our view, it would therefore be an unfair discrimination, if prospective carbon credit buyers rejected this PoA's high-integrity GS VERs just because AMS I.I. has not been CCP-approved, while completely disregarding its efforts to mitigate over-crediting risks plus the fact that its other methodology, AMS III R, has not even been assessed by ICVCM.

Such expectable blanket rejection becomes even more incomprehensible considering that this PoA has received much less carbon credits per supported household throughout its entire crediting period than other household biogas projects without such a robust approach. Not to forget that it has been verified under CDM and GS year by year by independent accredited Validation and Verification Bodies (VVBs) without complaints and has meanwhile received its 12<sup>th</sup> issuance.

We hope that interested parties acknowledge the specific case of UPM's Sichuan Household Biogas PoA and understand why a CCP non-approval of one digester methodology used does not necessarily mean that this project is of low quality and integrity.

There is definitely quality to be found in the market beyond CCP approvals. Thus, projects without CCP-approved methodologies should not be placed under general suspicion automatically and should also be given the opportunity to do the necessary adjustments, as far as possible.

### **In-depth due diligences of individual projects and direct exchange with project developers still needed**

For these reasons, we recommend that carbon market participants should take the ICVCM CCP decisions at programme and methodology level primarily as an indicative guidance for selecting high-end climate action projects and carbon credits, but they should still carry through in-depth due diligences of individual projects even if this is time-consuming and costly. Each project is different, even if they use the same methodology and are belonging to the same project type. A well-founded project due diligence can identify these differentiating factors and explain their effects on a project's performance and risks. The due diligences should be done in close exchange with project developers. Then, these would no longer be faced with a *fait accompli* (as is so often the case) but would be given the opportunity to share essential insights and background on their projects plus their most useful practitioner views on relevant market developments and their implications.

### **A distinction between existing and new projects is indispensable**

In this context, market participants should also distinguish between existing and new projects. Existing projects usually have been started many years ago still under the Kyoto Protocol (KP) and its Clean Development Mechanism (CDM) using those methodologies which have been state-of-the-art at that time. Some of these projects are now near the end of their crediting periods and it will neither be possible nor worth doing any major methodological adjustments with related MRV changes based on today's best practices to obtain CCP approval. For them it would be very hard to adapt to retroactive post-verification changes of methodological standards and rules. This especially applies for the ICVCM's prescribed use of more precise quantification methods for fuel use. The subsequent installation of complex measuring devices and the necessary trainings of households entail considerable additional costs, which can put at risk the financial viability of projects.

Whereas, for new projects, still in their early stages, it will probably be much easier to use CCP-approved methodologies from the start or switch to these soon. These might also be able to monitor GHG emission reductions using Kitchen Performance Tests and install the newly required devices for direct measurement of fuel use at the premises of supported households. Certainly, UPM would also develop potential new household-based projects according to the latest methodological guidelines of the ICVCM.

### **A more reasonable and realistic market response to CCP decisions prevents major setbacks for climate protection and sustainable development**

However, in case this more thoughtful market response to ICVCM's CCP decisions does not happen, both the climate and carbon markets could be severely damaged because many project developers will not be able to refinance their existing projects as planned. Consequently, a lot of their projects will become stranded assets, no (or not enough) financial reserves can be built up, trust in carbon markets gets lost, and affected project developers and investors might shy away from developing or funding new projects, although these are urgently needed for meeting Paris Agreement objectives and achieving sustainable development.

### **Carbon credits from existing projects without CCP-approved methodologies will still be needed for a certain transitioning period**

It should also be noted that, up to now, no CCP-approved carbon credits from household biodigester and cook stove projects have been issued yet. This means that the supply with CCP-approved carbon credits will be far too low for meeting the demand of the VCM, CORSIA and other target markets for several years.

According to carbon market solution provider [Abatable](#), up to 2.35 MtCO<sub>2</sub>e of CCP-eligible cookstove credits could be generated. This is just 1.9% of historical issuances for this project type and far away from those volumes needed alone to supply CORSIA. However, meeting CCP standards requires stricter quantification from cookstove developers and more effort, meaning supply could shrink even further and the costs for procuring high-integrity household biogas and cookstove credits will most likely increase considerably. Across other project types, Abatable has observed that CCP-compliant credits are fetching premiums of up to \$10/t.

All these data clearly show that, provided substantiated over-crediting problems are addressed, carbon credits from existing projects without CCP approved methodologies will still be needed for a certain transitioning period to ensure sufficient carbon market supply at affordable prices until a new generation of CCP-labelled credits from different project types will be available in sufficient quantity.

### **Governance bodies like the ICVCM must put more emphasis on their responsibility for functioning carbon markets beyond just providing the regulatory framework**

If the ICVCM's objective is to strengthen carbon markets, and the voluntary carbon market in particular, it should not just restrict its mandate to providing the regulatory framework and publishing new quality requirements for projects. The ICVCM also has a responsibility to find pragmatic solutions in coordination with the leading certification standards, project developers and carbon credit buyers to ensure that existing projects without CCP-approved methodologies are not completely devalued, buyers are not cut off from affordable carbon credit supply and that the most relevant carbon markets

can continue to fulfill their crucial role in climate protection and sustainable development both during the necessary transition phase of approx. 3-5 years and beyond.

Unnecessary carbon market frictions, like those we are experiencing for many years now during the bumpy transition from the CDM of the KP era to the Art. 6.4 mechanism under the Paris Agreement, should not be repeated for the case of CCP-eligibility. Well-intentioned regulatory provisions for certain carbon credit qualities and their feasibility under real market conditions should no longer be so far apart, unless suitable transitional rules and procedures are agreed. This advice applies equally to the quality criteria of host country corresponding adjustments for vintage 2021+ carbon credits and of CCP-approved carbon credits alike.

### **Some suggestions for transitional ICVCM measures**

Such transitional ICVCM measures for addressing potential over-crediting risks of affected household biogas and cook stoves projects and for supporting carbon markets could include for example;

- giving project developers sufficient time to meet the new requirements by adjusting fNRB parameters and installing robust fuel use quantification methods and measuring devices for the next monitoring periods (eventually just for a representative sample of project households),
- agreeing with the relevant certification standards and affected project developers on reasonable cuts of carbon credit issuance volumes as from vintage 2026 onwards (not retroactively) in case necessary adjustments are not possible,
- providing carbon credit buyers and the media with the missing guidance on how to make use of ICVCM CCP labelling decisions without jeopardizing their own climate change mitigation activities and the functionality of the carbon markets by counterproductive overreactions.

So far UPM's position on this topic. We hope you enjoyed the read and found this statement useful. UPM would be pleased to learn about your views, and we will gladly be available for further discussion.

In case of interest, please contact us at [info@upm-cdm.eu](mailto:info@upm-cdm.eu)

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