

Date: 03rd February 2019

Dear CDM Team (UNFCCC Secretariat),

e-mail: CDMRegistration@unfccc.int

Reference: Request for review for request for issuance of the PoA 5341: Improved Cooking Stoves Programme of Activities in Africa– Issuance request

Carbon Check (India) Private Ltd., (CC IPL) acknowledges the issues raised by UNFCCC in reference to the Request for review for request for issuance of the PoA 5341: Improved Cooking Stoves Programme of Activities in Africa– Issuance request 5341-MP4-IRP1.

As part of our response, Monitoring Report, Emission Reduction spreadsheet and the Verification Report have been appropriately revised and are being resubmitted.

Issue raised during Request for Review		
<p>1. As per paragraph 120 (b) the PS-PoA (version 01.0), the eligibility criteria shall cover conditions to avoid double counting, such as unique identifications of product and end-user locations. Page 24 of the PoA-DD also requires recording of name/identification of end user. However, as per the CAR ID 05, the stove database (i.e. worksheet "CPA Distribution data" in file "Kenya MP#4 ER calculator version 2.0 31072018") does not list the actual end users. The database shall contain identification of end-user otherwise it would not be possible to, inter alia:</p> <ul style="list-style-type: none">(i) identify the source of the emission reduction as it is not clear whether the stoves remain under the CPA or PoA boundary;(ii) check whether a particular household has more than one cook stoves, as the baseline stove fuel consumption was ex-ante fixed based on household fuel consumption and assuming that there is only one stove in each household; and(iii) draw proper samples since the location of the stove (at end user) remains unclear.		
With the above observation, the DOE is requested to explain how it has verified:		
Issue raised during Request for Review	CME Response	DOE Assessment
(a) The implementation of the PoA, in particular the management system, in line with the revised and approved PoA-DD in regard to the database not recording name/identification of end user and correctness of the database. It is noted that the CME's sampling	a) The CME wishes to clarify that it has implemented the PoA as per the PoA Operational and management plan specified in the PoA-DD (page 23 onwards). The CME collects end user information for ICS distributed via local distribution partners at the time of sale (CPA distribution record). A CPA distribution record, is generated only when a physical ICS sale takes place, and gets listed in the CPA distribution database.	The verification team confirms the implementation of the PoA, in line with the management system stated in the approved revised PoA-DD. This is based on the fact, that for the cases where multiple stoves were sold to one owner (with actual

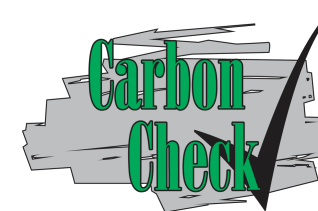
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<p>revealed that six households own another ICS. However, it is observed that according to the worksheet "CPA Distribution data", the other ICS found in four of these six sampled households are listed under different user. As an example, in sampled household with ICS serial number EM1K041235 (under customer name ALICE WANJIRU in city NAKURU), the other ICS found in the household has serial number of EK1L029650. However, according to the worksheet "CPA Distribution data", ICS with serial number EK1L029650 is registered under user name FAITH M.MBONE in city NKUBU.</p>	<p>However, in some cases, the ICS sales have been made to owners / buyers of the ICS (for example, local representatives - village head, Donor Organization / sponsored program Institution, landlords in case of rented living / slum developments, association / group representative, relatives etc. as referred in response to CAR 05 of the verification report) who subsequently distributed the ICS to the intended actual end user.</p> <p>For all cases (including multiples ICS listed on the same name and address in the database), each ICS unit can be uniquely tracked in the field through the ICS's unique serial number (product identification punched on the ICS) and by contacting the corresponding owner for actual end user detail. The owners/ buyers possess information and data of corresponding actual end users. Thus, the CME confirms that it is possible to identify the actual end user address in the field, as and when required. CME commits to further improve the CPA distribution database to also record actual end user information for all ICS with owners / buyers, which shall be verified during next periodic verification.</p> <p>Presence of multiple ICS in a household is confirmed ex-post <u>to ensure only one ICS is credited per household</u> (refer column 'O' and 'P' in Monitoring Survey Summary). At the time of monitoring visit, the presence of any additional ICS in a household is recorded in the monitoring survey forms and accordingly reported in the ER spread sheet. Subsequently, based on monitoring results, the ICS population is proportionally adjusted (based on % samples reporting use of multiple ICS), for the purpose of ER calculations. Thus, the monitoring surveys conducted captures any multi use cases.</p> <p>Out of total 221 samples randomly monitored from database, 6 samples were found using more than 1 ICS during the monitoring survey visits. Thus, an equivalent adjustment to the ICS population was made, considering all the above 6 samples as multi ICS users. A discount of</p>	<p>end user data not recorded in the presented data base), it is possible to uniquely identify and locate the end user in the field through the unique serial number punched on each stove and through contacting the corresponding stove owner listed in database. This was further confirmed by the verification team during the on-site visit interviews with the CPA implementers and sample stove owners (with multiple stoves listed in the database).</p> <p>The verification team confirms that the CME has captured and reported the usage of multiple stoves in a household at the time of monitoring in the survey forms and the ER spread sheet., CME had discounted the ICS population by the % of samples found reporting more than one ICS in the earlier submission. However, in the revised submission against UNFCCC review comments, CME has further discounted proportionately, for all such cases where multiple stoves were found during monitoring survey (i.e. for all the stoves reported in such households). This approach was deemed appropriate by the</p>
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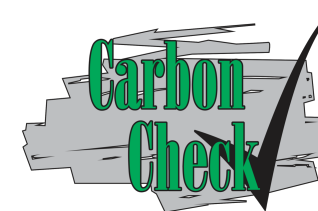
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	<p>1.65% i.e. 2 out of 121 charcoal samples monitored (equivalent to 593 ICS out of 35,867 in three CPAs combined) was applied for charcoal stoves and 4.00% i.e. 4 out of 100 woodfuel samples monitored (equivalent to 1,223 ICS out of 30,579 in three CPAs combined) was applied for woodfuel stoves in the ER calculations (refer tab "MP#4 ER Calculations, B37:E38) submitted previously.</p> <p>However, as pointed out in the UNFCCC review findings, for 4 of the aforesaid 6 samples, the second ICS is listed on a different name and location in the database. This can happen in some rare cases for eg: users gifting stoves to their relatives / acquaintances after purchase, or after using it for some period. However, the CME accepts that it missed the fact that additional ICS in these 4 samples were listed on a different name in the database and the additional ICS in these 4 households were accounted in the ER calculations. As a further conservative corrective action, the CME has now doubled the discount applied against multi-use samples (all 6). Please refer tab "MP#4 ER Calculations, B37:E38, where a factor of 2 has now been applied (i.e. 1- <u>2</u> * COUNTIFS ('Monitoring Survey ' ! \$F\$4 : \$F\$224, " charcoal ".....)). This ensures that the entire population gets adjusted proportionately, firstly against multi-use scenario (based on 6 samples) and secondly against the additional ICS found, being listed on a different name and location in the database (conservatively for all 6 samples).</p> <p>Further, as highlighted in the review findings, the baseline stove fuel consumption fixed ex-ante, assumes that there is only one ICS in each household whereas the database lists more than one cook stove for particular households. Out of total 221 samples monitored, for 12 samples database lists multiple ICSs on a given name and address. However, only 1 out these 12 samples was found using multiple ICS (i.e. Catherine Mukami). Although the other 11 samples were found using only one ICS, as an additional conservative measure, the PP has decided to further discount (from ER calculations) all multiple ICS listed</p>	<p>verification team as it conservatively covers for any shift of ICS from one house to another within the database.</p> <p>Further, the verification team assessed the validity of ex-ante assumption (only one ICS in each household) during the on-site visit. As part of acceptance sampling, the verification team visited 22 random samples from the CME's 221 samples. These 22 samples included two samples out of the CME's 12 samples having multiple ICSs listed on their name in the database. The verification team confirmed that for Catherine Mukami two stoves were being used in her household and for Rachael Nyanmbura only one ICS being used in her household. Accordingly CME had rightly discounted the ICS population (N_{all}) proportionately.</p> <p>However, in order to further ensure that emission reductions are claimed</p> <ul style="list-style-type: none"> • Only for ICS with end user details in the CPA distribution data, and; • Only one ICS unit per
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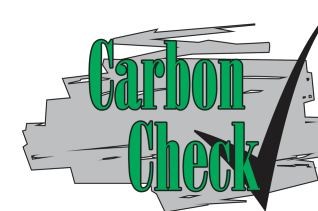
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	<p>on a given name and address from the CPA distribution database. Please refer the CPA distribution data (Column F “Multiple ICS Check”, tab “CPA Distribution Data”) of the revised ER calculator. For all multiple ICS cases, as perceived, the Stove_{year} fraction has been considered as zero ensuring that no CERs are accounted.</p> <p>This ensures that the CERs are being claimed,</p> <ul style="list-style-type: none"> • Only for ICS with end user details in the CPA distribution data, and; • Only one ICS unit per household <p>As a result of aforesaid, the ERs have reduced to 99,963 from 127,811 (~22% reduction due to</p> <ol style="list-style-type: none"> a) discarding 12,341 ICS from ER calculations out of total 66,446 ICS in the CPA distribution database, and; b) applying double discount to ICS population based on 6 samples found using 2 stoves in their household). <p>The revised MR and ER calculator are being submitted.</p>	<p>household</p> <p>the CME is now claiming emission reductions for only those stoves for which actual end user data has been presented in the CPA database. The CME has discounted CERs for all cases with multiple stoves listed on same name and address in database. The verification team has checked the revised ER calculator and confirms that such cases has been aptly discounted from ER calculations. Revised MR, ER spread sheet and Verification Report being submitted in this respect.</p> <p>Furthermore, a FAR is being raised in this respect, for the CME, to present the data base including all the end users in the next verification and for all cases where multiple ICS are found being used in a household during monitoring, the CME shall check consistency of information with CPA database and adjust ICS population accordingly (Please refer to the revised Verification Report).</p>
(b) The emission reduction calculation, in particular the correct determination of number of stoves as the database does not record the information of the end	The CME manages ICS distribution in Kenya via CPA Implementors / Distributing Organization (Envirofit Kenya). The DO is mandated to distribute ICS in Kenya only (i.e. the CPA boundary) thus ensuring that any ICS sold under the CPAs remains within the CPA boundary.	The verification team confirms that the stoves are distributed within the boundary of the CPAs. This was confirmed by the verification team

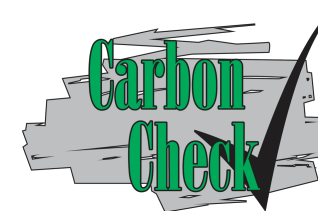
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<p>user, hence raising concern on whether all stoves claimed under the emission reductions have been distributed to end users under the CPA or PoA boundary.</p>	<p>Although some of the CPA distribution records do not mention the actual end user name, the ICS sale within the CPA boundary is still confirmed as the buyer / owner address is also within the CPA boundary.</p> <p>Further, the correction applied in (a) above ensures that only ICS with end user details in the database and thus present within the CPA boundary are accounted for CER calculations.</p>	<p>during the on-site visit interviews with the CPA implementers and also the stove users/ owners who confirmed having distributed the stoves within the country. However, in order to further ensure that emission reductions are claimed</p> <ul style="list-style-type: none"> • Only for ICS with end user details in the CPA distribution data, and; • Only one ICS unit per household <p>the CME is now claiming emission reductions for only those stoves for which actual end user data has been presented in the CPA database as verified in (a) above.</p>
<p>(c) The sampling conducted by the CME, with regard to whether the selected samples were representative of the population, as it is not clear how the samples were drawn (i.e. whether from the "CPA Distribution Data" which does not list actual end users, or from other data).</p> <p>Please refer to paragraphs 340 and 358 (a) of VVS-PoA (version 01.0), paragraph 24 (b) of Standard for Sampling and surveys (version 07.0)".</p>	<p>As explained in the response (a) above, CME can trace the end user in the field, as required, for each ICS listed in the database (including those enlisted under same name and address in the database), through the ICS's unique serial number and by contacting the corresponding owner.</p> <p>The CME wishes to clarify that samples were drawn from the entire population under the CPAs for monitoring purposes. Random numbers were generated online covering entire population in each category (fuel type). For woodfuel ICSs, 130 random numbers were generated online selecting a range of 1 to 30579 (total number of woodfuel ICS in the CPAs). For charcoal ICSs, 150 random numbers were generated online selecting a range of 1 to 35867 (total number of charcoal ICS in CPAs). Thus, each ICS in the population was given equal chance of being selected. This is also substantiated by the fact that the 221 samples</p>	<p>It is confirmed by the verification team that the CME had selected the samples from the whole population of the ICS distributed, i.e. 30,579 for woodfuel stoves and 35,867 charcoal stoves. The Verification team had verified the evidence for the random generator in this respect covering the entire population which has also been listed in the verification report Appendix 3 /14/.</p> <p>The random numbers were</p>

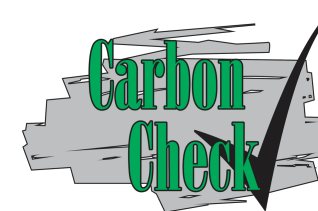
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	<p>monitored, also includes 12 samples having more than 1 ICS are listed on the corresponding name and address in the CPA database.</p> <p>Since the random samples generated for the monitoring survey were selected from the entire population of ICS under the CPAs, the selected samples are representative of the population.</p>	<p>generated online via Stat Trek random number generator on 17th January 2018 which is before the date of start of monitoring by CME.</p> <p>Further the range of random numbers specified, in the evidence provided (minimum value of 1 and maximum value of 30579 for woodfuel stoves and minimum value of 1 and maximum value of 35867 for charcoal stoves) confirms the consideration of entire population for sampling. For the woodfuel stoves, out of 130 random numbers generated, the least value was verified to be 7 and highest value was verified to be 30,559 and for charcoal stoves out of 150 random numbers generated, the least value was verified to be 2 and highest value was verified to be 34,896 thus confirming the random numbers to be scattered over entire population.</p> <p>Further the 221 samples monitored, include 12 samples with more than 1 ICS listed on the given name and address in the database confirming that multi-stove scenario was covered under sampling. Hence the verification team concludes, the</p>
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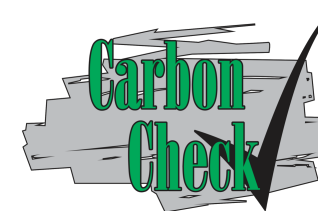
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		sampling approach adopted by CME to be appropriate and the identified samples as representative of the whole population.
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We believe that the above response and revised documents adequately address the issues raised during the Request for Review.

In case of any further query, the undersigned shall be responsible for answering and can be reached via the contact details provided below.

Kind regards

(Amit Anand)
Chief Executive Officer

Reference documents attached:

1. Revised MR in Track Change (5341_MP#4 MR version 4.0 02022019 track change)
2. Revised MR in Clean (5341_MP#4 MR version 4.0 02022019 clean)
3. Revised ER Sheet (Kenya MP#4 ER calculator version 3.0 02022019 FINAL)
4. Revised FVR in Track Change (CC IPL 612_FVR_Review response_track change)
5. Revised FVR in Clean (CC IPL 612_FVR_Review response_clean)

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