



**Validation report form for post-registration changes for
component project activities
(Version 02.0)**


Complete this form in accordance with the instructions attached at the end of this form.

BASIC INFORMATION

**Title and UNFCCC reference number of the
component project activity (CPA)**

1. 9265-P1-0002-CP1: Top Third Ventures Stove Programme CPA KE0002 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
2. 9265-P1-0003-CP1: Top Third Ventures Stove Programme CPA KE0003 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
3. 9265-P1-0004-CP1: Top Third Ventures Stove Programme CPA KE0004 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
4. 9265-P1-0005-CP1: Top Third Ventures Stove Programme CPA KE0005 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
5. 9265-P1-0006-CP1: Top Third Ventures Stove Programme CPA KE0006 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
6. 9265-P1-0007-CP1: Top Third Ventures Stove Programme CPA KE0007 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
7. 9265-P1-0008-CP1: Top Third Ventures Stove Programme CPA KE0008 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
8. 9265-P1-0011-CP1: Top Third Ventures Stove Programme CPA KE0011 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
9. 9265-P1-0012-CP1: Top Third Ventures Stove Programme CPA KE0012 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
10. 9265-P1-0013-CP1: Top Third Ventures Stove Programme CPA KE0013 – BURN Efficient Cookstoves for Kenya
11. 9265-P1-0014-CP1: Top Third Ventures Stove Programme CPA KE0014 – BURN Efficient Cookstoves for Kenya
12. 9265-P1-0015-CP1: Top Third Ventures Stove Programme CPA KE0015 – BURN Efficient Cookstoves for Kenya
13. 9265-P1-0016-CP1: Top Third Ventures Stove Programme CPA KE0016 – Top Third Ventures Stove Programme CPA KE0016 – BURN Efficient Cookstoves for Kenya
14. 9265-P1-0017-CP1: Top Third Ventures Stove Programme CPA KE0017 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea

	15. 9265-P1-0018-CP1: Top Third Ventures Stove Programme CPA KE0018 – BURN Efficient Cookstoves for Kenya
Version number of the validation report	024
Completion date of the validation report	17/08/2020
Version number of PoA-DD and CPA-DD applicable to this validation report	<p>PoA DD: Version 1.4, 24/09/2019</p> <p>CPA DDs:</p> <ol style="list-style-type: none"> 1. 9265-P1-0002-CP1: Top Third Ventures Stove Programme CPA KE0002 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 3.2, dated 09/06/2020 2. 9265-P1-0003-CP1: Top Third Ventures Stove Programme CPA KE0003 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 3.2, dated 09/06/2020 3. 9265-P1-0004-CP1: Top Third Ventures Stove Programme CPA KE0004 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 3.2, dated 09/06/2020 4. 9265-P1-0005-CP1: Top Third Ventures Stove Programme CPA KE0005 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 3.2, dated 09/06/2020 5. 9265-P1-0006-CP1: Top Third Ventures Stove Programme CPA KE0006 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 3.2, dated 09/06/2020 6. 9265-P1-0007-CP1: Top Third Ventures Stove Programme CPA KE0007 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 1.1, dated 09/06/2020 7. 9265-P1-0008-CP1: Top Third Ventures Stove Programme CPA KE0008 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 1.1, dated 09/06/2020 8. 9265-P1-0011-CP1: Top Third Ventures Stove Programme CPA KE0011 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 1.1, dated 09/06/2020 9. 9265-P1-0012-CP1: Top Third Ventures Stove Programme CPA KE0012 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 1.1, dated 09/06/2020 10. 9265-P1-0013-CP1: Top Third Ventures Stove Programme CPA KE0013 – BURN Efficient Cookstoves for Kenya, version 1.1, dated 09/06/2020 11. 9265-P1-0014-CP1: Top Third Ventures Stove Programme CPA KE0014 – BURN Efficient Cookstoves for Kenya, version 1.1, dated 09/06/2020 12. 9265-P1-0015-CP1: Top Third Ventures Stove Programme CPA KE0015 – BURN Efficient

	<p>Cookstoves for Kenya, version 1.1, dated 09/06/2020</p> <p>13. 9265-P1-0016-CP1: Top Third Ventures Stove Programme CPA KE0016 – Top Third Ventures Stove Programme CPA KE0016 – BURN Efficient Cookstoves for Kenya, version 1.1, dated 09/06/2020</p> <p>14. 9265-P1-0017-CP1: Top Third Ventures Stove Programme CPA KE0017 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea, version 1.1, dated 09/06/2020</p> <p>15. 9265-P1-0018-CP1: Top Third Ventures Stove Programme CPA KE0018 – BURN Efficient Cookstoves for Kenya, version 1.1, dated 09/06/2020</p>
Title and UNFCCC ref. no. of the registered PoA into which the CPA is included	<p>Top Third Ventures Stove Programme</p> <p>PoA Reference number: 9265</p>
Type(s) of CPA PRCs	<p><input type="checkbox"/> Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents</p> <p><input checked="" type="checkbox"/> Corrections</p> <p><input type="checkbox"/> Changes to the start date of the crediting period</p> <p><input type="checkbox"/> Inclusion of monitoring plan</p> <p><input type="checkbox"/> Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents</p> <p><input type="checkbox"/> Changes to the project design</p> <p><input type="checkbox"/> Changes specific to afforestation and reforestation activities</p>
Coordinating/managing entity (CME)	BURN Manufacturing Co.
Host Parties	Kenya
Applied methodologies and standardized baselines	AMS-II.G “Energy efficiency measures in thermal applications of non-renewable biomass”, version 4.0
Mandatory sectoral scopes	Sectoral scope 3: Energy demand
Conditional sectoral scopes, if applicable	N/A
Name and UNFCCC reference number of the DOE	E-0052: Carbon Check (India) Private Ltd.
Name, position and signature of the approver of the validation report	 Amit Anand, CEO

SECTION A. Executive summary

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The Coordinating/Managing Entity (CME) has appointed Carbon Check (India) Private Ltd. (CC IPL), to perform the validation of the Post Registration Changes to the following included CPAs /B02/ in the registered PoA “Top Third Ventures Stove Programme” (hereafter “PoA”) /B02/:

1. 9265-P1-0002-CP1: Top Third Ventures Stove Programme CPA KE0002 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
2. 9265-P1-0003-CP1: Top Third Ventures Stove Programme CPA KE0003 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
3. 9265-P1-0004-CP1: Top Third Ventures Stove Programme CPA KE0004 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
4. 9265-P1-0005-CP1: Top Third Ventures Stove Programme CPA KE0005 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
5. 9265-P1-0006-CP1: Top Third Ventures Stove Programme CPA KE0006 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
6. 9265-P1-0007-CP1: Top Third Ventures Stove Programme CPA KE0007 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
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8. 9265-P1-0011-CP1: Top Third Ventures Stove Programme CPA KE0011 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
9. 9265-P1-0012-CP1: Top Third Ventures Stove Programme CPA KE0012 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
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13. 9265-P1-0016-CP1: Top Third Ventures Stove Programme CPA KE0016 – Top Third Ventures Stove Programme CPA KE0016 – BURN Efficient Cookstoves for Kenya
14. 9265-P1-0017-CP1: Top Third Ventures Stove Programme CPA KE0017 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
15. 9265-P1-0018-CP1: Top Third Ventures Stove Programme CPA KE0018 – BURN Efficient Cookstoves for Kenya

The term “UNFCCC criteria” refers to Article 12 of the Kyoto Protocol, the CDM modalities and procedures and the subsequent decisions by the CDM Executive Board. The independent Validation by the DOE is required to confirm the post registration changes of the CPAs. This report summarises the post registration changes of the project with respect to requirements of CDM VVS for PoAs

(version 02.0) /B01/. This report contains the findings and resolutions from the validation and a validation opinion.

The main objective of the PoA is distribution of fuel-efficient improved cook stoves (ICS) in Kenya. The ICS will include distribution, replacement/repair, and monitoring of the efficient cooking technologies. The purpose of the CPA is to achieve widespread distribution and effective use of efficient cooking technologies in low-income rural/urban households.

Scope:

The scope of the PRC validation is defined as an independent and objective review of the revised CPA-DDs /01/ which include corrections in the CPA-DDs /B02/.

Validation methodology and process

The validation has been performed as described in the CDM VVS for PoAs (version 02.0) /B01/ and constitutes the following steps:

- Review of the included CPA-DDs /B02/;
- Review of the proposed revised CPA-DDs /01/ and corresponding emission reduction spread sheets /02/
- Desk review of relevant documents;
- Interview with representatives of the CME.

Conclusion

This report is the assessment opinion of the proposed PRC in the CPA-DDs /B02/. The proposed PRC includes correction to the CPAs. The validation team confirms that the proposed changes meet all relevant requirements of UNFCCC. In line with paragraph 227 and 250 of CDM PS for PoAs (version 02.0) /B01/, the proposed changes to the CPAs do not require prior approval. Thus, these changes are being notified to the UNFCCC secretariat as per paragraph 172 of the CDM PCP for PoAs (version 02.0) /B01/.

SECTION B. Validation team, technical reviewer and approver

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B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Document review	On-site inspection	Interviews	Validation findings
1.	Team Leader/ Validator/local expert	IR	Singh	Vikash Kumar	CC IPL	X	NA	X	X

B.2. Technical reviewer and approver of the validation report on CPA PRCs

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)
1.	Technical reviewer	IR	Agarwalla	Sanjay Kumar	CC IPL
2.	Approver	IR	Anand	Amit	CC IPL

SECTION C. Means of validation**C.1. Document review**

List of all documents reviewed or referenced during the validation is provided in Appendix-3.

C.2. On-site inspection

No on site inspection was conducted.

Duration of on-site inspection: DD/MM/YYYY to DD/MM/YYYY				
No.	Activity performed on-site	Site location	Date	Team member
1.				
...				

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Johann	Thaler	BURN Manufacturing Co.	10/06/2020 (on Skype)	<ul style="list-style-type: none"> Proposed corrections in the CPA-DDs 	Vikash Kumar Singh

C.4. Clarification requests, corrective action requests and forward action requests raised

Areas of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with CPA-DD form	--	--	--
Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents	--	--	--
Corrections	--	--	--
Changes to the start date of the crediting period	--	--	--
Inclusion of monitoring plan	--	--	--
Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents	--	--	--
Changes to the project design	--	--	--
Changes specific to afforestation and reforestation activities	--	--	--
Others (UNFCCC's clarification during summary note preparation)	01--	--	--
Total	019	00	00

SECTION D. Validation findings**D.1. Compliance with CPA-DD form**

Means of validation	DR
Findings	-
Conclusion	<p>CC IPL confirms the following:</p> <ul style="list-style-type: none"> There is no change in the template from the already included CPA-DDs to revised CPA-DDs. The compliance of the revised CPA-DDs /01/ (both in tracked-change and clean versions) with the latest version of the applicable CPA-DD form and the instructions therein for filling the respective form. This complies to the requirement of § 248 of CDM VVS for PoAs (version 02.0) /B01-1/. <p>The validation team confirms that the requirements of the CDM-CPA-DD-FORM /B04/ filling guidelines and relevant requirements of CDM VVS for PoAs (version 02.0) /B01-1/ have been appropriately met.</p>

D.2. Temporary deviations from the registered monitoring plan, applied methodologies, standardized baselines or other methodological regulatory documents

Means of validation	NA
Findings	NA
Conclusion	NA

D.3. Corrections

Means of validation	DR
Findings	-
Conclusion	<p><u>Background of the proposed corrections:</u></p> <p>During the 1st verification of the PoA for CPAs, 9265-P1-0002-CP1, 9265-P1-0003-CP1, 9265-P1-0004-CP1, 9265-P1-0005-CP1, 9265-P1-0006-CP1, 9265-P1-0007-CP1, 9265-P1-0008-CP1, the CME had opted to use the thermal efficiency based on WBTs included cold start, hot start and simmering and the thermal efficiency was calculated as an average of those 3 phases; this is in accordance with the approved revised PoA DD /B02/ (refer page 29 of 50), which states "<i>the η_{new} is determined as per the Water Boiling Test (WBT) protocol</i>". The WBT protocol /04/ requires all three phases i.e. cold start, hot start and simmering and the thermal efficiency calculated as an average of those 3 phases. However,</p>

during the I & R check, the following comment had been raised in regard to the efficiency:

"The certified efficiencies of the stoves described in the CPA-DD (e.g. Jikokoa G3.5 and Jikokoa Xtra G4, in page 2 of CPA-DD of CPA-0007) are 44.9% and 44.2% respectively based on WBTs, whereas the monitored efficiencies of those two stoves in this monitoring period indicates increased efficiencies of 57.3% and 54.1% respectively also based WBTs. CL03 of the verification report states that the efficiency differences are resulted from additional consideration of simmering in WBTs in the monitoring period (i.e. sampled simmering efficiency ranging from 64% to 79% for stove G3.5, sampled simmering efficiency ranging from 66% to 84% for stove G4) which is appropriate and in-line with the WBT Protocol. However, (a) the DOE shall provide more information how it has concluded that the WBTs referred in the CPA-DD did not consider simmering factors; (b) if WBT approach referred in the CPA-DD did not consider simmering factor as the WBT approach in this monitoring period, the DOE shall provide information on how it has verified the appropriateness and corrections of those two different WBT approaches; and (c) Considering the deviated WBT approach applied in the monitoring vs WBT results in the CPA-DD to calculate the stove efficiency, the DOE shall provide information on how it considered that the CPAs are implemented as described in the CPA-DD."

Apropos to this finding, CME had revised the approach for the thermal efficiency calculation during the request for issuance and removed the simmering. Furthermore, it is during this response, CME had indicated that they will revise the CPAs in regard to this finding. The proposed PRC involves the correction in the value of the ex-post parameter " η_{new} " i.e. Efficiency of the system being deployed as part of the project activity and WBTs included cold start, hot start and simmering and the thermal efficiency has been calculated as an average of those 3 phases. Due to this correction, other associated corrections (as summarised in the table below for each CPAs) have been done by the CME. Validation team based on review of the CPA-DDs /B02/ confirms that the WBTs referred in the CPA-DDs /B02/ did not consider simmering factor as the terminology used in the included CPA-DD /B02/ (refer section A.3) is "High Power Efficiency", which validation team based on its sectoral expertise can confirm that it belongs to only cold start and hot start without simmering. Consideration of simmering as indicated above is in accordance with the approved revised PoA DD /B02/ (refer page 29 of 50) and the WBT protocol /04/ and thus the proposed correction in the CPA DDs are acceptable to the validation team.

Following corrections has been made in the revised CPA-DDs /01/:

CPAs	Corrections with assessment
9265-P1-0002-CP1	<ul style="list-style-type: none"> The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-

		<p>distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01.</p> <ul style="list-style-type: none"> • The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	
	9265-P1-0003-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer’s specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	

	9265-P1-0004-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO_{2e} which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	
	9265-P1-0005-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. 	

		<ul style="list-style-type: none"> Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. Version/Date of CPA-DD have been updated firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT.
	9265-P1-0006-CP1	<ul style="list-style-type: none"> The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. Version/Date of CPA-DD have been updated firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT.
	9265-P1-0007-CP1	<ul style="list-style-type: none"> The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of Jikokoa G3.5 is 57.35% and Jikokoa Xtra (G4) have a thermal efficiency of 54.11%. This has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based

		<p>on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/</p> <ul style="list-style-type: none"> • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0012 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 14. • Emission reduction figure has been revised in all relevant sections of the CPA-DD/01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 100,531 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the respective CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been added due to change in the value of WBT. 	
	9265-P1-0008-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of Jikokoa G3.5 is 57.35% and Jikokoa Xtra (G4) have a thermal efficiency of 54.11%. This has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0012 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 14. • Emission reduction figure has been revised in all relevant sections of the CPA-DD/01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 100,531 	

		<p>tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the respective CPA DD.</p> <ul style="list-style-type: none"> Version/Date of CPA-DD have been updated firepower (kW) and boil time (in minutes) has been added due to change in the value of WBT.
	9265-P1-0011-CP1	<ul style="list-style-type: none"> The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. Version/Date of CPA-DD have been updated firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT.
	9265-P1-0012-CP1	<ul style="list-style-type: none"> The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005

		<p>in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01.</p> <ul style="list-style-type: none"> • The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO_{2e} which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	
	9265-P1-0013-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer’s specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO_{2e} which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	

	9265-P1-0014-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of stove model (i.e. Kuniokoa) been revised to 41.90 % which has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD /01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 42,093 tCO_{2e} which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	
	9265-P1-0015-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of Jikokoa G3.5 is 57.35% and Jikokoa Xtra (G4) have a thermal efficiency of 54.11%. This has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0012 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. 	

		<ul style="list-style-type: none"> The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 14. Emission reduction figure has been revised in all relevant sections of the CPA-DD/01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 100,531 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the respective CPA DD. Version/Date of CPA-DD have been update firepower (kW) and boil time (in minutes) has been added due to change in the value of WBT. 	
	9265-P1-0016-CP1	<ul style="list-style-type: none"> The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of Jikokoa G3.5 is 57.35% and Jikokoa Xtra (G4) have a thermal efficiency of 54.11%. This has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer’s specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0012 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. The term “estimated” has been added in parameter R_(y,usage) refers to the estimated sample size of 14. Emission reduction figure has been revised in all relevant sections of the CPA-DD/01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 100,531 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the respective CPA DD. Version/Date of CPA-DD have been updated firepower (kW) and boil time (in minutes) has been added due to change in the value of WBT. 	

	9265-P1-0017-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of the stove model (i.e. Kuniokoa Turbo) been revised to 41.62 %. ,this has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. • Emission reduction figure has been revised in all relevant sections of the CPA-DD/01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 91,873 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the respective CPA DD. • Version/Date of CPA-DD have been updated • firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	
	9265-P1-0018-CP1	<ul style="list-style-type: none"> • The efficiency value in section A.3 as well as in all other relevant sections of the CPA DD has been revised, the revision refers to the thermal efficiency value including simmering. The thermal efficiency of the stove model (i.e. Kuniokoa Turbo) been revised to 41.62 %. ,this has been checked and confirmed by the DOE by reviewing the stove manufacturer specification /03/. The thermal efficiency value is taken from manufacturer's specifications based on Water Boiling Tests carried out by the manufacturer BURN in its Design Lab following WBT protocol 4.2.3. and complying with a 95/10 confidence/precision level. /03/ • This change also leads to the correction in the variance value which is now corrected in section B.5.2 as 0.0005 in order to be in line with the standard deviation result found in the WBTs. This change has an implication on the initial sample size, hence text related to t-distribution and sample size has been revised in the section B.5.2. Please also refer to the closure of CL-01. • The term "estimated" has been added in parameter R_(y,usage) refers to the estimated sample size of 47. 	

	<ul style="list-style-type: none"> Emission reduction figure has been revised in all relevant sections of the CPA-DD/01/ as a result of the change of the thermal efficiency figure which includes Cover page, sections, A.1, B.4.3 and B.4.4 have been updated. The revised estimated reduction is 91,873 tCO₂e which is checked and confirmed by reviewing the emission reduction spreadsheet /02/ of the respective CPA DD. Version/Date of CPA-DD have been updated firepower (kW) and boil time (in minutes) has been updated due to change in the value of WBT. 	
	<p>Based on the above assessment, the validation team has accepted the proposed corrections in the CPA-DDs /01/ in accordance with requirements of §256, §257 and §258 of VVS for PoAs, version 02.0 /B01/ and confirms that the corrected information is an accurate reflection of actual project information.</p>	

D.4. Changes to the start date of the crediting period

Means of validation	NA
Findings	NA
Conclusion	NA

D.5. Inclusion of monitoring plan

Means of validation	NA
Findings	NA
Conclusion	NA

D.6. Permanent changes to the registered monitoring plan, or permanent deviation of monitoring from the applied methodologies, standardized baselines, or other methodological regulatory documents

Means of validation	NA
Findings	NA
Conclusion	NA

D.7. Changes to the project design

Means of validation	NA
Findings	NA
Conclusion	NA

D.8. Changes specific to afforestation and reforestation activities

Means of validation	NA
Findings	NA
Conclusion	NA

SECTION E. Internal quality control

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The final validation report passed a technical review and quality review before being submitted to the project participant and UNFCCC Executive Board. A technical reviewer qualified in accordance with CCIPL's qualification scheme for CDM validation and verification performed the technical review.

SECTION F. Validation opinion

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The CME has appointed Carbon Check (India) Private Ltd., (CC IPL) to perform the validation of the following Post Registration Changes to the included CPAs /B02/ in the registered PoA “Top Third Ventures Stove Programme” (hereafter “PoA”) /B02/:

1. 9265-P1-0002-CP1: Top Third Ventures Stove Programme CPA KE0002 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
2. 9265-P1-0003-CP1: Top Third Ventures Stove Programme CPA KE0003 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
3. 9265-P1-0004-CP1: Top Third Ventures Stove Programme CPA KE0004 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
4. 9265-P1-0005-CP1: Top Third Ventures Stove Programme CPA KE0005 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
5. 9265-P1-0006-CP1: Top Third Ventures Stove Programme CPA KE0006 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
6. 9265-P1-0007-CP1: Top Third Ventures Stove Programme CPA KE0007 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
7. 9265-P1-0008-CP1: Top Third Ventures Stove Programme CPA KE0008 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
8. 9265-P1-0011-CP1: Top Third Ventures Stove Programme CPA KE0011 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
9. 9265-P1-0012-CP1: Top Third Ventures Stove Programme CPA KE0012 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
10. 9265-P1-0013-CP1: Top Third Ventures Stove Programme CPA KE0013 – BURN Efficient Cookstoves for Kenya
11. 9265-P1-0014-CP1: Top Third Ventures Stove Programme CPA KE0014 – BURN Efficient Cookstoves for Kenya
12. 9265-P1-0015-CP1: Top Third Ventures Stove Programme CPA KE0015 – BURN Efficient Cookstoves for Kenya
13. 9265-P1-0016-CP1: Top Third Ventures Stove Programme CPA KE0016 – Top Third Ventures Stove Programme CPA KE0016 – BURN Efficient Cookstoves for Kenya
14. 9265-P1-0017-CP1: Top Third Ventures Stove Programme CPA KE0017 – BURN Efficient Cookstoves for Kenya supported by Republic of Korea
15. 9265-P1-0018-CP1: Top Third Ventures Stove Programme CPA KE0018 – BURN Efficient Cookstoves for Kenya

The following type of post registration changes have been made to the above mentioned CPA of the PoA:

- Corrections

CCIPL confirms that the corrected information is an accurate reflection of actual project information.

The validation team can confirm that the post registration changes carried out to CPA-DDs /01/ are in accordance with the requirements of UNFCCC. The DOE therefore accepts the changes and request for the approval of:

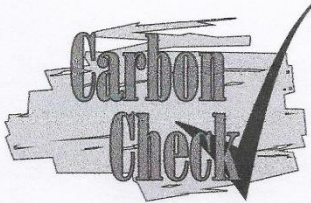
- Corrections

As per §227 of CDM PS for PoAs, version 02 /B01/, the proposed PRC does not require prior approval. The changes are being notified to the UNFCCC Secretariat as per §250 of PS for PoAs (version 02.0) /B01/ and §172 of CDM PCP for PoAs (version 02.0) /B01-2/.

Appendix 1. Abbreviations

Abbreviations	Full Texts
BE	Baseline Emission
CAR	Corrective Action Request
CC IPL	Carbon Check (India) Private Ltd
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CI	CPA implementer
CL	Clarification Request
CME	Co-ordinating or Managing Entity
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
COP/MOP	Conference of Parties/ Meeting of Parties
CPA	Component Project Activity
CPA-DD	Component Project Activity Design Document
DNA	Designated National Authority
DOE	Designated Operational Entity
DR	Document Review
EB	Executive Board
EIA	Environmental Impact Assessment
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas
GSC	Global Stakeholders Consultation
GWh	Giga Watt Hours
I	Interview
IPCC	Intergovernmental Panel on Climate Change
KCM	Korea Carbon Management Ltd.
Ley	Leakage
MoV	Means of Verification
NA	Not applicable
OSV	On Site Visit
PCP	Project Cycle Procedure
PE	Project Emission
PoA	Programme of Activities
PoA-DD	Programme of activities design document
PP	Project Participant
PS	Project Standard
t	Tonne
UNFCCC	United Nations Framework Convention on Climate Change
VVS	Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers



Carbon Check (India) Private Ltd.

Vikash Kumar Singh

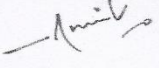
has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 07.0):

For following functions:

Validator	<input checked="" type="checkbox"/>	Team Leader	<input checked="" type="checkbox"/>	Technical reviewer	<input checked="" type="checkbox"/>
Verifier	<input checked="" type="checkbox"/>	Technical Expert	<input checked="" type="checkbox"/>	Local Expert ¹	<input checked="" type="checkbox"/>

In the following Technical Areas:

TA 1.1	<input checked="" type="checkbox"/>	TA 3.1	<input checked="" type="checkbox"/>	TA 5.2	<input type="checkbox"/>	TA 9.2	<input type="checkbox"/>	TA 13.2	<input checked="" type="checkbox"/>
TA 1.2	<input checked="" type="checkbox"/>	TA 4.1	<input checked="" type="checkbox"/>	TA 8.1	<input type="checkbox"/>	TA 10.1	<input type="checkbox"/>	TA 14.1	<input type="checkbox"/>
TA 2.1	<input type="checkbox"/>	TA 5.1	<input type="checkbox"/>	TA 9.1	<input type="checkbox"/>	TA 13.1	<input checked="" type="checkbox"/>		



Mr. Amit Anand
CEO

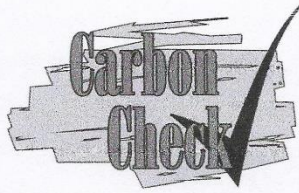
Date of Approval 24/12/2019	Valid Till 23/12/2020
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Revision History of the Document

26/12/2014	Initial Adoption
24/12/2015	Annual Revision
20/01/2016	Interim Revision for office address change
23/12/2016	Annual Revision
24/12/2017	Annual Revision
24/12/2018	Annual Revision
24/12/2019	Annual Revision

¹ India, South Africa

CARBON CHECK (INDIA) PRIVATE LIMITED
 Registered in India: U74930DL2012PTC232495
 Regd. Off: 2071/38, 2nd Floor, Naiwala, Karol Bagh, New Delhi - 110005
 Corporate off: G 49 & 50, 3rd Floor, Sector - 3, NOIDA (Uttar Pradesh) - 201301
 Tel: +91 120 4373114 | URL: www.carboncheck.co.in
 e-mail: info@carboncheck.co.in



Carbon Check (India) Private Ltd.

Sanjay Agarwalla

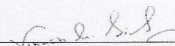
has been qualified as per CCIPL's internal qualification procedures, in accordance with requirements of Accreditation Standard (version 06.0):

For following functions:

Validator ☒ Team Leader ☒ Technical reviewer ☒
 Verifier ☒ Technical Expert ☒ Local Expert¹ ☒

In the following Technical Areas:

TA 1.1 ☒ TA 3.1 ☒ TA 5.2 ☒ TA 9.2 ☒ TA 13.2 ☐
 TA 1.2 ☒ TA 4.1 ☒ TA 8.1 ☐ TA 10.1 ☐ TA 14.1 ☐
 TA 2.1 ☒ TA 5.1 ☒ TA 9.1 ☒ TA 13.1 ☒


 Mr. Vikash Kumar Singh
 Compliance Officer


 Mr. Amit Anand
 CEO

Date of Approval
 24/12/2019

Valid Till
 23/12/2020

Revision History of the Document

26/12/2014	Initial Adoption
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23/12/2017	Annual Revision
24/12/2018	Annual Revision
24/12/2019	Annual Revision

¹ India

CARBON CHECK (INDIA) PRIVATE LIMITED
 Registered in India: U74930DL2012PTC232495
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 Corporate off: G 49 & 50, 3rd Floor, Sector - 3, NOIDA (Uttar Pradesh) - 201301
 Tel: +91 120 4373114 | URL: www.carboncheck.co.in
 e-mail: info@carboncheck.co.in

Appendix 3. Documents reviewed or referenced

No.	Author	Title	References to the document	Provider
/01/	CME	Revised CPA-DDs: <ul style="list-style-type: none"> 9265-P1-0002-CP1 9265-P1-0003-CP1 9265-P1-0004-CP1 9265-P1-0005-CP1 9265-P1-0006-CP1 9265-P1-0007-CP1 9265-P1-0008-CP1 9265-P1-0011-CP1 9265-P1-0012-CP1 9265-P1-0013-CP1 9265-P1-0014-CP1 9265-P1-0015-CP1 9265-P1-0016-CP1 9265-P1-0017-CP1 9265-P1-0018-CP1 	<ul style="list-style-type: none"> version 3.2, dated 09/06/2020 version 3.2, dated 09/06/2020 version 3.2, dated 09/06/2020 version 3.2, dated 09/06/2020 version 3.2, dated 09/06/2020 version 3.2, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 	CME
/02/	CME	Revised ER Sheets <ul style="list-style-type: none"> 9265-P1-0002-CP1 9265-P1-0003-CP1 9265-P1-0004-CP1 9265-P1-0005-CP1 9265-P1-0006-CP1 9265-P1-0007-CP1 9265-P1-0008-CP1 9265-P1-0011-CP1 9265-P1-0012-CP1 9265-P1-0013-CP1 9265-P1-0014-CP1 	<ul style="list-style-type: none"> version 03.2, dated 09/06/2020 version 03.2, dated 09/06/2020 version 03.2, dated 09/06/2020 version 03.2, dated 09/06/2020 version 03.2, dated 09/06/2020 version 03.2, dated 09/06/2020 version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 	CME

		<ul style="list-style-type: none"> 9265-P1-0015-CP1 9265-P1-0016-CP1 9265-P1-0017-CP1 9265-P1-0018-CP1 	<ul style="list-style-type: none"> version 01.1, dated 09/06/2020 version 01.1, dated 09/06/2020 version 1.1, dated 09/06/2020 version 1.1, dated 09/06/2020 	
/03/	Burn Manufacturing Co.	BURN Manufacturer specifications_thermal efficiency different stove models	--	CME
/04/	Clean Cooking Alliance	WBT Protocol version 4.2.3	--	Others
<u>/05/</u>	<u>Burn Manufacturing Co.</u>	<u>Records of WBTs including raw data sheet as conducted by BURN Design Lab</u>	<u>--</u>	<u>CME</u>
<u>/06/</u>	<u>Burn Manufacturing Co.</u>	<u>Documents pertaining to Quality Control and Quality Management System at Burn's Manufacturing facility.</u> <ol style="list-style-type: none"> <u>1. Templates: Daily Report Template and Sample, Engineering Change Notice, Incoming Quality Control (IQC) Approval Template, Supplier Audit Checklist, Quality inspection report template for supplier sample</u> <u>2. Process Flow Chart: Production process flow chart of different cook stove models, BURN Quality Processes flow chart.</u> <u>3. MR052020 Quality Review Report May 2020</u> <u>4. Inspection Report by third party, KRT Audit Corporation- Raw Material Pre-Inspection Report, Supplier Factory Audit Report</u> 	--	<u>CME</u>
/B01/	UNFCCC	<ol style="list-style-type: none"> 1. CDM VVS for PoAs (Version 02.0). 2. CDM PS for PoAs (Version 02.0) 3. CDM PCP for PoAs (Version 02.0) 	http://cdm.unfccc.int/	Others
/B02/	UNFCCC	Included CPA DDs <ul style="list-style-type: none"> 9265-P1-0002-CP1 9265-P1-0003-CP1 9265-P1-0004-CP1 	<ul style="list-style-type: none"> version 3.1, dated 16/09/2019 version 3.1, dated 16/09/2019 version 3.1, dated 16/09/2019 	Others

		<ul style="list-style-type: none"> • 9265-P1-0005-CP1 • 9265-P1-0006-CP1 • 9265-P1-0007-CP1 • 9265-P1-0008-CP1 • 9265-P1-0011-CP1 • 9265-P1-0012-CP1 • 9265-P1-0013-CP1 • 9265-P1-0014-CP1 • 9265-P1-0015-CP1 • 9265-P1-0016-CP1 • 9265-P1-0017-CP1 • 9265-P1-0018-CP1 	<ul style="list-style-type: none"> • version 3.1, dated 16/09/2019 • version 3.1, dated 16/09/2019 • Version 1.0 dated 07/10/2019 • Version 1.0 dated 07/10/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 • Version 1.0 dated 19/11/2019 	
/B03/	UNFCCC	AMS-II.G. Energy efficiency measures in thermal applications of non-renewable biomass (version 4.0)	http://cdm.unfccc.int/	Others
/B04/	UNFCCC	Programme design document form for CDM programmes of activities (CDM-CPA-DD-FORM) (Version 09.0)	http://cdm.unfccc.int/	Others

Appendix 4. Clarification requests, corrective action requests and forward action requests

Table 1. CLs from this validation

CL ID	XX	Section no.	Date:
Description of CL			
-			
CME's response			Date:
-			
Documentation provided by CME			
DOE assessment			Date:
-			

CL ID	01	Section no.	Clarification raised by CDM during summary note	Date: 03/08/2020
Description of CL				
The newly calculated sample size considers a new value of standard deviation resulting from the WBTs conducted by BURN Design Lab. The DOE/CME are requested to submit the results of the WBTs in order to support the use of new value of the standard deviation. In doing so, the CME/DOE shall also clarify the rationale and approach for the applied standard deviation value. Please refer to the Standard: Sampling and surveys for CDM project activities and programmes of activities Version 08.0 (paragraph 13(c) which elaborates the source data for the expected variance (standard deviation).				
CME's response				Date: 11/08/2020
<p>The results of the WBTs are attached with this response.</p> <p>The standard deviation and initial sample size was adjusted in the CPA-DDs as a logical consequence of the conducted WBTs including simmering. The updated standard deviation, initial sample size along with the WBT results have been checked by the DOE during the PRC validation. The very low standard deviation of all different stove models is due to the fact that BURN's stoves are manufactured in a highly standardised process in the most modern factory in Sub-Saharan Africa. The individual stoves of a certain model do not vary significantly beyond acceptable limits (e.g. in regard to characteristics such as materials, dimensions). There is a strict quality control in place at all the different levels, i.e. supplier quality control, incoming material quality control, in-process inspection, final assembly inspection, post-production quality and a continuous quality improvement procedure (see QC Processes PP 2020). Samples of quality control sheets have been submitted to the DOE.</p> <p>Detailed process flowcharts have been submitted to the DOE which prove the standardised assembly process.</p> <p>In addition a sample quality report from May 2020 has been shared with the DOE. The very low fallout rate (0.05% to 0.10% depending on the stove model) is a further evidence of the very highly standardized and perfectly coordinated assembly line.</p> <p>Please also note that the standard deviation is not significantly different from the standard deviation found during the first verification (though the WBT values at the first issuance spreadsheet are without simmering), further confirming its validity as this set of WBT results and standard deviation was checked and confirmed by DOE.</p>				
Documentation provided by CME				
<p>WBT results (detailed excel spreadsheets and summary excel spreadsheets of all different stove models)</p> <p>QC Processes PP 2020</p> <p>Process Flowcharts</p> <p>Sample quality control sheets</p> <p>Quality Report May 2020</p>				
DOE assessment				Date: 11/08/2020
As indicated in the CME's response, the records of WBTs/05/ were checked by the DOE for confirming the revised standard deviation used to calculate the sample size. As requested by UNFCCC, the records of WBTs are being submitted to UNFCCC as a response to the clarification. Validation team further confirms				

that the low standard deviation was also evidenced during the 1st periodic verification. In the opinion of validation team, the standardized manufacturing process adopted and implemented at the Burn Manufacturing facility would be the reason for this low standard deviation.

Based on review of documents /06-1/,/06-2/ along with the reports of quality department /06-3/ and third party inspection documents /06-4/, it can be confirmed that the manufacturing facility at Burn Manufacturing facility in Nairobi Kenya does follow a quality control process. This was also evidenced during the on-site inspection of Burn Manufacturing facility in Nairobi, -Kenya during the first verification. Validation team thus confirms that there is a quality control in place at all the different levels, i.e. supplier quality control, incoming material quality control, in-process inspection, final assembly inspection, post-production quality. Furthermore, the sample quality report for May 2020 (which was an input for the management review) indicated a low fallout rate (0.05% to 0.10% depending on the stove model); this also indicates that there is an element of continual quality improvement process as this report was one of the input for the discussion in management review.

Based on above assessment, validation team confirms there is an internal quality management system in place at the at the Burn Manufacturing facility in Nairobi, -Kenya, which allows the production of stoves of consistent quality, although even though there is no certified quality management system (such as ISO 9001).

Based on above assessment, the CL is closed.

Table 2. CARs from this validation

CAR ID	Section no.	Date:
Description of CAR		
-		
CME's response		Date:
-		
Documentation provided by CME		
-		
DOE assessment		Date:
-		

Table 3. FARs from this validation

FAR ID	xx	Section no.	Date: DD/MM/YYYY
Description of FAR			
-			
CME's response			Date: DD/MM/YYYY
-			
Documentation provided by CME			
-			
DOE assessment			Date: DD/MM/YYYY
-			

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
02.0	31 May 2019	Revision to: <ul style="list-style-type: none">• Ensure consistency with version 02.0 of the “CDM validation and verification standard for programmes of activities” (CDM-EB93-A08-STAN);• Make editorial improvements.
01.0	29 December 2017	Initial publication.

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