Verification and certification report form for CDM programme of activities

(version 01.0)

Complete this form in accordance with the "Attachment. Instructions for filling out the verification and certification report form for CDM programme of activities" at the end of this form.

VERICATION AND CERTIFICATION REPORT		
Title of the programme of activities (PoA)	Improved Cook Stove Programme with Carbon Finance (ICF), Nepal	
UNFCCC reference number of the PoA	UNFCCC ID: POA9811 TN P-No.: 8000473027 – 16/184	
Version number(s) of the PoA-DD(s) applicable to this report	6.0	
Version number of the verification and certification report	1.0	
Completion date of the verification and certification report	02/08/2017	
Monitoring period number	**CPA # 01** 2 **CPA # 02** 2 **CPA # 03** 1	
Duration of this monitoring period	**CPA # 01** 02/04/2015 -01/04/2017 (both days included) **CPA # 02** 02/04/2015 -01/04/2017 (both days included) **CPA # 03** 02/04/2015 - 01/04/2017 (both days included	
Number and version number of the monitoring report to which this report applies	4.0	
Coordinating/managing entity (CME)	SNV Netherlands Development Organisation (SNV), Nepal	
Host Party(ies)	**Host Party(ies) of the PoA**	**Is this a host Party to a CPA covered in this report? (yes/no)**
	Federal Democratic Republic of Nepal	No
Sectoral scope(s)	Scope 3 : / Technical Area: 3.1	
Selected methodology(ies)	CDM Methodology: AMS-II.G "Energy efficiency measures in thermal applications of non-renewable biomass" (version 05.0)	
Selected standardized baseline(s)	NA	

Total estimated GHG emission reductions or net GHG removals for this monitoring period in the included CPA(s) covered in this report

CPA under verification	Value estimated in ex ante calculation
9811-0001 (CPA # 01)	83,288
9811-0002 (CPA # 02)	82,793
9811-0003 (CPA # 03)	70,129
Total	**236,210**

Total certified GHG emission reductions or net GHG removals for this monitoring period for the included CPA(s) covered in this report

CPA	2015	2016	2017	Total
CPA # 01	12,904	17,237	4,286	34,425
CPA # 02	12,615	17,122	4,257	33,994
CPA # 03[1]	3,535	8,162	2,029	13,725
Total	**29,053**	**42,520**	**10,571**	**82,144**

Name of DOE

TÜV NORD CERT GmbH

Name, position and signature of the approver of the verification and certification report

Rainer Winter

Final Approver

[1] CPA# 3 was included on 19th December 2014 however no installation and corresponding ERs are claimed until 09th April 2015 by PP. Hence, ERs from the start date of crediting period i.e. 19/12/2014 until 09/04/2015 for CPA# 3 are taken zero.

SECTION A. Executive summary

SNV Netherlands Development Organisation (SNV), Nepal has commissioned the TÜV NORD JI/CDM Certification Program to carry out the 2nd periodic verification of CPA # 01 and CPA # 02 and the 1st periodic verification of CPA # 03 under the CDM Programme of Activities (CDM-PoA):

"Improved Cook Stove Programme with Carbon Finance (ICF), Nepal"

with regard to the relevant requirements for CDM PoAs.

This verification covers the period for CPA # 01, CPA # 02 and CPA # 03 from 02/04/2015 - 01/04/2017 (including both days).

The project reduces GHG emissions due to introduction of efficient and improved cook stoves in Far Western Districts Regions (FWDR) in Nepal. The PoA aims to significantly reduce fuel wood consumption of low-income Nepalese households by providing them with affordable improved cooking stoves (ICS) in replacement to their low–efficiency, unimproved traditional stoves. The ICS disseminated by the PoA are more efficient than existing traditional cookstoves. This results in a reduction of the quantity of wood fuel that each household must consume to meet their cooking needs. Thus, the CPAs under the PoA achieve a reduction in the emissions of greenhouse gases and have significant socio-economic and environmental benefits, including contribution to the reduction of deforestation and degradation of forests in the FWDR through wide and voluntary participation of the people in adopting fuel efficient stoves potentially reaching thousands of rural poor who are at the bottom of the energy ladder in Nepal.

Details of the PoA location are given in table A-1 below:

Table A-1: Project Location

No.	Project Location of CPA # 01, CPA #02, CPA # 03		
Host Country	Federal Democratic Republic of Nepal		
Region:	Far Western Development Region (FWDR)		
Project location address:	Districts of Doti, Dadeldhura, Baitadi, Achham, Darchula, Bajhang, and Bajura		
Geo-coordinates	District	Latitude	Longitude
	Doti	N 29° 13.230'	E 80° 53.857'
	Dadeldhura	N 29° 14.596'	E 80° 30.044'
	Baitadi	N 29° 31.155'	E 80° 28.125'
	Accham	N 29° 04.378'	E 81° 15.611'
	Darchula	N 29° 54.440'	E 80° 45.783'
	Bajhang	N 29° 47.865'	E 81° 15.363'
	Bajura	N 29° 38.562'	E 81° 36.292'

Basic technical details of the PoA are summarized in table A-2.

Table - A-2: Technical data of the project activity for ICS:

Parameter	Unit	Value
Stove type: RS 1.1		
Combustion chamber thickness (steel)	mm	2
Diameter of combustion chamber (steel)	cm	10.8
Fuel type	-	Firewood
Thermal (η new)	%	24.95
Top plate pot rest thickness (steel)	mm	5

Parameter	Unit	Value
Stove type: RS 1.3		
Combustion chamber thickness (steel)	mm	2
Diameter of combustion chamber (steel)	cm	10.7
Fuel type	-	Firewood
Thermal efficiency (η new)	%	22.94
Top plate pot rest thickness (steel)	mm	5

The initial efficiency mentioned the registered CPA-DDs were 23.4% for stove model RS1.1 and 25.1% for stove model RS1.3 and the same was provided by the Regional CookstovesTesting and Knowledge Center in Kathmandu in a laboratory setting. Verification team has assessed ANNEX 12 - Test Report RS1.1 Stove, ANNEX 13 - Test Report RS1.3 Stove in this regards.

Based on onsite assessment, verification of WBT report and WBT analysis sheet, interview with the stove model users and CME, it was observed that the efficiencies of RS 1.1 model and RS 1.3 model stoves have slightly come down from the previous (1st periodic) issuance and corresponding test conducted.

As stipulated in the applied methodology AMS-II.G, parameter $\eta_{new,y}$ (monitored efficiency during year y) is derived from WBTs conducted on a sample basis of stoves in the field and not in the laboratory any more.

Test conducted in the laboratory and testing center and test for thermal efficiencies of stove models conducted in the real case field in different year of its operation can be different as per the local and sectoral expertise of the verification team.

Most of the sampled stoves tested are more than their 2 years of operation in field though the efficiency of modes RS 1.1 the monitored efficiency is slightly higher than the initial efficiency tested in the laboratory (23.4%) as mentioned in the registered CPA-DD.

In this second monitoring period, the efficiency of both stove types was lower as compared to the first monitoring period, two years prior.

Nonetheless, this does not violate the requirement for biennial sampling, which states that the efficiency of the cook stove does not drop significantly as compared to the initial

efficiency of the new device, over a time period of two years of typical usage. Over 77% of the ICS population (installed prior to May 2015) and 80% of the samples used for the WBTs are over two years of age; thus a decrease in efficiency from the previous monitoring period to the current is not unexpected due to more than two years of typical usage. The decision to conduct biennial sampling was based on the WBT results in the first monitoring period which did not demonstrate a drop in efficiency over the first two years of use and the confirmation from the stove designer, the Regional Cookstove Testing and Knowledge Centre under CRT-N, that the efficiency was not expected to decrease over the period of use.

Moreover, the manufacturer for the stove technologies are also the same as in the registered CPA-DDs. This could be assessed by visiting the manufacturing unit and meeting with concerned personnel and interview with the technology provider to further assess if the CPAs are implemented as per registered CPA-DDs. The shipping records were also checked and verified to be ok.

Based on above it can be confirmed that the CPAs under the current verification are implemented in accordance with the included/registered CPA-DDs.

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document.
- the monitoring plan is in accordance with the applied approved CDM methodology, i.e., AMS-II.G. ver. 5
- the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately.
- the monitoring system is in place and functional. The project has generated GHG emission reductions.

As the result of the 1st periodic verification of CPA # 03 and the 2nd periodic verification of CPA # 01 and CPA # 02, the verifier confirms that the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner. TÜV NORD JI/CDM CP herewith confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions: 82,144 t CO2e

SECTION B. Verification team, technical reviewer and approver

B.1. Verification team members

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			
						Desk review	On-site inspection	Interview(s)	Verification findings
1.	Team Leader + Technical Expert	EI	Mishra	Prakash Kumar		x	x	x	x

B.2. Technical reviewer and approver of the verification and certification report

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	Stöhr	Christina	TÜV NORD CERT
3	Technical reviewer	IR	Winter	Stefan	TÜV NORD CERT
3	Approver	IR	Winter	Rainer	TÜV NORD CERT

SECTION C. Means of verification

C.1. Desk review

During the desk review all documents initially provided by the client and publicly available documents relevant for the CPA # 01, CPA # 02 and CPA # 03 verification were reviewed. The main documents are listed below:

- the last revision of the PoA-DD including the monitoring plan/PoA-DD/,
- the last revisions of the CPA-DDs
- the last revision of the validation report/VAL/,
- CPA inclusion reports
- Last approved verification Report/VR/
- documentation of validation which are relevant during verification/VAL/
- the emission reduction calculation spreadsheet/XLS/.

Other supporting documents, such as publicly available information on the UNFCCC website and background information were also reviewed. List of all the relevant documents reviewed during verification process are listed in Appendix 3.

C.2. On-site inspection

Duration of on-site inspection: 14/06/2017 to 21/06/2017				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
1.	• Formal Introduction with CME, CPE implementer and other involved personnel in GHG data monitoring, discussion on audit planning, site lay out. • Record keeping. • Sales receipt verification • Double counting avoidance	FWDR Region of Nepal (SNV office)	14/06/2017	Prakash Kumar Mishra, CME (SNV) representative, CPA implementer, involved personnel and others

Duration of on-site inspection: 14/06/2017 to 21/06/2017				
No.	**Activity performed on-site**	**Site location**	**Date**	**Team member**
	procedure • Interviews of the CME, PO and sales personnel • Master data verification • Competency of the PO and involved personnel. • Overall organizational structure for data management and flow of information • Meeting and interview with third party survey agency on procedure adopted for sampling and survey			
2	Onsite verification of deployed stoves, interview with the ICS users on related issues, e.g. usage pattern, whether baseline 3 stone stoves are still in use, fuel saving, awareness level, maintenance procedure wood consumption etc.	FWDR region	15/06/2017	Prakash Kumar Mishra
3	Onsite verification of deployed stoves, interview with the ICS users on related issues, e.g. usage pattern, whether baseline 3 stone stoves are still in use, fuel saving, awareness level, maintenance procedure wood consumption etc.	FWDR region	16/06/2017	Prakash Kumar Mishra/CME/PP
4	Onsite verification of deployed stoves, interview with the ICS users on related issues, e.g. usage pattern, whether baseline 3 stone stoves are still in use, fuel saving, awareness level, maintenance procedure wood consumption etc.	FWDR region	17/06/2017	Prakash Kumar Mishra/ CME/PP
5	Onsite verification of deployed stoves, interview with the ICS users on related issues, e.g. usage pattern, whether baseline 3 stone stoves are still in use, fuel saving, awareness level, maintenance procedure wood consumption etc.	FWDR region	18/06/2017	Prakash Kumar Mishra/CME/PP
6	Meeting with stove manufacturers, retailers and distributers etc	FWDR region	19/06/2017	Prakash Kumar Mishra/CME/PP
7	• Discussion on Monitoring report compliance with MR filling guideline, PoA DD, CPA DDs, Validation report • Documentary evidence check, data verification and comparison with onsite observation	FWDR region	20/06/2017	Prakash Kumar Mishra/CME/PP/Consultant
	• Briefing on verification onsite audit findings of CPA # 01-CPA # 03 and • Closing meeting	FWDR region	21/06/2017	Prakash Kumar Mishra/CME/PP/Consultant

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Dhakal	Subash	SNV Nepal	14/06/2017	Programme implementation, co-ordination and monitoring	Project Leader
2	Newsum	Peter	SNV	14/06/2017	Program overview and Organisational structure and implementation schedule of the entire programme	County Director
3	O'Neil	Megan	Consultant	14/06/2017	Development of MR and related documentation for CPA # 01, CPA # 02, and CPA # 03 verification	Project Developer independent
4	Srestha	Bikash	RDSC	15/06/2017	Procedure and mechanism followed during usage survey	Team Leader
5	Kathayat	Ganesh	RDSC	15/06/2017	Database management, verification, recording and data protection	Database co-ordinator
6	Kunwar	Yagyaman	RDSC	15/06/2017	Usage survey related	ATC
7	Vikash	Sreshtha	RDSC	15/06/2017	Usage survey related	Leader team
8	Bista	Narendra	RDSC	15/06/2017	Usage survey mechanism and procedure	Surveyor
9	Kathayat	Bharat Bahadur	RDSC	15/06/2017	Over all survey responsibility and reporting	Vice President
10	Saud	Chandra	Asian Metal Power udyog	21/06/207	ICS manufacturing procedure and agreement related	PKM
11	Bista	Dilip	ICS user	16/06/2017	ICS information	PKM
12	Saud	Dhansara	ICS user	16/06/2017	ICS information	PKM
13	B.K	Suntala	ICS user	16/06/2017	ICS information	PKM
14	Pariyar	Amar	ICS user	16/06/2017	ICS information	PKM
15	Pariyar	Dhoj	ICS user	16/06/2017	ICS information	PKM
16	Giri	Lokendra	ICS user	16/06/2017	ICS information	PKM
17	Saud	Sete	ICS user	16/06/2017	ICS information	PKM
18	Bhatt	Dama	ICS user	16/06/2017	ICS information	PKM
19	Bhatta	Krishan Datta	ICS user	17/06/2017	ICS information	PKM
20	Bhatta	Gambhir Dutta	ICS User	17/06/2017	ICS information	PKM
21	Bhatta	Ram Datta	ICS User	17/06/2017	ICS information	PKM
22	Bhatta	Mandhir	ICS User	17/06/2017	ICS information	PKM

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
23	Lohar	Gajendra	ICS User	17/06/2017	ICS information	PKM
24	Aauji	Shyam	ICS User	17/06/2017	ICS information	PKM
25	Bhatta	Harish	ICS User	17/06/2017	ICS information	PKM
26	Bhatt	Dev Dutta	ICS User	17/06/2017	ICS information	PKM
27	Bam	Tek	ICS User	17/06/2017	ICS information	PKM
28	Bohara	Prem Bahadur	ICS User	17/06/2017	ICS information	PKM
29	Bhat	Prem Bahadur	ICS User	17/06/2017	ICS information	PKM
30	Saud	Ganga	ICS User	17/06/2017	ICS information	PKM
31	Sarki	Sarada	ICS User	17/06/2017	ICS information	PKM
32	Saud	Mathu	ICS User	18/06/2017	ICS information	PKM
33	BK	Khamm Bhadur	ICS User		ICS information	PKM
34	Pant	Jayaraj	ICS User	18/06/2017	ICS information	PKM
35	Nath	Hari	ICS User	18/06/2017	ICS information	PKM
36	Nath	Lal	ICS User	18/06/2017	ICS information	PKM
37	Pandya	Mahesh	ICS User	18/06/2017	ICS information	PKM
38	Singh	Jwala Devi	ICS User	18/06/2017	ICS information	PKM
39	Giri	Dharm Raj	ICS User	18/06/2017	ICS information	PKM
40	Dhami	Dal Bdr	ICS User	18/06/2017	ICS information	PKM
41	Bhul	Rup	ICS User	18/06/2017	ICS information	PKM
42	Saud	Parmale	ICS User	18/06/2017	ICS information	PKM
43	Saud	Gore	ICS User	18/06/2017	ICS information	PKM
44	Luhar	Joji	ICS User	18/06/2017	ICS information	PKM
45	Luhar	Ammre	ICS User	19/06/2017	ICS information	PKM
46	Bhatta	Laxman	ICS User	19/06/2017	ICS information	PKM
47	Bhatt	Parmanand	ICS User	19/06/2017	ICS information	PKM
48	Lohar	Jaya Ram	ICS User	19/06/2017	ICS information	PKM
49	Bohara	Narad	ICS User	19/06/2017	ICS information	PKM
50	Bohara	Indra Bahadur	ICS User	19/06/2017	ICS information	PKM
51	Bohara	Bhawani Singh	ICS User	19/06/2017	ICS information	PKM
52	Madai	Parbati Devi	ICS User	19/06/2017	ICS information	PKM
53	Madai	Raghubir	ICS User	19/06/2017	ICS information	PKM
54	Budha	Ram Bahadur	ICS User	19/06/2017	ICS information	PKM
55	Budha	Mathura	ICS User	19/06/2017	ICS information	PKM
56	BK	Dhan Bahadur	ICS User	19/06/2017	ICS information	PKM
57	Budha	Man Bahadur	ICS User	19/06/2017	ICS information	PKM
58	Aidi	Kamdev	ICS User	20/06/2017	ICS information	PKM
59	Aidi	Chandra Bahadur	ICS User	20/06/2017	ICS information	PKM
60	BK	Laxman	ICS User	20/06/2017	ICS information	PKM
61	BK	Nirmala	ICS User	20/06/2017	ICS information	PKM
62	Nath	Pare	ICS User	20/06/2017	ICS information	PKM
63	Nath	Hari	ICS User	20/06/2017	ICS information	PKM
64	Nath	Yasodha	ICS User	20/06/2017	ICS information	PKM
65	Nath	Narayan	ICS User	20/06/2017	ICS information	PKM
66	Nath	Mane	ICS User	20/06/2017	ICS information	PKM
67	Nath	Phuna	ICS User	20/06/2017	ICS information	PKM
68	Nath	Dewaki	ICS User	20/06/2017	ICS information	PKM
69	Saud	Chandra	ICS User	20/06/2017	ICS information	PKM

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
70	Bista	Dilip	ICS User	20/06/2017	ICS information	PKM
71	Saud	Dhansara	ICS User	20/06/2017	ICS information	PKM
72	BK	Suntala	ICS User	20/06/2017	ICS information	PKM
73	Pariyar	Amar	ICS User	20/06/2017	ICS information	PKM
74	Pariyar	Dhoj	ICS User	20/06/2017	ICS information	PKM
75	Giri	Lokendra	ICS User	20/06/2017	ICS information	PKM
76	Saud	Sete	ICS User	20/06/2017	ICS information	PKM
77	Bhatt	Dama	ICS User	20/06/2017	ICS information	PKM
78	Bhatt	Krishan Datta	ICS User	20/06/2017	ICS information	PKM

C.4. Sampling approach

C.4.1 Sampling during monitoring

☐	No sampling approach has been used by the PP to determine the monitored parameters
☒	A sampling approach has been taken for the following monitored parameter(s):

Parameter	Sampling approach [1)]	Sampling Type [2)]	Total Population	Sample Size by PP
SOF	MSS	PS	48810	448
f_{old}	MSS	PS	48810	250
$\eta_{new,y}$	MSS/StRS	PS	48810	36

[1)] *Sampling Approaches:*
SiRS: Simple Random Sampling
StRS: Stratified Random Sampling
SS: Systematic Sampling
CS: Cluster Sampling
MSS: Multi-stage Sampling

[2)] *Sampling Types:*
PS: Parameter Sampling

The CME selected a sample of ICS to monitor from the PoA Distribution and Monitoring Database, containing the population of CPA # 01, CPA # 02 and CPA # 03. A multi-stage sampling has been applied in line with the Guideline: Sampling and Surveys for CDM Project Activities and Programme of Activities, version 03.0 (EB 75, Annex 8) and registered PoA-DD. Multistage sampling is a more complex form of cluster sampling and involves sampling from a number of groups (known as primary sampling units), and then going on to sample units within each group (known as secondary sampling units). The primary sampling unit is Village Development Committee (VDC)[2] and the secondary sampling unit is the ICS.

For all parameters, the primary unit or VDC is randomly selected by "probability proportional to size"-sampling, i.e. VDCs with a higher number of appliances deployed have a higher chance to be selected than those with a smaller number of appliances. For sampling ***SOF*** and f_{old}, ICS are selected randomly within each VDC using a random number generator. For sampling $\eta_{new,}$ units in the secondary sampling unit, i.e. the ICS, were selected proportionally to the total distribution of each stove type, similar to a stratified sampling approach (Survey Sample Selection/ANN-9/).

[2] A village development committee (VDC) in Nepal is the lower administrative part of its local development ministry. Each district has several VDCs, similar to municipalities but with greater public-government interaction and administration. There are 3,913 village development committees in Nepal. A VDC is further divided into wards, the number depending on the population of the district. [Source: http://mofald.gov.np/mld/uploadedFiles/allFiles/LSGA_1999_Eng.pdf]

The CME hired a third party consultant to conduct the sample size calculations and select samples for all monitored parameters (Sample Size Calculation)/ANN-8/. SNV hired the RPO, RDSC, to conduct the Usage Survey/AGGR/, by visiting the end user premises where the selected ICS are located to conduct a sufficient number of surveys for monitored parameters, *SOF* and f_{old} according to the estimated sample size (Usage Survey Report)/ANN-3/. SNV hired third party contractor, Rural Energy Testing Station (RETS), to conduct sampling for monitored parameter η_{new} by visiting sampled ICS and conducting a sufficient number of water boiling tests (WBTs) according to the estimated sample size (WBT Report)/ANN-6/.

Out of total 48810 stoves under CPA #01, CPA #02 and CPA # 03, CME has selected sample of 448 stoves in coherence with Guidelines for Sampling and Surveys for CDM Project Activities and Programme Activities" (Version 03.0) and "Standard for Sampling and Surveys for CDM Project Activities and Programme Activities" (version 4.1) /G-SS/.

As assessed from sample size calculator and onsite interview with CME and survey team, in order to address the higher sample size calculated for f_{old} and an expectation that the usage rate may be lower given that the project had not distributed new stoves since December 2015, samples for an additional 6 VDCs, for a total of 12 VDCs (same as first monitoring period), were drawn to conduct the Usage Survey. The interim usage survey results from the first 6 VDCs indicated that more sampling would have been required to meet the 95/10 confidence/precision requirement for both parameters SOF and f_{old}, thus it was found that all 12 VDCs were monitored. In total, the sample size for SOF was 448, exceeding the required sample size of 150, however the sample size for parameter f_{old} was taken only 250.

As discussed and observed during the onsite visit and interview with the end users, the sample size for f_{old} was smaller because only households using their ICF may be surveyed regarding their continuous usage of a Traditional Cook Stoves (baseline stoves). This provides further evidence for the infeasibility of meeting the calculated sample size of 950. With 448 households surveyed, the sample size for f_{old} was only 250 (55.8%). To reach 950 samples for f_{old}, a total of 1702 households would have to be surveyed. This would have required practically impossible time to surveying and significantly more money and human resources to conduct the survey. While the number of samples for f_{old} was lower than the calculated value of 950, the effect, if any, is conservative on the calculation of emission reductions for this monitoring period. Without reaching the sample size to meet the required confidence/precision level, the upper bound of the confidence interval is found to be applied for the value of f_{old}, which results in a decrease in emission reductions.

The sample size for η_{new} was assessed to meet the required minimum of 30 samples. As such, 12 ICS were sampled in each VDC, for a total of 36 samples.

PP has applied multistage sampling- proportional parameter at 95/10 confidence/precision and calculated the sample size as per equation stipulated in EB 75 Annex 08, version 03.0, p. 40, Equation (55)/G-SS/. A sample size calculation spread sheet/ANN-8/ along with Survey Sample Selection spread sheet/ANN-9/ have been submitted by the PP. Verification team has assessed these spread sheets read with the registered sampling plan in the PoA-DD, applied methodology and Standard and guidelines for Sampling and Survey, and found that sampling and survey conducted by the PP is reasonable and appropriate.

C.4.2 Sampling approaches during verification

☐	No sampling approach has been used by the VT to verify the monitored parameters
☒	A sampling approach has been applied by the VT for the following monitored parameter(s):

Parameter	Sampling approach 1)	Sampling Type 2)	Sample survey Population by PP	Sample survey by VT
SOF	SiRS	AS	448	68
f_{old}	SiRS	AS	250	68
$\eta_{new,y}$	SiRS	AS	36	68

[1] *Sampling Approaches:*

SiRS:	*Simple Random Sampling*
StRS:	*Stratified Random Sampling*
SS:	*Systematic Sampling*
CS:	*Cluster Sampling*
MSS:	*Multi-stage Sampling*

[2] *Sampling Types:*

AS:	*Acceptance Sampling*
PS:	*Parameter Sampling*
COM:	*Full data check at higher data aggregation levels and sampling at original data levels*

During the on-site verification, a sampling approach has been followed by the verification team to verify the reported values for the monitored parameters of *SOF*, f_{old}, $\eta_{new,y}$, $N_{all,}$, $N_{y,I}$, $N_{CPA,}$ $E_{Saving,appliance}$ and $f_{NRB,y}$.

The sampling approach is conducted according with "Guidelines for Sampling and Surveys for CDM Project Activities and Programme Activities" and the "Standard for Sampling and Surveys for CDM Project Activities and Programme Activities". As the population is relatively homogeneous with respect to the object of the sampling effort, simple random sampling method is adopted for verification of the parameters.

Since the CPAs included in the PoA implements technologies/measures with high degree of standardization and the stove capacities in terms of energy savings per year in the CPAs are smaller than 1% of small scale CDM thresholds, the verification team decided to draw samples mainly from the project samples selected by PP. i.e. the acceptance sampling approach has been applied.

Verification team has tried the best way possible to verify the samples on site in limited time and could approach around 68 samples in total and applied the standard audit technique for data verification including the verification sampling approach and sampling results obtained by the CME/CPA implementer during the current monitoring period.

$f_{NRB,y}$ is taken from the National value for Nepal approved by UNFCCC[3] and by the Ministry of Environment, Science and Technology of Nepal .

Sample Size Calculation

According to "Best practices examples focusing on sample size and reliability calculations", the following equation is applied for sample size calculation.

$$n \geq \frac{z^2 \times N \times V}{(N-1) \times precision^2 + z^2 \times V}$$

Where:

$$V = \frac{p \times (1-p)}{p^2}$$

n	Number of elements to be sampled.
N	Total number of elements in the population, (see table below for each of the parameters)
p	Proportion: Set to 0.5 based on the very conservative estimation that 50% of the values checked are found to be incorrect.
z	Constant referring to the level of confidence (for this case 1.96 for 95% as per Guideline for Sampling and Surveys Appendix 1 §9 for SSC project activities).
precision	Required precision (for this case 10%=0.1 as per Guideline for Sampling and Surveys Appendix 1 §9 for SSC project activities).

[3] http://cdm.unfccc.int/DNA/fNRB/index.html

The following table provides the background information and how many samples of main monitoring parameter of the project activity are actually have been checked:

Parameter	Population	Maximum number of sample to be checked according to random sampling	Actual number of sample checked
SOF	448[4]	63	68
f_{old}	250	79	68
$\eta_{new,y}$	36	9	9

a. Parameter SOF

According to the values above and the conservative estimation of 50% wrong values the maximum number of values to be checked for the population of ICS in the program (395) for parameter stove operation factor (SOF) would be as following:

The details calculation for sample size for the "SOF" parameter is :

$$n \geq \frac{1.96^2 \times 448 \times \frac{0.84 \times (1-0.84)}{0.84^2}}{(448-1) \times 0.1^2 + 1.96^2 \times \frac{0.84 \times (1-0.84)}{0.84^2}} = 63.02$$

Rounding, the sample size for verification of these populations is 63.
During the on-site verification, 68 ICS could verify and the verification team interviewed end users. Hence, more than the required numbers for the sample have been verified. Based on the values from the usage survey report/ANN-3//ANN-4/, based on the underlying original data/ANN-10/, sample size calculation/ANN-8-9/ and interview outcome, the verification team calculated the data aggregation completely independent from the calculation provided by the PP.

Out of 68 samples of ICS verified by verification team onsite only 7 of improved project stove which were not in operation (i.e. around 11%). Based on this, verification team can confirm, that CME/PPs value for this parameter (SOF) is higher than the verified value of (40.7/ANNEX3-4/%) and hence usage survey is found to be acceptable and appropriate.

Usage Survey Report/Ann-3/, Usage survey analysis spread sheet/Ann-4/, sample size selection spread sheet/Ann-9/ and sample size calculation spread sheet/ANN-8/ were assessed and found to be in line with the verified observation and Guideline for sampling and survey/G-SS/.

b. Parameter f_{old}

According to the values above and the conservative estimation of 50% wrong values the maximum number of values to be checked for the population of ICS in the program (395) for parameter "**F_{old}**" (The fraction of end users that are still using baseline (replaced) stoves) would be as following:

$$n \geq \frac{1.96^2 \times 448 \times \frac{0.8 \times (1-0.8)}{0.8^2}}{(448-1) \times 0.1^2 + 1.96^2 \times \frac{0.8 \times (1-0.8)}{0.8^2}} = 79.231$$

Rounding on, the sample size for verification of weighing notes is 79.

During the on-site verification, almost 68 ICS were checked and users were interviewed if they are still using their baseline (3stone/mud stove using along with ICS). VT could not complete the desired 79 sample as calculated above in line with the guideline for sampling and survey due to inapproachability in the project area during site inspection

To further substantiate, as per the verification of household ICS and interview with the end users 10 ICS were found to be used with baseline stoves, however, around 5 stoves were outside the kitchen and used for cattle food preparation and heating purposes during the winter period.

f_{old} = 10/68*100

15% i.e. as per onsite observation and interview it was found that less than 15 % of households have been using their old stove along with ICS, which is far less than CME/PP value of 71%, and hence the user survey conducted by the CME can be concluded as conservative.

Usage Survey Report/ANN-3/, Usage survey analysis spread sheet/ANN-4/, sample size selection spread sheet/ANN-9/ and sample size calculation spread sheet were assessed and found to be in line with the verified observation and Guideline for sampling and survey/G—SS/.

As per the survey analysis spread sheet /ANN-4/, Usage Survey Report/ANN-3/ and Monitoring report, it was verified that the overall mean proportion calculated for fold is 0.6444. However, this value did not meet required confidence/precision level of 95/10 required for cross-CPA sampling. Thus the CME has opted the more conservative value of the upper bound of the confidence interval of 0.716. This approach is found to be in accordance with the applied methodology AMS-II.G version 05 and hence acceptable.

c. Parameter $\eta_{new,y}$

According to the values above and the conservative estimation of 50% wrong values the maximum number of values to be checked for the population of ICS in the program (36) for parameter $\eta_{new,y}$ (Efficiency of the device being deployed as part of the project activity in year y) would be as following:

The details calculation for sample size for this example is:

Sample size for mean value in simple random sampling as per CDM EB 75, Annex 8; Eq 67

$$n \geq \frac{1.96^2 NV}{(N-1) \times 0.1^2 + 1.96^2 V}$$

Where:

$$V = \left(\frac{SD}{mean}\right)^2$$

$$n \geq \frac{3.8416 * 48810 * 0.024}{48810 * 0.01 + 3.8416 * 0.024}$$

$$= 9.218$$

Rounding, the sample size for verification of population of thermal efficiency test is 9.
During the on-site verification, verification team has inspected 68 samples out of which 12 stoves were from exclusive WBT test samples for thermal efficiency test conducted by RETS, Nepal. WBT samples were limited in number (36) as compared to the usage survey (448) and hence sparsely distributed in the quite distant locations. Verification team has applied the technical sectoral expertise and tried contacting over phone to conduct a telephonic interview with the ICS users participated in the WBT.
Since, the parameter thermal efficiency of ICS in operation was tested in field using WBT by a third part government organization, and result of such cannot be verified by interviewing ICS users during site visit, verification team could decide the result produced by RETS as deemed appropriate. An expected mean of 27.39 was taken based on thermal efficiencies of different ICs model types (RS 1.1, RS 1.3). The same has been verified from the technical specification of ICS in the MR and supporting evidence/TECH/ and found satisfactory.

PP has selected 36 samples for WBT, which is in accordance with applied methodology AMS-II.G version 05, which stipulates the minimum sample size of 30 for thermal efficiency test.

RETS is authorized and mandated to test the cook stove under Nepal Academy of Science and Technology (NAST) Act 2048 under its clause 31. RETS has been testing ICS from 2012 and recommended by Global Alliance for Clean Cook stoves (GACC).

WBT Report by RETS/ANN-6/ May 2017, WBT Data Analysis sheet/ANN-7/, sample size selection spread sheet/ANN-9/ and sample size calculation spread sheet were assessed and found to be in line with the verified observation and Guideline for sampling and survey.

C.5. Clarification requests, corrective action requests and forward action requests raised

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
General			
Compliance of the monitoring report with the monitoring report form	-	-	-
Remaining forward action requests from validation and/or previous verification	-	-	-
Specific-case CPA(s) considered for verification and covered in this report	1	-	-
Programme of activities			
Compliance of the programme implementation with the registered PoA-DD	2	5	-
Implementation and operation of the management system	-	-	-
Post-registration changes			
• Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline	-	-	-
• Corrections	-	-	-
• Inclusion of a monitoring plan in a registered PoA-DD (including its generic CPA-DD(s))	-	-	-
• Permanent changes to the monitoring plan as described in the registered PoA-DD, applied methodology, or applied standardized baseline	-	-	-
• Changes to the programme design of the registered PoA-DD (including corresponding changes to project design of the generic CPA-DD(s)) and updates to the eligibility criteria for inclusion of specific-case CPAs in the PoA	-	-	-
• Types of changes specific to afforestation and reforestation activities	-	-	-
Component project activity(ies)			
Compliance of the CPA implementation with the included CPA design document	-	-	-
Post-registration changes			
• Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline	-	-	-
• Corrections	-	-	-
• Changes to the start date of the crediting period	-	-	-
• Inclusion of a monitoring plan to an included CPA-DD	-	-	-
• Permanent changes to the monitoring plan as described in the included CPA-DD, applied methodology, or applied standardized baseline	-	-	-
• Changes to the programme design of the included CPA-DD	-	-	-
• Types of changes specific to afforestation and reforestation component project activities	-	-	-
Compliance of the monitoring plan with the monitoring methodology including applicable tool and standardized baseline	-	-	-
Compliance of monitoring activities with the registered monitoring plan	-	-	-
• Data and parameters fixed ex ante or at renewal of crediting period	-	-	-
• Data and parameters monitored	-	3	-

Areas of verification findings	No. of CL	No. of CAR	No. of FAR
• Implementation of sampling plan	-	-	-
Compliance with the calibration frequency requirements for measuring instruments	-	-	-
Assessment of data and calculation of emission reductions or net removals			
• Calculation of baseline GHG emissions or baseline net GHG removals by sinks	-	-	-
• Calculation of project GHG emissions or actual net GHG removals by sinks	-	3	-
• Calculation of leakage GHG emissions	-	-	-
• Summary of calculation of GHG emission reductions or net GHG removals by sinks	1	-	-
• Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included specific-case CPA	-	-	-
• Remarks on difference from estimated value in registered PDD	-	-	-
Others (please specify)			
Total	4	11	0

SECTION D. Internal quality control

Before the submission of the final verification report a technical review of the whole verification procedure was carried out. Each member of the technical review team is a competent GHG auditor. At least one person of the technical review team is being appointed for the scope this project falls under. Thus the technical review team collectively has all knowledge and skills to conduct a technical review. The technical reviewers are not considered to be part of the verification team and thus not involved in the decision making process up to the technical review.
As a result of the technical review process the verification opinion and the topic specific assessments as prepared by the verification team leader may have been confirmed or revised. Furthermore reporting improvements might have been achieved.
After the successful technical review an overall (esp. procedural) assessment of the complete verification has been carried out by a senior assessor located in the accredited premises of TÜV NORD.
After this step the submission for requesting for issuance is conducted.

SECTION E. Verification opinion

SNV Netherlands Development Organisation (SNV), Nepal has commissioned the TÜV NORD JI/CDM Certification Program to carry out the periodic verification of the CDM PoA:

"Improved Cook Stove Programme with Carbon Finance (ICF), Nepal",

with regard to the relevant requirements for CDM Programme of Activities. The PoA reduces GHG emissions due to introduction of efficient and improved cook stoves in Far Western Districts Regions (FWDR) in Nepal. The PoA aims to significantly reduce fuel wood consumption of low-income Nepalese households by providing them with affordable improved cooking stoves (ICS) in replacement of their low–efficiency, unimproved traditional stoves. The ICS disseminated by the PoA are more efficient than existing traditional cookstoves, facilitating a reduction is the quantity of wood fuel that each household must consume to meet their cooking needs. This verification covers the period from 02/04/2015 - 01/04/2017 (First and last days included).

As a result of this verification, the verifier confirms that:

- all operations of the project are implemented and installed as planned and described in the validated project design document,
- the monitoring plan is in accordance with the applied approved CDM methodology, i.e., AMS-II.G, version 05.0,
- the installed equipment essential for measuring parameters required for calculating emission reductions are calibrated appropriately,
- the monitoring system is in place and functional. The project has generated GHG emission reductions,
- the GHG emission reductions are calculated without material misstatements in a conservative and appropriate manner.

TÜV NORD JI/CDM CP further confirms that the project has achieved emission reductions in the above mentioned reporting period as follows:

Emission reductions: 82,144 t CO_2 e.

SECTION F. Certification statement

As a duly accredited DOE, TÜV NORD CERT confirms that the CDM PoA

"Improved Cook Stove Programme with Carbon Finance (ICF), Nepal"

registered under

UNFCCC-No. : POA 9811

has achieved emission reductions in accordance with all applicable requirements for registered CDM project activities during the current monitoring period

CPA	MP-No.	from	to
CPA # 01	2	02/04/2015	01/04/2017
CPA # 02	2	02/04/2015	01/04/2017
CPA # 03	1	02/04/2015	01/04/2017

(including both days) as follows:

Emission reductions: 82, 144 t CO_2e.

New Delhi, 2017-08-02

Prakash Prakash Kumar Mishra
Team Leader

SECTION G. Verification findings - General

G.1. Compliance of the monitoring report with the monitoring report form

Means of verification	The project participant submitted a draft monitoring report to the verification team. The DOE has made this report publicly available prior to the start of the verification activities. No comments were received. By means of the UNFCCC website it has been checked whether the latest applicable MR template CDM-PoA-MR-FORM has been used. Further it has been checked whether the latest instructions for filling out the MR template have been followed. Every section has been checked against the respective guidance. The following sources of information have been used in this context: • /MR/ • /MRT/ • /unfccc/	
Findings	☒	The latest reporting template CDM-PoA-MR-FORM as listed on the UNFCCC website has been used for the Monitoring Report to be uploaded.
	☐	The latest instructions for filling out the MR have been followed. No adverse finding has been identified in the course of this verification.
	☐	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:
Conclusion	☒	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	☐	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

G.2. Remaining forward action requests from validation and/or previous verification

During the validation the validating DOE might have raised issues that could not be closed or resolved during the validation stage. For this purpose FARs might have been raised.
In the course of this verification the latest version of the PDD /PDD/ and the validation report/VAL/, has been checked in order to identify any remaining forward action requests. For the current monitoring period the following applies:

(i) Open issues from validation:

☒	There were no open issues which have been addressed in the latest version of the validation report.
☐	All open issues from the validation have been appropriately addressed in the context of previous verifications.
☐	All issues related to the validation have been appropriately addressed in the course of the current monitoring period (for details please refer to appendix 4)
☐	The following issues related to the validation have **not** yet been appropriately addressed (for details please refer to appendix 4):
	- N/A

(ii) Open issues from previous verifications:

☐	N/A – as this is the first monitoring period for this CDM project activity.
☒	There were no open issues which have been addressed in the previous verification report
☐	All issues related to the previous verification have been appropriately addressed in the course of the current monitoring period (for details please refer to appendix 4)

☐	The following issues related to the previous verification have **not** yet been appropriately addressed (for details please refer to appendix 4):
	- N/A

G.3. Specific-case CPA(s) considered for verification and covered in this report

Reference number of the specific-case CPA included in the PoA as of the end of this monitoring period	Is the specific-case CPA considered for this verification? (yes/no)	Version number of the registered PoA-DD to which the specific-case CPA complies with	Confirmation that a request for issuance including the specific-case CPA has been published for the previous monitoring period (Y/N)
9811-0001	Yes	06	Y
9811-0002	Yes	06	Y
9811-0003	Yes	06	N

SECTION H. Verification findings – Programme of activities

H.1. Compliance of the programme implementation with the registered programme design document

Means of verification	By means of an in-depth review of the PoA-DD/PoA-DD/ in its latest form – as downloaded from the UNFCCC project site - and the checks carried out during the on-site visits, an assessment has been carried out whether the project has been implemented and operated in line with the latest approved version of the PoA-DD and whether all physical features of the project are in place. The following has been checked: implemented technology, project equipment as well as monitoring and metering equipment. Further it is has been checked if relevant technical equipment of the project activity has been exchanged or modified during the monitoring period in PoA-DD, MR and calculation spreadsheet are applied. Interviews with operational personnel have been carried out, management system records; maintenance records, survey and related monitoring procedures were checked in this context. Special focus has further been laid to determine whether a potential phase wise implementation has occurred within the crediting period or any delays with respect to the starting dates have occurred. Further it has been checked whether any observed deviations from the registered project design have been correctly addressed as PRCs. The following sources of information have been used in this context: • /PDD/ • /MR/ • /VVS/ • /XLS/ • /QMS/ • /unfccc/	
Findings	☒	The project has been implemented as described in the latest version of the PoA-DD as well as in section B.1 of the monitoring report. No deviations thereof have been identified in the course of this verification.
	☐	The following deviations from the registered / approved project design and or the project description in the MR have been identified in the course of this verification (for further details please refer to section E.4): - N/A
	☐	In this context the following CARs, CLs have been raised:
	In case of phased implementation:	

	☒	N/A
	☐	The phased implementation has correctly and in sufficient detail been described in the latest version of the PoA-DD.
	☐	The description in section 3.1 of the MR differs in content or the level of detail from the latest version of the PoA-DD. However, the description in the MR is correct and reflects the situation during the site inspection.
	☐	The project description in the PoA-DD/MR is not deemed sufficient. The detailed implementation timeline is as follows: N/A
Conclusion	☒	No CARs/CLs have been raised in this context. No correction was required in the context. The project is in line with the respective requirements.
	☐	The raised CARs/CLs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

H.2. Implementation and operation of the management system

Means of verification	By means of review of the final PoA DD, validation report followed by an onsite inspection and interview with the CME, CPA implementer including involved personnel involved in the PoA, verification team observed that, the operation of the management system of the PoA is carried out as per the registered PoA design. It has been further checked by means of interview with the local partners of the PoA , CME and CPA implementer on their training and competency to carry out the operation of the management system, and found it satisfactory. Training records/TRNG/ submitted by CME including training on record keeping, data entry, data management, data protection, awareness etc. have also been checked during the course of verification. A clear operation and management structure have been observed during the onsite visit and interview. The following sources of information have been used in this context: • PoA DD • VAL • MR • VVS • XLS • IM • TRNG
Findings	Please refer CL F1 and CL B2 which were raised and closed successfully during course of verification. For details on the finding please refer Appendix-4
Conclusion	The project is in line with the respective requirements.

H.3. Post-registration changes

☒ By means of site visit, document check and interview it could be verified that the project is implemented and operated in line with the registered PoA-DD and the applied methodology.

☐ Post registration changes have been identified and are assessed in detail in the subsequent steps.

H.3.1. Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline

It has been checked whether Temporary deviations from the registered monitoring plan (TDfrMP) or Temporary deviations from monitoring methodology or standardized baseline (TDfMM) have been applied during this monitoring period. The result is summarized in the table below.

☒	No Temporary deviations from the registered monitoring plan (TDfrMP) or Temporary deviations from monitoring methodology or standardized baseline (TDfMM).have been submitted to the UNFCCC prior to the current monitoring period.		
☐	The following TDfrMP or TDfMM have been approved or are under approval by the UNFCCC		
	1	Title	
		Status	☐ under approval; ☐ approved (approval No.:)
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved (approval No.:)
		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a TDfrMP or TDfMM has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following TDfrMP or TDfMM is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.		
	1	Issue:	
	2	Issue:	
☐	The following TDfrMP or TDfMM for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

H.3.2. Corrections

It has been checked whether any corrections to project information or parameters fixed at validation have been approved during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	During the verification of the current MP no need for corrections has been identified.		
☐	The following corrections have been applied:		
	1	Issue:	
	2	Issue:	
	The CPA-DD has been revised accordingly: Revision date:		
	It is confirmed that the updated / corrected information is an accurate reflection of the actual project information and that the corrected parameters are in accordance with the applied		

	methodology and the monitoring plan.
	☐ A related post registration change has been submitted prior to the issuance request. The approval has been received on DD/MM/YYYY via approval number PRC-XXXX-00Z. ☐ A related post registration change is submitted along with this issuance request. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.

H.3.3. Inclusion of a monitoring plan in a registered PoA-DD (including its generic CPA-DD(s))

☒	N/A - as this monitoring plan was part of the registered PoA-DD /CPA-DD
☐	In line with PS § 281 or § 282 the PP has forwarded a monitoring plan to the DOE for validation. No prior approval of the monitoring plan was required as the PP in line with PS § 282 wished to submit the monitoring plan together with the request for issuance for the first monitoring period. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC..
☐	In line with § 282 the PP submitted a monitoring plan prior to the submission of the request for issuance for validation to the DOE. A DOE has assessed the monitoring plan in line with related VVS requirements and submitted a related PRC report for prior approval. The approval has been received on DD/MM/YYYY via approval number

H.3.4. Permanent changes to the monitoring plan as described in the registered PoA-DD, applied methodology, or applied standardized baseline

It has been checked whether any permanent changes from the registered monitoring plan (PCfrMP) or applied methodologies (PCfMM) including standardized baselines (PCfSB) have been approved prior or during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	No PCfrMP, PCfMM or PCfSB have been submitted to the UNFCCC prior to the current monitoring period		
☐	The following PCfrMP, PCfMM or PCfSB have been approved or are under approval by the UNFCCC		
	1	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a PCfrMP, PCfMM or PCfSB has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following PCfrMP, PCfMM or PCfSB is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply.		

	1	Issue:	
	2	Issue:	
☐	The following PCfrMP, PCfMM or PCfSB for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

H.3.5. Changes to the programme design of the registered PoA-DD (including corresponding changes to project design of the generic CPA-DD(s)) and updates to the eligibility criteria for inclusion of specific-case CPAs in the PoA

It has been checked whether any changes to the project design (CoPD) have been approved prior or during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	No CoPD has been submitted to the UNFCCC prior to the current monitoring period		
☐	The following CoPD have been approved or are under approval by the UNFCCC		
	1	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a CoPD has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following CoPD.is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply.		
	1	Issue:	
	2	Issue:	
☐	The following CoPD for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

H.3.6. Types of changes specific to afforestation and reforestation activities

☒	N/A - as this monitoring plan was part of the registered PDD

SECTION I. Verification findings – Component project activity(ies)

I.1. Compliance of the CPA implementation with the included CPA design document

Means of verification	CPA # 01, CPA # 02 and CPA # 03 are involved in disseminating ICS of the efficiency more than specified efficiency of 20% in the FWDR region of Nepal in order to reduce the firewood consumption by the use of conventional baseline stoves. All monitoring parameters are assessed to be monitored as per the registered monitoring plan in included CPA-DDs and registered PoA-DD.
Findings	No finding is raised in this regard.
Conclusion	CPAs (CPA # 01, CPA # 02 and CPA # 03) under verification are implemented as described in the included CPAs design documents and registered PoA-DD as verified from the CPA-DDs and registered PoA-DD downloaded from the project webpage of unfccc website and onsite observation by the verification team. It is also found to be implemented in line with the applied methodology AMS-II.G version 05.

I.2. Post-registration changes

☒ By means of site visit, document check and interview it could be verified that the project is implemented and operated in line with the registered CPA-DDs and the applied methodology.

☐ Post registration changes have been identified and are assessed in detail in the subsequent steps.

I.2.1. Temporary deviations from registered monitoring plan, applied methodology or applied standardized baseline

It has been checked whether Temporary deviations from the registered monitoring plan (TDfrMP) or Temporary deviations from monitoring methodology or standardized baseline (TDfMM) have been applied during this monitoring period. The result is summarized in the table below.

☒	No Temporary deviations from the registered monitoring plan (TDfrMP) or Temporary deviations from monitoring methodology or standardized baseline (TDfMM).have been submitted to the UNFCCC prior to the current monitoring period.		
☐	The following TDfrMP or TDfMM have been approved or are under approval by the UNFCCC		
	1	Title	
		Status	☐ under approval; ☐ approved (approval No.:)
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved (approval No.:)
		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a TDfrMP or TDfMM has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following TDfrMP or TDfMM is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.		
	1	Issue:	

	2	Issue:	
☐	The following TDfrMP or TDfMM for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

I.2.2. Corrections

It has been checked whether any corrections to project information or parameters fixed at validation have been approved during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	During the verification of the current MP no need for corrections has been identified.		
☐	The following corrections have been applied:		
	1	Issue:	
	2	Issue:	
	☐ A related post registration change has been submitted prior to the issuance request. The approval has been received on DD/MM/YYYY via approval number PRC-XXXX-00Z. ☐ A related post registration change is submitted along with this issuance request. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.		

I.2.3. Changes to the start date of the crediting period

N/A

I.2.4. Inclusion of a monitoring plan to an included CPA-DD

☒	N/A - as this monitoring plan was part of the included CPA-DD
☐	In line with PS § 281 or § 282 the PP has forwarded a monitoring plan to the DOE for validation. No prior approval of the monitoring plan was required as the PP in line with PS § 282 wished to submit the monitoring plan together with the request for issuance for the first monitoring period. Please refer to the related PRC report submitted along with this issuance request for further details w.r.t. the assessment of the PRC.
☐	In line with § 282 the PP submitted a monitoring plan prior to the submission of the request for issuance for validation to the DOE. A DOE has assessed the monitoring plan in line with related VVS requirements and submitted a related PRC report for prior approval. The approval has been received on DD/MM/YYYY via approval number

I.2.5. Permanent changes to the monitoring plan as described in the included CPA-DD, applied methodology, or applied standardized baseline

It has been checked whether any permanent changes from the registered monitoring plan (PCfrMP) or applied methodologies (PCfMM) including standardized baselines (PCfSB) have been approved prior or during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	No PCfrMP, PCfMM or PCfSB have been submitted to the UNFCCC prior to the current monitoring period		
☐	The following PCfrMP, PCfMM or PCfSB have been approved or are under approval by the UNFCCC		
	1	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a PCfrMP, PCfMM or PCfSB has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following PCfrMP, PCfMM or PCfSB is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply.		
	1	Issue:	
	2	Issue:	
☐	The following PCfrMP, PCfMM or PCfSB for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

I.2.6. Changes to the programme design of the included CPA-DD

It has been checked whether any changes to the project design (CoPD) have been approved prior or during this monitoring period or submitted with this monitoring report. The result is summarized in the table below.

☒	No CoPD has been submitted to the UNFCCC prior to the current monitoring period		
☐	The following CoPD have been approved or are under approval by the UNFCCC		
	1	Title	
		Status	☐ under approval; ☐ approved
		Appr.date	
		Ref. No.	
	2	Title	
		Status	☐ under approval; ☐ approved

		Appr.date	
		Ref.No.	
☒	During the verification of the current MP no need for a CoPD has been identified. The monitoring plan is in accordance with the approved methodology applied by the PA		
☐	An approval of the following CoPD is to be requested from the EB for the current MP as appendix 1 of the project standard does not apply.		
	1	Issue:	
	2	Issue:	
☐	The following CoPD for which appendix 1 of the PS is applicable have been applied:		
	1	Issue:	
	2	Issue:	

I.2.7. Types of changes specific to afforestation and reforestation component project activities

☒	N/A - as this monitoring plan was part of the registered PoA-DD

I.3. Compliance of monitoring plan with the monitoring methodology including applicable tool and standardized baseline

Means of verification	By means of comparison of the MR with (i) the applied CDM methodology (ii) all applicable CDM Meth tools and (iii) if applicable, a standardized baseline the verification team has checked whether the MP is in compliance with the MP related requirements of the applied methodology/tools/SB. The following sources of information have been used in this context: • /MR/ • /AMSII.G/ • /unfccc/			
Findings	☒	The MP is completely in accordance with the approved methodology applied by the CDM PoA project (last registered/approved version of the PoA-DD)		
	☒	The breakdown of MP accordance of the referenced guidlines is as follows:		
		1	Title (of the guideline)	• General guidelines for SSC CDM methodologies", "Guidelines on the demonstration of additionality of small-scale project activities" • General guidance on leakage in biomass project activities
			MP compliance	☒ full compliance ☐ findings have been raised ☐ N/A (for MP)
		2	Title (of the tool)	[NA]
			Version	[NA]
			MP compliance	☐ full compliance ☐ findings have been raised

				☒ N/A
	☐	The breakdown of MP accordance of the applicable SB is as follows:		
		1	Title (of the SB)	Name of SB
			Version	
			MP compliance	
	☐	In this context the following CARs, CLs, FARs have been raised:		
		-		
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		

I.4. Compliance of monitoring activities with the registered monitoring plan

I.4.1. Data and parameters fixed ex ante or at renewal of crediting period

Means of verification	By means of comparison of the MR and the ER calculation with the latest version of the registered PoA-DD the verification team has checked whether all parameters fixed ex-ante have been applied correctly. Further it has been checked whether the GWP for the respective period have been correctly applied. The following sources of information have been used in this context: • /MR/ • /XLS/ • /PoA-DD/ • /PS/ • /VVS/ • /unfccc/	
Findings	☒	The MR and the ER calculation have considered the parameters fixed ex-ante correctly, no deviations have been observed.
	☐	The following deviations from the parameters fixed ex-ante or at renewal of crediting period have been identified in the course of this verification: - N/A
	☒	In this context the following CARs, CLs, FARs have been raised: CL G1
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

I.4.2. Data and parameters monitored

Means of verification	During the verification all relevant monitoring parameters (as listed in chapter B.7.1 of the PoA-DD and D.7.1 of the CPA-DD) have been verified with regard to the (i) appropriateness of the applied measurement / determination method, (ii) the correctness of the values applied for ER calculation, (iii) the accuracy, and applied QA/QC measures. The results as well as the verification procedure are described parameter-wise in the project specific verification checklist (Appendix 5).
Findings	For details please refer to appendix 4

Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	It can be confirmed that all monitoring parameters have been measured / determined without material misstatements and in line with all applicable standards and relevant requirements.	

I.4.3. Implementation of sampling plan

Means of verification	The verification team has been checked whether the PPs have applied a sampling approach to determine the monitored values. Further it has been checked whether the PPs have correctly applied the implemented sampling plan including (i) description of the implemented sampling design (ii) collected data (iii) analysis of collected data (iv) demonstration on whether the required confidence/precision has been met. The following sources of information have been used in this context: • /MR/ • /XLS/ • /PoA-DD/ • Usage Survey report • Usage Survey Analysis sheet • WBT report • Sample size calculation sheet • Standard and Guideline for sampling and survey • /CPA-DD/.			
Findings	☒	For detail on the CAR/CLs please refer to appendix 5		
	☒	The PPs have applied sampling approaches for the following parameters monitored.		
		1	Parameter:	SOF
			Name:	Stove Operation Fraction – used to determine the share of distributed stoves that are still operating, measured ex-post through survey/ user feedback
			Description on how the sampling efforts and survey comply with the validated sampling plan:	Determined through Usage Survey; employed multi-stage sampling method with VDC as primary sampling unit and ICS as secondary sampling unit. Samples exceeded calculated minimum sample size for 95/10 confidence/precision.
		2	Parameter:	f_{old}
			Name:	The fraction of end users that are still using baseline (replaced) stoves.
			Description on how the sampling efforts and survey comply with the validated sampling plan:	Determined through Usage Survey; employed multi-stage sampling method with VDC as primary sampling unit and ICS as secondary sampling unit. Samples exceeded calculated minimum sample size for 95/10 confidence/precision.
			Parameter:	$\eta_{new,y}$
			Name:	Efficiency of the device being deployed as part of the project activity in year y
			Description on how the sampling efforts and survey	Determined through WBTs; employed multi-stage stratified sampling method, with VDC as primary sampling unit and ICS as

			comply with the validated sampling plan:	secondary sampling unit, stratified at secondary sampling unit by ICS type. Samples taken met calculated minimum sample size for 95/10 confidence/precision.
	☒	In this context the following CARs, CLs, FARs have been raised:		
		please refer to Appendix 4		
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.		
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.		

I.5. Compliance with the calibration frequency requirements for measuring instruments

Means of verification	This PoA is basically the distribution of improved cook stoves in the FWDR region in Nepal, where the majority of households were using 3 stone traditional woodstoves. Measurements required for monitoring does not directly require equipment and its calibration in the PP's hand. For stove efficiency test (WBT), a third party Government body is allowed to test the thermal efficiency of deployed cook stove applying Water Boiling Test. The same is checked and reviewed during the verification. The following sources of information have been used in this context: • /MR/ • /XLS/ • /PoA-DD/ • /AMSII.G/	
Findings	☒	Based on the details listed in appendix 6 the verification team can confirm that all installed monitoring equipment has been duly calibrated for this entire monitoring period.
	☐	Based on the assessment and information as per appendix 6 delay(s) in calibration have been identified. The PP has applied the maximum permissible error of the instrument to the measured values taken during the period between the scheduled date of calibration and the actual date of calibration. From the related calibration certificates and emission reduction calculation the verification team confirms that the maximum permissible error has been applied in a conservative manner so that the adjusted measured values due to the delayed calibration result in fewer claimed emission reductions. For details please refer to appendix 6
	☐	In this context the following CARs, CLs, FARs have been raised:
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

I.6. Assessment of data and calculation of emission reductions or net removals

I.6.1. Calculation of baseline GHG emissions or baseline net GHG removals by sinks

Means of verification	During the verification the calculation of baseline GHG emissions has been checked. In detail the following has been verified: • Transparency: It has been checked whether the calculation of baseline emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae.

	• Parameter consistency: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spread sheet. • Correctness: It has been checked whether the applied formulae and methods for calculating baseline emissions are in accordance with the monitoring plan and the approved methodology. • Completeness: It has been checked whether all calculations are complete and without omissions. The following sources of information have been used in this context: • /MR/ • /ANN-3//USAGE/ • /ANN-4//WBT/ • /ANN-6/ • /XLS/	
Findings	☒	The calculation of the baseline emissions was found to be fully compliant with the above stated principles. The calculations of baseline GHG emissions or baseline net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied. No errors, miscalculations, omissions, misstatements or incomplete information has been identified.
	Please refer to appendix 4 for details on findings raised during verification.	
	☐	The verification team has identified mistakes in the baseline emissions calculation or the underlying calculation approaches.
	☒	In this context the following CARs, CLs, FARs have been raised:
		CAR H1
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	Where corrections were required a revised baseline emissions calculation was prepared by the PPs and presented to the verification team. All raised issues were addressed appropriately so that it can be confirmed that the baseline calculation is overall correct.	

I.6.2. Calculation of project GHG emissions or actual net GHG removals by sinks

Means of verification	During the verification the calculation of project GHG emissions has been checked. In detail the following has been verified: • Transparency: It has been checked whether the calculation of project emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae. • Parameter consistency: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spread sheet. • Correctness: It has been checked whether the applied formulae and methods for calculating project emissions are in accordance with the monitoring plan and the approved methodology. • Completeness: It has been checked whether all calculations are complete and without omissions. The following sources of information have been used in this context: • /MR/ • /AMS-II.G/ • /XLS/.

Findings	☒	The calculation of the project emissions was found to be fully compliant with the above stated principles. The calculations of project GHG emissions or actual net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied. No errors, miscalculations, omissions, misstatements or incomplete information have been identified.
	☐	The verification team has identified mistakes in the project emissions calculation or the underlying calculation approaches.
	☐	In this context the following CARs, CLs, FARs have been raised:
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	Where corrections were required a revised PE calculation was prepared by the PPs and presented to the verification team. All raised issues were addressed appropriately so that it can be confirmed that the baseline calculation is overall correct.	

I.6.3. Calculation of leakage GHG emissions

Means of verification	During the verification the calculation of project GHG emissions has been checked. In detail the following has been verified: • Transparency: It has been checked whether the calculation of project emissions is fully traceable and, where used, the Excel calculation provides all calculation formulae. • Parameter consistency: It has been checked whether all internal and external parameters and data used for the calculation are applied consistently in the monitoring report and the calculation spreadsheet. • Correctness: It has been checked whether the applied formulae and methods for calculating project emissions are in accordance with the monitoring plan and the approved methodology. • Completeness: It has been checked whether all calculations are complete and without omissions. As per the small scale methodology AMS-II. G version 05.0 paragraph 20 and paragraph 29 (c), the net to gross adjustment factor of 0.95 has been applied to By to account for leakages, thus leakage emissions were already taken into account in the estimation of overall emission reductions The following sources of information have been used in this context: • /MR/ • /AMS-II.G/ • /XLS/.	
Findings	☒	The calculation of the project emissions was found to be fully compliant with the above stated principles. The calculations of project GHG emissions or actual net GHG removals have been carried out in accordance with the formulae and methods described in the registered monitoring plan, the applied methodology and, where applicable, the applied standardized baseline. Any assumptions used in emission or removal calculations have been justified. Appropriate emission factors, IPCC default values, GWPs and other reference values have been correctly applied. No errors, miscalculations, omissions, misstatements or incomplete information have been identified.

	☐	The verification team has identified mistakes in the project emissions calculation or the underlying calculation approaches.
	☐	In this context the following CARs, CLs, FARs have been raised:
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	Where corrections were required a revised PE calculation was prepared by the PPs and presented to the verification team. All raised issues were addressed appropriately so that it can be confirmed that the baseline calculation is overall correct.	

I.6.4. Summary of calculation of GHG emission reductions or net GHG removals by sinks

Means of verification	The verification team has checked if the MR includes a summary table of the emission reductions calculation specifying separately • Total baseline emissions, • Total project emissions, • Total leakage, • Total emission reductions. It has been assessed whether the values are correct or need to be revised as a consequence of issues identified above.	
Findings	☒	Section H.4 of the MR includes in a summary table of the emission reductions calculation.
	☒	The summary table specified the total baseline, project and leakage emissions as well as the total emission reductions separately.
	☒	The values as specified in the ER summary table are correct; no issues have been identified during the verification which requires changes in the ER calculation.
	☐	During the verification issues with impact on the ER calculation have been identified.
	☒	In this context the following CARs, CLs, FARs have been raised:
		CAR H1
Conclusion	☐	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☒	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

Specific-case CPA reference number	Baseline emissions or baseline net GHG removals by sinks (tCO_2e)	Project emissions or actual net GHG removals by sinks (tCO_2e)	Leak-age (tCO_2e)	GHG emission reductions or net GHG removals by sinks (tCO_2e)		
				achieved in the period up to 31/12/2012	achieved in the period from 1/1/2013 onwards	achieved in the entire monitoring period
9811-0001	34,425	0	0	N/A	34,425	34,425
9811-0002	33,994	0	0	N/A	33,994	33,994
9811-0003	13,725	0	0	N/A	13,725	13,725
Total	82,144	0	0	N/A	82,144	82,144

The year wise emission reductions per CPA is presented in table below:

CPA	ERy (tCO2e)			
	2015	2016	2017	Total
CPA # 01	12,904	17,237	4,286	34,425
CPA # 02	12,615	17,122	4,257	33,994
CPA # 03	3,535	8,162	2,029	13,725
Total	29,053	42,520	10,571	82,144

I.6.5. Comparison of actual GHG emission reductions or net GHG removals by sinks with estimates in included specific-case CPA

Means of verification	The verification team has checked if the MR includes a comparison of actual values of the monitoring period with the estimations in the registered PoA-DD. It has further checked which of the below listed cases is applicable for the calculated ER of the current monitoring period.	
Findings	☒	*Case 1:* The ex-ante estimated value was found to be proportionally higher than the ex-post determined value. No further action is deemed required.
	☐	*Case 2:* The ex-ante estimated value fits very good to the actually monitored value. No further justification is deemed required.
	☐	*Case 3:* The ex-ante estimated value was found to be proportionally lower than the ex-post determined value.
	☐	In this context the following CARs, CLs, FARs have been raised:
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.

Specific-case CPA reference number	ER_y estimated in ex ante calculation in the included specific-case CPA-DD(s) (tCO_2e)	Actual ER_y achieved by the specific-case CPA(s) during this monitoring period (tCO_2e)
9811-0001	83,288	34,425
9811-0002	82,793	33,994
9811-0003	70,129	13,725
Total	236,210	82,144

I.6.6. Remarks on difference from estimated value in registered PDD

Means of verification	On the basis of the above comparison of actual values of the monitoring period with the estimations in the registered PoA-DD (E.8.5) the verification team has checked whether (in case 3) an appropriate explanation is included in the MR.	
Findings	☒	No further justification or explanation is deemed required as actual emissions of this MP do not exceed significantly the ex-ante calculated emission reductions (applicable for case 1 and 2).
	☐	*For case 3:* The PP has provided a related justification in the MR. The reasons for the increase are as follows: - N/A
	☐	In this context the following CARs, CLs, FARs have been raised:

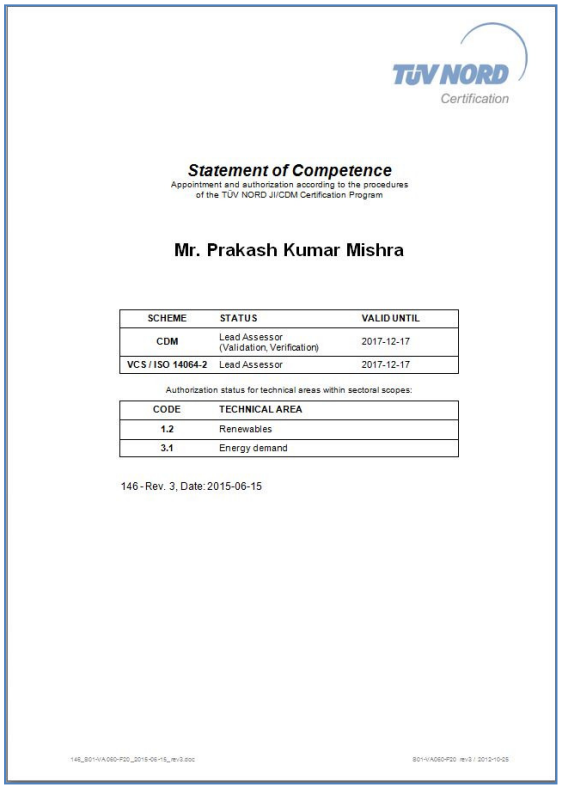
Conclusion	☒	No CARs/CLs/FARs have been raised in this context. No correction was required. The project is in line with the respective requirements.
	☐	The raised CARs/CLs/FARs have been addressed appropriately. The PP has carried out the requested corrections. All respective findings could be closed out. For details please refer to Appendix 4.
	The actual emission reduction accrued during the monitoring period does not exceed from the estimated value in the registered PoA-DD. The justifications provided were found to be reasonable and the team has verified the underlying facts.	

Appendix 1. Abbreviations

Abbreviations	Full texts
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CO_2	Carbon dioxide
CO_{2eq}	Carbon dioxide equivalent
CL	Clarification Request
CME	Co-ordinating Managing Entity
CRT/N	Centre for Rural Technology Nepal
DVerR	Draft Verification Report
ER	Emission Reduction
FAR	Forward Action Request
FWDR	Far Western Development Region
GHG	Greenhouse gas(es)
ICS	Improved cooking stoves
IM	Interview Memo
LPO	Local Partner Organisation
MP	Monitoring Plan
MR	Monitoring Report
PA	Project Activity
PDD	Project Design Document
PCP	Project Cycle Procedure
PP	Project Participant
PS	Project Standard
QA/QC	Quality Assurance / Quality Control
RDSC	Regional Development Service Centre
RETS	Renewable Energy Testing Station
SNV	SNV Netherlands Development Organisation

Abbreviations	Full texts
UNFCCC	United Nations Framework Convention on Climate Change
VDC	Village Development Committee
VVS	Validation and Verification Standard
WBT	Water Boiling Test
XLS	Emission Reduction Calculation Spread Sheet

Appendix 2. Competence of team members and technical reviewers



TÜV NORD Certification

Statement of Competence
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

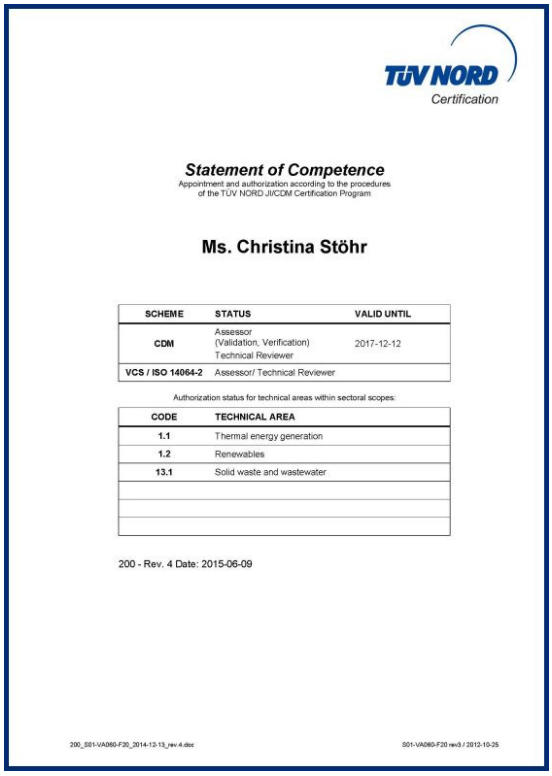
Mr. Prakash Kumar Mishra

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2017-12-17
VCS / ISO 14064-2	Lead Assessor	2017-12-17

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy demand

146 - Rev. 3, Date: 2015-06-15



TÜV NORD Certification

Statement of Competence
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

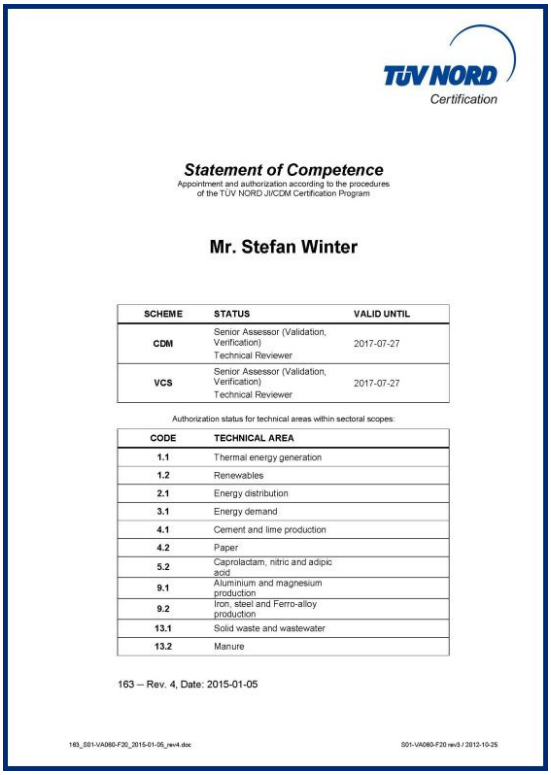
Ms. Christina Stöhr

SCHEME	STATUS	VALID UNTIL
CDM	Assessor (Validation, Verification) Technical Reviewer	2017-12-12
VCS / ISO 14064-2	Assessor/ Technical Reviewer	

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
13.1	Solid waste and wastewater

200 - Rev. 4 Date: 2015-06-09



TÜV NORD Certification

Statement of Competence
Appointment and authorization according to the procedures of the TÜV NORD JI/CDM Certification Program

Mr. Stefan Winter

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2017-07-27
VCS	Senior Assessor (Validation, Verification) Technical Reviewer	2017-07-27

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal energy generation
1.2	Renewables
2.1	Energy distribution
3.1	Energy demand
4.1	Cement and lime production
4.2	Paper
5.2	Caprolactam, nitric and adipic acid
9.1	Aluminium and magnesium production
9.2	Iron, steel and Ferro-alloy production
13.1	Solid waste and wastewater
13.2	Manure

163 – Rev. 4, Date: 2015-01-05

Appendix 3. Documents reviewed or referenced

No.	Author	Reference	Title	References to the document	Provider
1	UNFCCC	/**AMSII.G**/	Energy efficiency measures in thermal applications of non-renewable biomass"	http://cdm.unfccc.int	Other
2.	SNV	/**AGGR**/	Usage Survey Agreement between SNV and RDSC	18/10/2014	
3	Consultant	/**ANN-2**/	ER calculation spread sheet ver.04	03/07/2017	Other
4	Consultant	/**ANN-3**/	Usage Survey Report ver 01	May 2017	Other
5	Consultant	/**ANN-4**/	Usage Survey Data Analysis ver01	May 2017	other
6	RETS	/**ANN-6**/	WBT Report of ICS RS (1.1,1.3 and 3.1)	May 2017	Other
7	RETS/Consultant	/**ANN-7**/	WBT Data Analysis sheet	May 2017	Other
8		/**ANN-8**/	Sample Size Calculation sheet	May 2017	Other
9	CME	/**ANN-9**/	Survey sample selection sheet	March 2017	Other
10	CME/CRT	/**ANN-10**/	Detailed Customer Database version 02	03/07/2017	CME
11	CME/SNV	/**SD-CPA#3**/	Installation completion Receipt for ICF054065	09/04/2015	CME
11	CME	/**ANN-14**/	SNV Internal Audit Report	Feb 2016	CME
12	DOE	/**CPM**/	TÜV NORD JI / CDM CP Manual (incl. CP procedures and forms)		Other
13	IPCC	/**IPCC**/	1. 1996 IPCC Guidelines for National Greenhouse Gas Inventories: work book 2. 2006 IPCC Guidelines for National Greenhouse Gas Inventories: work book	www.ipcc-nggip.iges.or.jp	Other
14	UNFCCC	/**KP**/	Kyoto Protocol (1997)	http://unfccc.int/kyoto_protocol/items/2830.php	Other
15	UNFCCC	/**MA**/	Decision 3/CMP. 1 (Marrakesh – Accords)	http://cdm.unfccc.int/Reference/COPMOP/index.html	Other
16	UNFCCC	/**MRT**/	Monitoring report form for CDM programme of activities 1	https://cdm.unfccc.int/Reference/PDDs_Forms/index.html	Other
17	UNFCCC	/**POADD**/	Project Design Document for CDM PoA project: "**Fehler! Verwenden Sie die Registerkarte 'Start', um x ProjectTitle dem Text zuzuweisen, der hier angezeigt werden soll.**Improved Cook Stove Programme with Carbon Finance (ICF), Nepal" version 06, dated 2013-12-05		Other
18	DOE	/**PRC-VLR**/	VALIDATION REPORT ON POST-REGISTRATION CHANGES	-	Other

No.	Author	Reference	Title	References to the document	Provider
			(PRCS) of CPA # 01 of PoA 9811		
19	UNFCCC	/**PS**/	CDM Project Standard (Version 9.0)	http://cdm.unfccc.int/Reference/Standards/index.html	Other
20	PP	/**VAL**/	Validation Report for CDM project "Improved Cook Stove Programme with Carbon Finance (ICF), Nepal version 01 dated 2013-12-09	09/12/2013	Other
21	Manufacturer	/**TECH**/	Technical specification of ICS	-	Other
22	UNFCCC	/**VVS**/	CDM Validation and Verification Standard (Version 09.0)	http://cdm.unfccc.int/Reference/Standards/index.html	Other
23	UNFCCC	/**G-SS**/	"Guidelines for Sampling and Surveys for CDM Project Activities and Programme Activities" (Version 03.0) "Standard for Sampling and Surveys for CDM Project Activities and Programme Activities" (version 4.1)	https://cdm.unfccc.int/Reference/Guidclarif/index.html http://cdm.unfccc.int/Reference/Standards/index.html	Other
24	UNFCCC	/**GOT**/	Glossary "CDM terms" (version 08.0)	https://cdm.unfccc.int/filestorage/e/x/t/extfile-20150226124447549-glos_CDM.pdf/glos_CDM.pdf?t=UmZ8bnFjODI3fDCW9A3vJwR03kQQh4sbLiYu	Other
25	PP	/**MR**/	"Improved Cook Stove Programme with Carbon Finance (ICF), Nepal" Ver 01, dated 22/05/2017 Ver 02, dated 03/07/2017 Ver 03, dated 28/07/2017 Ver 04, dated 31/07/2017		CME
26	PP	/**WBT-PRT**/	Water boiling Test protocol version 4.2.3 dated 19/03/2014		CME
27	PP	/**TRNG**/ /**ANN-16-17**/	• Annual Report of CRT/N covering Jan 2013 to Dec 2013 dated Jan 2014 • Annual Report of CRT/N covering Jan to Oct 2014 dated Nov 2014 • Usage Survey report attachment		Other

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

Table 3. Remaining FAR from validation and/or previous verification

FAR ID		**Section no.**		**Date:** DD/MM/YYYY
Description of FAR				
NO FAR is raised during the verification.				
Project participant response (1st round)				**Date:** DD/MM/YYYY
Documentation provided by project participant (1st round)				
☐	Changes in the PoA-DD	Section(s):		New version No.:
☐	Changes in the CPA-DD	Section(s):		New version No.:
☐	Changes in MR	Section(s):		New version No.:
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other: Internal Audit report			
DOE assessment (1st round)				**Date:** 14/07/2017
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☐ The finding is closed			

Table 4. CL from this verification

CL ID	CL B1	**Section no.**	B.1	**Date:** 24/06/2017
Description of CL				
As per section B.1 of the monitoring report and interview with partner organisation and SNV, it was found that due to lack of funding, no new installation and replacements of improved project stoves are in place. Moreover, as per the review of database and interview with personnel on ground, it was also observed that stoves were only installed until November 2015, however section B.1 of the MR is not consistent with same (October 2015). Clarification is requested.				
Project participant response (1st round)				**Date:** 06/07/2017
Updated section B.1 of the MR to state that no new or replacement ICS were installed after November 2015, as demonstrated in Table 10.				
Documentation provided by project participant (1st round)				
☐	Changes in the PoA-DD	Section(s):		New version No.:
☐	Changes in the CPA-DD	Section(s):		New version No.:
☒	Changes in MR	Section(s): B.1		New version No.: 2
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
DOE assessment (1st round)				**Date:** 14/07/2017
Revised MR submitted by PP is assessed and found reasonable. The updated/corrected information on installation of improved project cook-stoves which were not installed and replaced traditional stoves after Nov 2015 was added. This is in line with onsite observation and assessment of detailed customer database/Ann-10/.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CL ID	CL B2	**Section no.**	B.1	**Date:** 24/06/2017
Description of CL				
Webhosted MR Section B.1 under subsection (f) mentions that there are number of improvements implemented, same has to be clarified with documentary evidence.				
Project participant response (1st round)				**Date:** 06/07/2017
Included evidence for each improvement in line with description, copied below with description of evidence in bold.				

- Data Security: improved filing procedures for and back-up records of Sales Agreements and Installation Completion Receipts. **Demonstrated on site, ICF number printed on both Sales Agreement and Installation Completion Receipt, filed together in filing cabinets labelled with ICF number range for easier access.**
- Database: improved data cleaning measures to spot inaccuracies and internal audits, system for tracking replacement ICS and linking new ICS to replaced, and inclusion of CDM Usage Survey monitoring records. **Internal audit report provided in ANNEX 14 - SNV Internal Audit Report, linking of replacement ICS and new ICS demonstrated on site in database and in ANNEX 10 - Detailed Customer Database; CDM Usage Survey monitoring records from 2015 and 2017 included in ANNEX 10 - Detailed Customer Database.**
- User feedback: SNV led the project partners in developing an improved mechanism for receiving feedback from users. The district energy units were trained further on how the overall program operates and what their role is in satisfying the need and suggestion from user and different stakeholders. Promoters provided feedback to LPOs in regular meetings; DTC collects that feedback and presents them in regular monthly meetings with CRT/N. Further, additional grievance process books were placed in DDC/Energy unit and at the offices of RDSC & CRT/N to provide more opportunity for users to register any feedback. **Documentation of these improvements is not available at time of verification, but shall be presented at next verification.**
- Internal audits: SNV conducts internal audits periodically while the program was operating, and conducted a further database internal audit in preparation for the second verification. **Internal audit report provided in ANNEX 14 - SNV Internal Audit Report.**

Documentation provided by project participant (1st round)		
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:
☒ Changes in MR	Section(s): B.1	New version No.: 2
☐ Changes in XLS	Worksheet(s): ER (Ann3)	New version No.:
☐ Other:		

DOE assessment (1st round)	**Date:** 14/07/2017

As per interview and assessment of recording keeping process, it was found that PP has implemented the procedure for data protection, backup and marking for all the project related records including Installation completion receipt, warranty sheets and all soft copy data including PoA database/ANN-10/.

It was also observed that SNV conducts an annual internal audit in order to enhance the quality of data entered into the database and record keeping. PP has also submitted the internal audit report/ANN-14/ which is assessed to be acceptable and hence.

Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CL ID	CL F1	**Section no.**	F	**Date:** 24/06/2017

Description of CL

As found out during the onsite visit and interview, that SNV ICF regional office is closed from Dadelldhura (FWDR) region and all PoA related aspects are handed over to RDSC (partner organization) Doti. However this information is not in the MR. it is not clear how the implementation of management system including data generation, transferring and recording will not be impacted.

Project participant response (1st round)	**Date:** 06/07/2017

As noted in section F, the processes described were conducted through February 2016 when project operations and installation of ICS temporarily stopped. Included the following sentence in section F to address the clarification:

"As noted in section B.2, prior to restart of sales and distribution, SNV will ensure that all project partners are trained to implement required roles and responsibilities listed below to ensure that implementation of the management system including data generation, transferring, and recording will not be impacted once the sales and distribution restarts. Moreover the personnel handling the records at RDSC office had been trained and served as assistant to Database Manager at the ICF headquarters office since 2014."

Documentation provided by project participant (1st round)		
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:

☒	Changes in MR	Section(s): F	New version No.: 2
☐	Changes in XLS	Worksheet(s): ER (Ann3)	New version No.:
☐	Other:		

DOE assessment (1st round)	**Date:** 14/07/2017

PP has submitted the revised MR and same was assessed to be included with the information on the closure of SNV regional office and handing over the entire procedure to RDSC office.

Verification team has also interviewed the personnel involved in data generation, reporting, recording and maintenance and found them well trained and aware about the SNV management system for the PoA. Also it was found that person responsible for data entry and generation on computer was initially deputed in the SNV Dadeldhura office and completely trained.

Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CL ID	G1	**Section no.**	G	**Date:** 24/06/2017

Description of CL

As per the registered PoA-DD and CPA-DD, every stove disseminated under the PoA should have a serial number in order to avoid any double counting and also for the accurate traceability.

However, during onsite visit and interview with the improved cookstove users, it was observed that, around 7% (5 out of 68) of serial numbers could not be legible. How it is ascertained that the traceability and double counting of the stove will not be impacted.

Documentation provided by project participant (1st round)

The program continues to seek methods of improvement to ensure readability of the Stove Number (serial number) on the ICS. The Stove Number is imprinted on the metal top plate, which is the only accessible metal part of the ICS when it is installed. While the promoters have been trained to cover the Stove Number with mud to preserve it, sometimes the mud comes off and the Stove Number becomes less readable with regular stove use. Further, the ICS are typically located in dark kitchens which make it difficult to view the Stove Number. Although in 8% of cases (5 out of 68) visited on verification the Stove Number was not fully legible, typically at least some of the numbers were legible which could be used to partially compare to the records.

In addition to the Stove Number, multiple identifying pieces of household information are collected with the Installation Completion Receipt and stored in the database with the ICS Stove Number, including user name, gender, and location (Tole, Ward, VDC, District), along with the date of sale and installation and ICS model. This information is used in addition to the Stove Number to trace individual ICS at each household and ensure no double counting.

Further, the Installation Completion Receipt together with the Sales Agreement is filed together and input in the database. Upon inclusion in the database, a second unique number is ascribed to each ICS, the ICF code, which is recorded on both the Sales Agreement and Installation Completion Receipt. The two unique codes, the ICF Code and Stove Number are used to track each individual stove along with corresponding household information. During project implementation, this was checked ongoing per the QA/QC measures described in section F, including through ongoing spotchecks by the LPO and District Technical Coordinator and RDSC, which further assures no double counting.

Lastly, on site the local Promoter who was responsible for installing the stove can further identify the household and ICS. In addition to the printed Stove Number on the ICS, upon installation the Promoter provides the user household with a User Manual which includes the Installation Completion Receipt and the Stove Number. For households that retained this User Manual as advised by the Promoter, this serves as an additional check.

Project participant response (1st round)		**Date:** 06/07/2017
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:
☐ Changes in MR	Section(s):	New version No.:
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		

DOE assessment (1st round)	**Date:** 14/07/2017

Based on experience during on the site visit while verifying stoves´ serial number the verification team

accepts the argument of PP. The positioning of the stoves (mainly very small kitchen with almost no light there) and the mud cover of ICS metal plates made it difficult to read the exact unique serial numbers. However, through the promoter of the stoves same can be confirmed and further compared with the additional installation completion receipt at RDSC/SNV office and also read with PoA Database.

Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

Table 5. CAR from this verification

CAR ID	CAR A 1	**Section no.**	A.1.2	**Date:** 24/06/2017
Description of CAR				
Crediting period start date mentioned for CPA # 03 under section A.1.2 and section D.1 of the MR is not consistent with the monitoring period start date (date on which first ICS under CPA # 03 was installed) as verified during onsite visit document review. Correction is required. Moreover, record for the sale of first ICS is required to be submitted. Moreover, as per the signed contract and information in the Monitoring report, CPA # 03 has the first monitoring period, however first page of the MR do not clearly mention the MP of all 3 CPAs under this MR separately. Furthermore, as verified from the data, the first stove installation took place on 9/04/2015 which is not in conformity with the Date of monitoring period mention in The MR.				
Documentation provided by project participant (1st round)				
Corrected crediting period start date for CPA # 03 under section A.1.2 and section D.1 to 09/04/2015, date of installation of first ICS included in CPA. Monitoring period number and dates are further corrected for all CPAs throughout MR, to reflect the following: **CPA # 01, CPA # 02:** - Monitoring Period: 2 - Dates: 02/04/2015 -01/04/2017 (First and last days included) **CPA # 03:** - Monitoring Period: 1 - Dates: 02/04/2015 - 01/04/2017 (First and last days included; 09/04/2015 is installation date of first ICS included)				
Project participant response (1st round)				**Date:** 06/07/2017
☐	Changes in the PoA-DD	Section(s):		New version No.:
☐	Changes in the CPA-DD	Section(s):		New version No.:
☒	Changes in MR	Section(s): A.1.2, D.1		New version No.: 2
☐	Changes in XLS	Worksheet(s):		New version No.:
☐	Other:			
DOE assessment (1st round)				**Date:** 14/07/2017
Revised monitoring report is found to be corrected with regards to number of monitoring periods for particular CPAs and also the crediting period starting date. CPA #1 and CPA #2 is under 2nd periodic monitoring period however CPA #3 is applied for verification under 1st periodic verification. Under CPA #3 the date of monitoring period is mentioned as the start date of crediting period i.e. 02/04/2015. The CPA# 03 was included on 19/12/2014 as verified from the PoA webpage from UN site. Based on the interview with CME, it was observed and verified from the ER calculation spreadsheet that CME is chose to start the crediting period from the CPA inclusion however the ER claim is accounted from 09/04/2015 onwards. CAR A1 is successfully closed out.				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	CAR B1	**Section no.**	B.2	**Date:** 24/06/2017
Description of CAR				
Under table 2, section B.2 of the webhosted MR the expected value for each parameter is not in line with Annex-08 (sample size calculation). Correction required.				
Documentation provided by project participant (1st round)				
Corrected in Table 2, and included in Summary table of Annex 08. Expected values are based on calculated values from Monitoring Period 1 Usage Survey and WBT survey.				
Project participant response (1st round)				**Date:** 06/07/2017
☐	Changes in the PoA-DD		Section(s):	New version No.:
☐	Changes in the CPA-DD		Section(s):	New version No.:
☒	Changes in MR		Section(s): B.2	New version No.: 2
☒	Changes in XLS		Worksheet(s): Annex 8, Summary	New version No.: 2
☐	Other:			
DOE assessment (1st round)				**Date:** 14/07/2017
Revised MR was assessed against the Annex-8 and the usage survey and WBT reports and found all values under table 2, section B.2 of the MR for each parameter is in line with Annex-08 (sample size calculation).				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	CAR B3	**Section no.**	B.2	**Date:** 24/06/2017
Description of CAR				
The total number of ICS in use (M) under table 4 of section B.2 of the MR, and as assessed from usage Survey report are not consistent with the value presented in the spreadsheet, i.e. Usage Survey report, usage Survey Analysis and ER calculation spreadsheet (Annex-3, Annex-4 and Annex-02) Table 6 of the MR with regards to value presented is also not in line with the database.				
Documentation provided by project participant (1st round)				
Corrected values in MR Tables 3, 4, and 6 to align with values in **ANNEX 2** - ER Calculations, **ANNEX 3** - Usage Survey Report, and **ANNEX 4** - Usage Survey Analysis.				
Project participant response (1st round)				**Date:** 06/07/2017
☐	Changes in the PoA-DD		Section(s):	New version No.:
☐	Changes in the CPA-DD		Section(s):	New version No.:
☒	Changes in MR		Section(s):B.2	New version No.: 2
☐	Changes in XLS		Worksheet(s):	New version No.:
☐	Other:			
DOE assessment (1st round)				**Date:** 14/07/2017
Table 4 and table-6 are found to be corrected in the revised MR. They are in line with all spread sheets (Annex-3, Annex-4 and Annex-02).				
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	CAR D1	**Section no.**	D.1	**Date:** 24/06/2017
Description of CAR				
Section D.1 of the webhosted MR after table 7 describes about warranty and replacement policy of the specific CPAs. However the provision for replacement and warranty is not found described as per the previous monitoring report (issued) and registered CPA-DD. Moreover, as per the review of the database, Annex-10, that only 14 ICSs have been replaced however as per this section 21 ICS have been replaced. Please justify				
Documentation provided by project participant (1st round)				
Included description of warranty and replacement policy as present in CPA-DD and previous monitoring report, in addition to the following sentence: "Once the program begins installing ICS again, expected in fall of 2017, this warranty and replacement provision will continue to be implemented."				

Correction made to include that only 14 ICS have been replaced, as demonstrated in ANNEX 10 and in section D.1, per review of database.		
Project participant response (1st round)		**Date:** 06/07/2017
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:
☒ Changes in MR	Section(s): D.1	New version No.: 2
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		**Date:** 14/07/2017
Revised MR is assessed to be in conformity with Annex-10 and acceptable to the verification team.		
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	CAR D2	**Section no.**	D.1	**Date:** 24/06/2017
Description of CAR				
Section D.1 of the Monitoring report is inconsistent with the project database (Annex-10)-Detailed customer Database-Iss-V2 and the value presented in Table 10 and write up above.				
Documentation provided by project participant (1st round)				
Corrected section D.1 to be consistent with ANNEX 10 - Detailed Customer Database, reflecting the accurate number of ICS installed in CPA # 02 and CPA # 03; and the correct number of ICS excluded due to not crediting replacements to avoid double counting (14 ICS), and RS 3.1 model ICS remaining in database (195, same as previous monitoring period).				

Project participant response (1st round)		**Date:** 06/07/2017
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:
☒ Changes in MR	Section(s): D.1	New version No.: 2
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		**Date:** 14/07/2017
Revised MR submitted by PP was assessed to be correct and consistent with the Detailed Customer Database/ANN-10/.		
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	CAR F1	**Section no.**	Section F, B	**Date:** 24/06/2017
Description of CAR				
As per the assessment of section B and section F of MR and Sample size calculator; Annex-08, the number of samples required to achieve the required confidence interval for the parameter f_{old} are not found to be followed the by the PP while conducting sampling for this parameter. PP is requested to clarify, how the results out of inadequate samples were not impacted for this parameter for the calculation of accrued emission reduction during the applied monitoring period.				
Documentation provided by project participant (1st round)				
Included the following to section B.2, demonstrating that the lower number of samples had a conservative effect, if any on the calculation of emission reduction during the applied monitoring period: "This provides further evidence for the infeasibility of meeting the calculated sample size of 950. With 448 households surveyed, the sample size for fold was only 250 (55.8%). To reach 950 samples for fold, a total of 1702 households would have to be surveyed. This would require at least 8 months of surveying and significantly more resources to conduct. While the number of samples for f_{old} was lower than the calculated value of 950, the effect, if any, is conservative on the calculation of emission reductions for this monitoring period. Without reaching the sample size to meet the required confidence/precision level, the upper bound of the confidence interval was applied for the value of f_{old}, which results in a decrease in emission reductions."				

Project participant response (1st round)		**Date:**
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:

☒	Changes in MR	Section(s): B.2	New version No.: 2
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
DOE assessment (1st round)			**Date:** 14/07/2017
Based on onsite visit and interview with local Survey team, it can be deemed acceptable that reaching a number of 950 as per the sample size calculator based on Standard for sampling and survey would have been difficult. Moreover, considering the type of parameter under monitoring and sample size selection by the PP, and applying upper bound value of the confidence interval i.e. 71.6% of f_{old} is deemed conservative and hence acceptable.			
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	CAR G1	**Section no.**	Section G2	**Date:** 24/06/2017
Description of CAR				
A consolidated CAR is raised on monitoring parameter $f_{NRB,y}$" and "N_{all}" section G.2 as follows: 1. Values of "$f_{NRB,y}$" for year 2016 are not found included in the section G.2 of the MR 2. The value of parameter "Nall" provided under MR for CPA#03 is not correct and consistent with the ER calculation spreadsheet and database. 3. Source of data and reference provided for parameter Nall under G.2 of the MR are not correct. 4. For parameter "Nall" under the information about the way monitoring (measured/calculated/default), date of measurement/calculation of the parameter is not found appropriate. Moreover, this parameter is calculated or recorded not measured.				
Documentation provided by project participant (1st round)				
All values corrected in section G.2.				

Project participant response (1st round)			**Date:**
☐	Changes in the PoA-DD	Section(s):	New version No.:
☐	Changes in the CPA-DD	Section(s):	New version No.:
☒	Changes in MR	Section(s): G.2	New version No.: 2
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
DOE assessment (1st round)			**Date:** 14/07/2017
Revised section G.2 of the revised MR was checked and found corrected with the values of "$f_{NRB,y}$" and N_{All} along with the measurement methods and type of monitoring (Measured/calculated/recorded).			
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	CAR G2	**Section no.**	G.2	**Date:** 24/06/2017
Description of CAR				
The value of SOF as verified from Annex-4 Usage Survey analysis and ER calculation spreadsheet is found rounded up (0.407 to 0.41) which is not acceptable as it impacts the overall ER calculation on higher side. Reference provided for source of data is not found correct and CPA # 03 was also not found included as this MR include CPA # 01, CPA # 02 and CPA # 03 under verification under current monitoring period.				
Documentation provided by project participant (1st round)				
The value of SOF is corrected to 0.407 and is consistent in the MR, ANNEX 2 - ER Calculations, and ANNEX 4 - Usage Survey Data Analysis. Reference is corrected to demonstrate that the same value for SOF is applied to CPA # 01, CPA # 02, and CPA # 03 in accordance with applied cross-CPA sampling.				
Project participant response (1st round)				**Date:** 06/07/2017

☐	Changes in the PoA-DD	Section(s):	New version No.:
☐	Changes in the CPA-DD	Section(s):	New version No.:
☒	Changes in MR	Section(s): G.2	New version No.: 2
☒	Changes in XLS	Worksheet(s): ANNEX 4- Usage Survey, ANNEX 2-ER calculation	New version No.:2, 2
☐	Other:		

DOE assessment (1st round)	**Date:** 14/07/2017
Value of parameter is found to be rounded down in the revised MR, ER calculation spread sheet and ANNEX 4 - Usage Survey Data Analysis. The MR, ER and Annex 4 have been checked.	
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	CAR G3	**Section no.**	G.2	**Date:** 24/06/2017

Description of CAR

Usage survey and WBT are found to be conducted couple of months later than biennial frequency as per the registered monitoring plan (last survey/WBT dated Jan-March 2105 and current survey March-May 2017).

This is not in line with monitoring frequency as set out in the registered monitoring plan. Justification needed if this delay in usage survey and WBT for almost 2 months has any impact on overall accrual of emission reduction by the PoA.

Documentation provided by project participant (1st round)

Both Usage Survey and WBT Survey were scheduled to be conducted within two years of previous rounds of surveys, but were slightly delayed due to funding constraints. The second verification was initially planned in 2016, but was delayed due to funding. The Usage Survey and WBT were conducted for the purposes of the verification and issuance, and required funding and a plan for verification and issuance in place prior to start.

The prior Usage Survey was completed in March 2015, the current completed in May 2017. The prior WBT Survey was completed in February 2015, the current completed in April 2017. The delay can be expected to have no impact, or a conservative impact, on emission reduction of the PoA.

As no new ICS were installed during the two month delay period (March 2017-May 2017 for Usage Survey; February 2017 - April 2017 for WBT survey), the population of ICS was collectively two months older during the applied survey period. As expected, and demonstrated in comparison of results from the first to second monitoring period, an older population of ICS have a lower usage rate and lower efficiencies. While this minimal delay of 2 months due to funding considerations is expected to have a negligible impact on findings, any impact it may have would be conservative, resulting in lower calculated emission reductions. Future surveys will be completed within the biennial requirement.

Language added in 'Additional Comment' section of SOF, f_{old}, and $\eta_{new,y}$ parameter boxes.

Project participant response (1st round)			**Date:**
☐	Changes in the PoA-DD	Section(s):	New version No.:
☐	Changes in the CPA-DD	Section(s):	New version No.:
☒	Changes in MR	Section(s): G.2	New version No.: 2
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

DOE assessment (1st round)	**Date:** 14/07/2017

Based on the interview with the CME and CPA implementer, it was learnt that funding was the main constrain to conduct the Survey in scheduled time. Due this reason the entire verification process got delayed as the verification was planned on annual basis. This can be understood by the verification team as same team performed the previous verification and had an opportunity to interview the Eneco Energy Carbon cell head (one of the funding agency of this verification in Nepal to SNV), SNV representatives etc.

Moreover, conducting the survey couple of months later than specified frequency i.e. 2 years, may not have considerable impact on accrual and calculation of emission reduction overall. Based on sectoral expertise of the verification team, PP's arguments can be acceptable considering further monitoring

frequency shall be maintained by the PP in future.

Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	CAR G4	**Section no.**	G.2	**Date:** 24/06/2017
Description of CAR				
As per Annex-4 (Usage Survey analysis) and Annex-02, ER calculation spreadsheet, the value of fold is not consistent with the value presented in the webhosted monitoring report.				
Documentation provided by project participant (1st round)				
The value of f_{old} is corrected to 0.716 and is consistent in the MR, ANNEX 2 - ER Calculations, and ANNEX 4 - Usage Survey Data Analysis.				

Project participant response (1st round)			**Date:** 06/07/2017
☐	Changes in the PoA-DD	Section(s):	New version No.:
☐	Changes in the CPA-DD	Section(s):	New version No.:
☒	Changes in MR	Section(s): G.2	New version No.: 2
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

DOE assessment (1st round)	**Date:** 14/07/2017
The value of the parameter f_{old} is found corrected to 0.716 in all the related documents including revised MR, ER calculation spreadsheet and Usage Survey Analysis/ANN-4/.	

Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	G5	**Section no.**		**Date:** 24/06/2017
Description of CAR				
Although the value provided for the parameter η_{new} is correct and in line with the WBT report and analysis sheet, however reference to the cell is not correct. Correction for all the references are required as per the comments in the MR al also required.				
Documentation provided by project participant (1st round)				
All references in the MR parameter boxes have been corrected to the correct cell in the relevant annexes.				

Project participant response (1st round)			**Date:** 07/06/2017
☐	Changes in the PoA-DD	Section(s):	New version No.:
☐	Changes in the CPA-DD	Section(s):	New version No.:
☒	Changes in MR	Section(s): G.2	New version No.: 2
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		

DOE assessment (1st round)	**Date:** 14/07/2017
All references in the MR parameter boxes have been found to be corrected and exact cell in the relevant annexes/spreadsheets.	

Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed

CAR ID	H1	**Section no.**	H	**Date:** 24/06/2017
Description of CAR				

A consolidate CAR is raised on section H of the webhosted MR as follows:

1. Value of $E_{Saving\ appliance}$ is not correct and in line with the value presented in ER calculation spreadsheet. As per the calculation it should be 0.008 GWhth/year. Moreover unit for the same parameter is required to be corrected.
2. Unit for SSC threshold shall also be corrected.

3. Value for parameter Nall is not found correct and consistent with the Annex-02. 4. Stove year value for CPA # 03 is not consistent with Annex-02		
Documentation provided by project participant (1st round)		
Corrected all referenced values and units in section H.		
Project participant response (1st round)		**Date:** 06/07/2017
☐ Changes in the PoA-DD	Section(s):	New version No.:
☐ Changes in the CPA-DD	Section(s):	New version No.:
☒ Changes in MR	Section(s): H	New version No.: 2
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		**Date:** 14/07/2017
1. Value of $E_{Saving\ appliance}$ is now found corrected in the revised MR section H and in line with ER calculation spreadsheet. 2. Unit for SSC threshold is found corrected to GWh_{th}/year in the revised MR. 3. Value for parameter Nall is found to be revised and with the Annex-02. 4. Stove year value for CPA # 03 is now found consistent with Annex-02/ER calculation spreadsheet.		
Conclusion *Tick the appropriate checkbox*	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

Table 6. FAR from this verification

FAR ID	NA	**Section No.**	NA	**Date:** DD/MM/YYYY
Description of FAR				
Project participant response				**Date:** DD/MM/YYYY
Documentation provided by project participant				
☐ Changes in the PoA-DD		Section(s):		New version No.:
☐ Changes in the CPA-DD		Section(s):		New version No.:
☐ Changes in MR		Section(s):		New version No.:
☐ Changes in XLS		Worksheet(s):		New version No.:
☐ Other:				
DOE assessment				**Date:** DD/MM/YYYY
Conclusion *Tick the appropriate checkbox*	☐ To be checked during the next periodic verification			

Appendix 5. Monitored Parameters

Table A-5: Periodic Verification Checklist – Monitored Parameters

Checklist Item (incl. guidance for the verification team)	**Refe-rence**	**Verification Team Comments** (Means and results of assessment)	**Draft Concl.**	**Final Concl.**
A. $E_{Saving,appliance}$		Average annual energy saving per ICS distributed		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /AMS-II.G/ /MR/ /WBT/	*Description:* This parameter is calculated from $By_{,savings}$ and $NCV_{biomass}$ to calculated the average annual energy savings by a single ICS deployed under the project activity. The procedure to calculate this parameter is derived from the equation 5 of the registered PoA-DD and all the values used to calculate are also from the methodology applied. There has not been any exchanged of the equipment and appliance during current monitoring period. *Verifier´s action:* PoA-DD, applied methodology, AMS-II.G Version 05, ER spread sheet and MR were checked. *Conclusion:* Calculation approach and applied values are found to be in conformity with registered PoA-DD, AMS-II.G version 05, WBT report and found to be appropriate.	**OK**	OK
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures*	/CAL/ /MM/ /PoA-DD/ /AMS-II.G/ /BLS/ /XLS/	*Description:* The calculation of this parameter is done through the fixed value from the baseline survey conducted in 2012 by third party assessment, Registered PoA-DD, applied methodology. No calibration of equipment related with this parameter is applicable. Verifier´s action: The verification team reviewed the relevant documents e.g. baseline survey report /BLS/, WBT report /WBT/ , related spread sheet, PoA-DD, MR, applied meth and	**OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance. *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*		interviewed CME, consultant, surveyors, field staff to determine whether the measurements were done correctly. *Conclusion:* The value is determined according to the methodology.		
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/	☒ Correct ☐ Not correct (initial assessment) *Description:* Value for this parameter given in the MR is 0.009 GWh/year is consistent with the ER calculation spread sheet/Ann-2/, and survey reports/BLS//WBT/ *Verifier´s action:* Value has been cross checked in MR, ER calculation spread sheet, test and survey reprt. *Conclusion:* Please refer CAR H1 in Appendix4.	~~**CAR H1**~~	OK
B. $f_{NRB,y}$		Fraction of woody biomass saved by the project activity in year y that can be established as non-renewable biomass		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring*	/IM01/ /POADD/ /MR/ /Ann-2/ /UNFCC/ /AMS-II.G/	Description: The value of this parameter is default as 0.86, which is approved by UNFCCC and the Ministry of Environment, Science and Technology of Nepal. It has to be confirmed annually or at least once per monitoring period through national value approved for Nepal. Verifier´s action: MR, PoA-DD, applied methodology and UNFCCC website regarding the fraction of woody biomass value has been checked. Conclusion: Frequency and value of this parameter is correctly applied during the current monitoring period.	**OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
plan of the PDD and the applied methodology.				
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*	/IM01/ /POADD/ /MR/ /Ann-2/ /UNFCC/ /AMS-II.G/	Description: No equipment is used by the CME/PP to measure the value, as this is a default value approved by UN for LDCs, which was verified during current monitoring period. NO QA/QC is applicable for this parameter. Verifier´s action: UN website[5], MR, spread sheet, PoA DD were verified in this regards Conclusion: Value used is accurate and correct.	**OK**	OK
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/IM01/ /POADD/ /MR/ /Ann-2/ /UNFCC/ /AMS-II.G/	☒ Correct ☐ Not correct (initial assessment) Description: 0.86 is the value presented in the MR, which is approved, by UNFCCC and Ministry of Environment, Science and Technology of Nepal. Verifier´s action: Value of this parameter in MR is cross - checked with emission reduction calculation spread-sheet, PoA-DD, UN website for approved default values of fraction of woody biomass. Conclusion: Value applied in the MR is correct and accurate for the current monitoring period	**OK**	OK

[5] http://cdm.unfccc.int/DNA/fNRB/index.html

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
C. N_{CPA}		Maximum number of appliances in one CPA to reach small scale threshold of 180 GWh(th)		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /AMSII.G / /DATABASE/	Description: 21,304 are the total number of ICS under every CPA as a fixed number where saving by each CPA be within SSC limit of 180GWh(th). This is determined as the product of average annual energy saving per ICS distributed and maximum number of ICS under the individual CPA. This value is taken from PoA Monitoring and Distribution Database/DATABASE/. Verifier´s action: PoA Monitoring and Distribution Database/DATABASE/, ER calculation spread-sheet/Ann-2/, PoA-DD is verified. Conclusion: Calculation approach and applied values are found to be in conformity with registered PoA-DD, ER calculation spread sheet, AMS-II.G version 05, and verified PoA Monitoring and Distribution Database/DATABASE/.	**OK**	OK
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of*	/CAL/ /MM/ /RECIPT/	Description: This parameter does not involve any QA/QC procedure however CME ensures the recording of deployed stoves under an individual CPA is accurate by means of verification of recorded data against back up evidence e.g. sales agreement and installation completion receipts/RECEIPTS/. Verifier´s action: PoA-DD, PoA Monitoring and Distribution Database/DATABASE/, ER calculation spread sheet/Ann-2/ and sample sales agreement and installation completion receipts/RECEIPTS/ of stoves were verified. Conclusion: The value of this parameter is accurate and this	**OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
the installed monitoring equipment in the table in Annex 2.		parameter is in conformity with PoA-DD and CPA-DD.		
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/	☒ Correct ☐ Not correct (initial assessment) Description: Value of this parameter is 21,304 which corresponds to the net energy saving of 180GWh(th) in a year and within SSC threshold of 180 GWh(th). Verifier´s action: PoA-DD, CPA-DD, MR, excel spread sheet/Ann-2/, POA Monitoring Distribution aster data sheet were verified. Conclusion: Monitoring of this parameter and value presented in the MR is correct.	**OK**	OK
D. $N_{y,i}$		Number of project devices of type i operating in year y		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /AMS-II.G/ /Ann-2/ /US/	Description: Number of ICS under operation are as follows: CPA # 01: 16,128 CPA # 02: 15,926 CPA # 03: 6,430 This number is based on the value of measure parameter SOF and average use of stove per year. Verifier´s action: PoA Monitoring and Distribution database, emission reduction calculation spread sheet and SOF survey report/US/ were assessed and CME, monitoring personnel, personnel conducted survey were interviewed. Conclusion: The measurement and calculation procedure of this parameter is in line with registered PoA-DD, CPA-DD, and usage survey.	**OK**	**OK**

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*	/CAL/ /MM/	Description: This parameter does not involve any calibration of equipment however CME ensures the competencies of personnel involved in the monitoring of this parameter by providing the training and verifying the records before entering into the master database. Verifier´s action: PoA-DD, MR, spread sheet and usage survey report and data analysis sheet were reviewed. Also during onsite audit CME, representatives of Usage survey group, and consultant were interviewed. Conclusion: Measurement and calculation procedure of this parameter is found to be appropriate.	**OK**	**OK**
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/	☒ Correct ☐ Not correct (initial assessment) Description: Values of this parameter for : CPA # 01: 16,128 CPA # 02: 15,926 CPA # 03: 6,430 , which is calculated from the equation#4 of the registered PoA-DD and value applied were taken from the data base and usage survey report. Verifier´s action: MR was cross checked from the registered PoA-DD, emission reduction calculation spread sheet/Ann-2/, Usage Survey report/US/ and onsite interview with users and CME, CPA implementer and consultant. Conclusion: Value of this parameter presented in MR is found to be correct.	**OK**	**OK**
E. N_{all}		Total number of ICS installed in a given monitoring period in		

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		CPA # 01 and CPA # 02 and CPA # 03		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /RECEIPT/ /MR/ /DATABASE/	Description: The total number if ICS installed under CPA #1 are 19,786, CPA # 02 are 19,655 and CPA # 03 are 9369. The measurement procedure and data recording is as per the provision in the registered PoA-DD. CME has developed a procedure to ensure the accuracy of the data before entering into the master data sheet/DATABASE/ for monitoring and audit purposes. All backup evidence e.g. installation competition receipts and sales agreements for the ICS deployed under the CPAs were found maintained at the CME and CPA implementer's office. No monitoring equipment is transferred and monitoring frequency is in line with the registered PoA-DD and applied methodology. Moreover during course of verification CAR H1 was raised and closed successfully. Verifier´s action: Interviews were conducted, PoA-DD, MR, master data sheet and sample records were verified. Conclusion: CAR H1 is raised.	~~CAR H1~~	OK
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line*	/IM01/ /POADD/ /RECEIPT/ /MR/ /DATABASE/	Description: Please refer above. Verifier´s action: CAR H1 is raised. Conclusion: CAR H1 is raised.	~~CAR H1~~	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
with the latest EB guidance. *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*				
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/IM01/ /POADD/ /RECEIPT/ /MR/ /DATABASE/	☒ Correct ☐ Not correct (initial assessment) Description: Please refer above and CAR H1. Verifier´s action: CAR H1 Conclusion: CAR H1 is raised.	~~CAR H1~~	OK
F. SOF		Stove Operation Fraction – used to determine the share of distributed stoves that are still operating		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /AMS-II.G/ /ANN-4/ /AGGR/ /USDA/ /US/	Description: Parameter SOF is measured through the survey of the sampled population in FWDR region where the CPA # 01, CPA # 02 and CPA # 03 are implemented. CME has contracted a third party agency, RDSC, to conduct the survey. As per the survey conducted during March-May 2017 CME has arrived to a value of 40.7% of the deployed stoves under CPAs are in operation. Sample was selected using multi stage sampling of cross CPAs (CPA # 01, CPA # 02 and CPA # 03). Value for parameter is determined applying the Hansen Hurwitz estimator to account for multi-stage sampling approach. In case that the value does not meet 95/10 confidence precision level required for cross-CPA sampling, the lower bound of the confidence interval is conservatively applied.	~~CAR G2~~	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		Verifier´s action: PoA-DD, MR, Usage survey agreement/AGGR/ with RDSC, Usage Survey Report, Usage Survey Analysis Data Analysis sheet/Ann-6//USDA/, ER calculation spread sheet were assessed along with onsite visit interview with all relevant stakeholder's including ICS end users. Conclusion: Measurement method of this parameter is found to be in accordance with the registered PoA-DD, CPA-DDs, applied methodology AMS-II.G version 05. However CAR G2 was raised.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*	/CPA-DD/ /PoADD/ /AMSII.G / /MM/ /USR/ /USDA/ /IM/	Description: There is no equipment involved during usage survey, which requires calibration, by the CME/CPA implementer neither required by the registered monitoring plan. ICS users were interviewed and there inputs were recorded in an application installed in mobile phones of surveyors which in turn downloaded in the central data bases system once the survey questions are complete and all set of required information were correctly entered. Verifier´s action: Registered monitoring plan, MR, applied methodology, usage survey report and analysis sheet were verified. Representative from Usage Survey team along with the CME/CPA implementer and consultant were also interviewed during the onsite visit. Conclusion: Measurement and calculation procedure of this parameter is found to be appropriate. Moreover CAR G4 was raised and closed successfully on inconsistency in mention of	~~CAR G2~~	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		monitoring frequency of parameter "SOF" in the webhosted monitoring report from the registered PoA-DD and CPA-DD. Furthermore CAR G2 was raised.		
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/CPA-DD/ /PoADD/ /MR/ /AMSII.G / /MM/ /USR/ /USDA/ /IM/	☒ Correct ☐ Not correct (initial assessment) Description: Value measured of this parameter is 40.7%, which has been derived from the usage survey, conducted in line with registered monitoring plan and applied methodology AMS-II.G. version 05. Verifier´s action: Value in the MR was cross checked from the Usage Survey Report, Usage Survey Data analysis sheet, applied methodology and registered MP were also checked. An interview with survey team, CME representatives, personnel involved in data monitoring and recording, consultant and ICS end users were taken to further assess the value arrived for this parameter. Conclusion: Value of this parameter presented in MR is found to be correct. However CAR G2 was raised.	~~**CAR G2**~~	OK
G. $Stove_{year}$		Calculated average stove operation years in the monitoring period		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard*	/IM01/ /POADD/ /AMS-II.G/ /MR/ /DATABASE/	Description: Stove year is the time period for which an ICS deployed under PoA is under operation and is calculated based on date of installation of ICS and star date of crediting period of CPA as follows: If ICS Installation date is before Crediting period start date: Stove year = (Crediting period end date - Crediting Period Start Date)/365	**OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements. *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/Ann-2/	If ICS Installation date is after Crediting Period start date: Stove year = (Crediting period end date - ICS Installation Date)/365 Value for this parameter for CPAs are as follows: CPA # 01: 2.00 CPA # 02: 1.99 CPA # 03: 1.69 Verifier´s action: PoA-Monitoring Distribution database/DATABASE/, ER calculation spread sheet/Ann-2/, registered monitoring plan and MR were checked. Conclusion: Measurement method of this parameter is found to be in accordance with the registered PoA-DD, CPA-DDs, applied methodology AMS-II.G version 05.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*	/CAL/ /MM/ /DATABASE/ /Ann-2/	Description: This parameter does not involve any calibration of equipment however CME ensures the competencies of personnel involved in the monitoring of this parameter by providing the training and verifying the records before entering into the master database. Verifier´s action: PoA-DD, CPA-DD, MR, PoA Monitoring Distribution Data base, ER calculation spread sheet was checked. Conclusion: Measurement and calculation procedure of this parameter is found to be appropriate.	**OK**	OK
c) Correctness	/MR/	☒ Correct ☐ Not correct (initial assessment)	**OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
(VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/DATABASE/ /Ann-2/	Description: Values measured for this parameter is taken from Master Database for POA Monitoring and Distribution/DATABASE/ which has the provision to adjust the calculation of stove year based on start date of ICS installation and start date of crediting period of the CPA. Verifier´s action: Master Data base and ER calculation spread sheet is assessed with regards to calculation of stove year against the value provided in the MR. Conclusion: Values presented for this parameter is accurately calculated and correct.		
H. f_{old}		The fraction of end users that are still using baseline (replaced) stoves.		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /AMS-II.G/ /ANN-3/ /ANN-4/	Description: Parameter Fold is measured through the survey of the sampled population in FWDR region where the CPAs are implemented. As per the survey conducted during March-May 2017 CME has arrived to a value of 71.6% of the old stoves are still used under the PoA. Sample was selected using multi stage sampling approach of cross CPAs (CPA # 01, CPA # 02 and CPA # 03). Value for parameter is determined applying the Hansen Hurwitz estimator to account for multi-stage sampling approach. In case that the value does not meet 95/10 confidence precision level required for cross-CPA sampling, the lower bound of the confidence interval is conservatively applied. As 95/10-confidence precision estimate was not met, upper bound of confidence interval is conservatively applied in line with applied methodology. Verifier´s action: PoA-DD, MR, Usage Survey Report/Ann-3/,	~~CAR G4~~ ~~CAR F1~~	

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		Usage Survey Analysis Data Analysis sheet/ANN-4//USDA/, ER calculation spread sheet were assessed along with onsite visit interview with all relevant stakeholder's including ICS end users. Conclusion: Measurement method of this parameter is found to be in accordance with the registered PoA-DD, CPA-DDs, applied methodology AMS-II.G version 05. However CAR G4 and CAR F1 were raised.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*	/CAL/ /MM/	Description: There is no equipment involved during usage survey, which requires calibration, by the CME/CPA implementer neither required by the registered monitoring plan. ICS users were interviewed and there inputs were recorded in an application installed in mobile phones of surveyors which in turn downloaded in the central data bases system once the survey questions are complete and all set of required information were correctly entered. Verifier´s action: Registered monitoring plan, MR, applied methodology, usage survey report and analysis sheet were verified. Representative from Usage Survey team along with the CME/CPA implementer and consultant were also interviewed during the onsite visit. Conclusion: Measurement and calculation procedure of this parameter is found to be appropriate. However CAR G4 and CAR F1 were raised.	~~CAR G4~~ ~~CAR F1~~	
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative*	/MR/	☒ Correct ☐ Not correct (initial assessment) Description: Value measured of this parameter is 71.6%, which has been derived from the usage survey, conducted in line with	~~CAR G4~~ ~~CAR~~	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
manner. *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*		registered monitoring plan and applied methodology AMS-II.G. Version 05. As per onsite observation and interview, it was found that less than 20 % of households have been using their old stove along with ICS, which is less than CME/PP value of 71%, and hence the user survey conducted by the CME can be concluded as conservative. Usage Survey Report/ANN-3/, Usage survey analysis spread sheet/ANN-4/, sample size selection spread sheet/ANN-9/ and sample size calculation spread sheet were assessed and found to be in line with the verified observation and Guideline for sampling and survey/G—SS/. As per the survey analysis spread sheet /ANN-4/, Usage Survey Report/ANN-3/ and Monitoring report, it was verified that the overall mean proportion calculated for fold is 0.644. However, this value did not meet required confidence/precision level of 95/10 required for cross-CPA sampling. Thus the CME has opted the more conservative value of the upper bound of the confidence interval of 0.716 (71.6%). This approach is found to be in accordance with the applied methodology AMS-II.G version 05 and hence acceptable. Verifier´s action: Value in the MR was cross checked from the Usage Survey Report, Usage Survey Data analysis sheet, applied methodology and registered MP were also checked. An interview with survey team, CME representatives, personnel involved in data monitoring and recording, consultant and ICS end users were taken to further assess the value arrived for this parameter. During onsite visit and inspection of ICS under the project, it was observed that this value depends on who is answering the question (user itself or representative of the	~~F1~~	

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		family who does not cook/involve in). Fraction of end users that are still using the baseline stoves was found less than 20% out of total 67 households interviewed during verification site visit. Conclusion: Value of this parameter presented in MR is found to be correct and conservative. However CAR G4 and CAR F1 were raised.		
I. $\eta_{new,y}$		Efficiency of the device being deployed as part of the project activity in year y		
a) Measurement / Determination method (VVS, §§ 389-393) *Describe how the monitoring parameter was measured / determined. Focus primarily on the original data level (ODL) but also describe the applied data aggregation trails (from ODL to data aggregation level zero (DAL0)).* *Check if relevant equipment has been exchanged and if in cases of failures / downtimes of standard equipment other measurement / determination methods have been used. Furthermore, verify the frequency of measurements as per the requirements.* *Assess whether the measurement / determination method is in line with the registered monitoring plan of the PDD and the applied methodology.*	/IM01/ /POADD/ /AMS-II.G / /ANN-6/	Description: Parameter $\eta_{new,y}$ is measured through the Water Boiling Test (WBT) as required by the applied methodology and registered monitoring plan. Water Boiling Tests (WBT) is conducted by Renewable Energy Test Station (RETS), Under Nepal Academy of Science & Technology, on 36 sampled ICS; model surveyed proportional to total number of each ICS model in population. Minimum sample required by the applied methodology and registered monitoring plan is 30 and hence taking 36 samples from the different district for WBT is found to be appropriate. CME has opted to conduct the monitoring of this parameter once every two year which is in line with the provision in applied methodology that if the efficiency of the ICS does not drop significantly as compared to the initial efficiency of the new device, over a time period of two years of typical usage, biennial monitoring is allowed. It was observed during the onsite inspection and interview with the users, CME, CPA implementer and manufacturer read with the Test reports/ANN-6/ of ICS models RS1.1, RS1.3, that efficiency of the ICS does not drop significantly as compared to the initial efficiency of the new device, over a time period of two years of typical usage and hence biennial frequency of monitoring this parameter is acceptable.	**…OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		Furthermore, it was also observed that initial efficiency tested in the laboratory of different ICS type for the purpose of ex-ante ER calculation, has the value of 23.9% and the infield real term WBT assessment for weighted average thermal efficiency of 23.4% (weighted average of RS 1.1 and RS 1.3). Verification team based on interview with CME and end users and personal sectoral expertise along with the efficiency test reports of different stove models can conclude that procedure to calculate weighted average of thermal efficiency and application of same for ER calculation is correct in the MR and ER calculation spreadsheet. Verifier´s action: PoA-DD, MR, WBT Reports/ANN-6/, WBT Data Analysis sheet/ANN-7/, ER calculation spread sheet/ANN-2/ were assessed along with onsite visit interview with all relevant stakeholder's including ICS end users. Since the thermal efficiency conducted at the time of validation in the laboratory is lower than the WBT result in the field, VT has confer the WBT protocol version 4.2.3[6]/WBT-PRT/ which states that laboratory test results may vary from the test of ICS in practice in the field as several factors govern the result of the WBT results including, types of fuel used, moisture content, shape and size of the solid fuel (fire wood), initial water temp and cooking pot etc. Initial test were conducted in laboratory by CRT/N on single ICS of each ICS type (RS 1.1, 1.3 or RS 3.1) however the RETS a third party government agency conducted WBT on appropriate ICS sample size (36) in line with requirements of applied methodology AMS-II.G, which can be considered most reliable representative of entire population. Based on this, verification team can accept the thermal efficiency value applied for current monitoring period.		

[6] http://cleancookstoves.org/technology-and-fuels/testing/protocols.html

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		Conclusion: Measurement method of this parameter is found to be in accordance with the registered PoA-DD, CPA-DDs and applied methodology AMS-II.G version 05.		
b) Accuracy and QA/QC Procedure (VVS, §§ 394-400) *In case of measured (or estimated) values, check whether the accuracy of equipment used for monitoring is controlled and calibrated in accordance with the monitoring plan or if significant inaccuracies occur; in this case, make sure that the most conservative assumptions theoretically possible have been made for calculating ERs.* *Describe whether all applicable QA/QC procedures are met. Assess further if the calibration of the monitoring equipment has been carried out in line with the latest EB guidance.* *Include calibration dates and information in validity of the installed monitoring equipment in the table in Annex 2.*	/CAL/ /MM/ /AMS-II.G/ /TECH/ /ANN- 6/ / ANN 7/ /WBT-PRT/	Description: RETS has conducted the Water Boiling Test to measure the thermal efficiency of the ICS based on requirement laid down in the registered monitoring plan and applied methodology. 36 samples were tested during the WBT and an weighted average thermal efficiency of 23.4% is applied for the purpose of calculation of emission reduction. Model surveyed proportional to total number of each ICS model in population. Thermal efficiencies of 3 stove models of ICS under the CPA1, CPA2 and CPA3 as per the technical specification/TECH/ are as follows: RS 1.1: 24.95% RS 1.3: 22.94% Sampling was conducted considering two models (RS1.1, RS 1.3). Since RS3.1 stoves are replaced by RS1.3 models, and also are not credited during this monitoring period to be conservative. The weighted average value of the efficiency used for ER calculation is 23.4%, which is in conformity with the weighted value calculation in WBT analysis sheet and ER calculation spreadsheet. WBT Data Analysis sheet as Annex 7 for calculation approach has been presented. Sampling and survey were carried out with 95% confidence interval and a 10% margin of error for cross-CPA sampling. Verifier´s action: PoA-DD, MR, ER calculation spreadsheet, WBT report by RETS/Ann- 6/, WBT data analysis sheet/Ann- 7/, were verified. Conclusion: Measurement and calculation procedure of this parameter is found to be appropriate and in line with the	**OK**	OK

Checklist Item (incl. guidance for the verification team)	Refe-rence	Verification Team Comments (Means and results of assessment)	Draft Concl.	Final Concl.
		registered monitoring plan and applied methodology, AMS-II.G. version 05.		
c) Correctness (VVS, §§ 389-393) *Determine whether the value given in the monitoring report is correct or determined in a conservative manner.* *In case of conservative approaches used in lieu of the monitoring as per registered MP detailed assessment of the conservativeness of the approach used should be given.* *In case of mistakes / deviations pl. provide details and descriptions of the CARs raised.*	/MR/ /AMS-II.G/ /TECH/ /Ann- 6/ /Ann-7/	☒ Correct ☐ Not correct (initial assessment) Description: The efficiency as calculated using a weighted average of efficiencies of RS1.3 and RS1.1, based on credited population of stoves. This is conservative as the efficiency of the RS3.1 model is higher. The weighted average value of the efficiency used for ER calculation is 23.4%, which is in conformity with the specification. RETS WBT report considered all three efficiencies for 3 ICS model being credited in CPA1, CPA2 and CPA3. An analysis sheet for WBT data/Ann- 7/ also provided along which further provides the transparency in calculation approach. Verifier´s action: WBT Report/Ann- 6/, WBT data analysis sheet/Ann-7, MR and emission reduction calculation spread sheet were assessed. Conclusion: Value of this parameter presented in MR is found to be correct and conservative.		

Appendix 6. Calibration dates and validity of installed monitoring equipment

Table A-6: Periodic Verification Checklist – Calibration details

Monitoring equipment	Related monitoring parameter as per applicable registered monitoring plan	Serial number	Type	Accuracy or accuracy class	Previous calibration (last calibration before start of this monitoring period)	Calibration date(s) during this monitoring period	Validity of calibration(s)	Delay in calibration: yes/no	Period of delayed calibration
								☐ No ☐ Yes	From: To:
								☐ No ☐ Yes	From: To: