

Validation report form for renewal of crediting period for GS project activities

(Version 01.0)

VALIDATION REPORT FOR RENEWAL OF CREDITING PERIOD (RCP)

Title of the project activity	Energy Efficient Cook Stoves for Siaya Communities, Kenya
Reference number of the project activity	GS ID: 879 TN P-No.: 8000472403 - 17/094
Number and duration of the next crediting period	CP-No.: 2 01/01/2018 to 31/12/2024 (incl. both days)
Version number of the validation report for RCP	1.0
Completion date of the validation report for RCP	04/12/2017
Version number of PDD to which this report applies	PDD: 3.2.3 Passport: 3.2.4
Project participant(s)	Myclimate Foundation & Tembea Youth Centre for Sustainable Development
Host Party	Republic of Kenya
Sectoral scope(s), selected methodology(ies), and where applicable, selected standardized baseline(s)	Scope 3 : / Technical Area: 3.1 GS Methodology: Technologies and Practices to Displace Decentralized Thermal Energy Consumption (Version 2.0)
Estimated annual average GHG emission reductions or net anthropogenic GHG removals in the next crediting period	144,910 tCO₂e
Name of DOE	TÜV NORD CERT GmbH
Name, position and signature of the approver of the validation report for RCP	 Rainer Winter Final Approval

SECTION A. Executive summary

Myclimate Foundation has commissioned the TÜV NORD JI/CDM Certification Program to carry out validation of the request for renewal of crediting period (RCP) for the project:

“Energy Efficient Cook Stoves for Siaya Communities, Kenya”

with regard to the relevant requirements for GS project activities.

The project was registered on 01/01/2011 under Gold Standard (Ver. 2.1) and the Gold Standard registration No. 879. The PP has chosen a 7 year crediting period which is now due for renewal. The second crediting period starts from 01/01/2018 to 31/12/2024.

The objective of this RCP validation is the review by an independent entity whether the project is still compliant with the applicable sections of:

- The GS Validation and Verification Standard^{/VVS/},
- the Gold Standard Requirements Version 2.2^{/GSR/},
- the Gold Standard Toolkit Version 2.2^{/GST/},
- GS 2.2 Annex-Z Gold Standard Procedures for the renewal of a crediting period^{/PRCP/}
- the updated applied GS Methodology A Technologies and Practices to Displace Decentralized Thermal Energy Consumption (Version 2.0)^{/METH/}
- the methodological tool “Assessment of the validity of the original / current baseline and update of the baseline at the renewal of the crediting period” (Version 03.0.1).

As per the requirements of the Annex-Z Gold Standard Procedures for the renewal of a crediting period^{/PRCP/} the validation is based on

- the registered GS PDD (including the monitoring plan)^{/PDD-R/},
- the registered GS Passport^{/GSP-R/},
- the Gold Standard Local Stakeholder Consultation Report of 1st crediting period^{/LSCR/},
- the GS validation report of 1st crediting period^{/VAL/},
- the updated PDD corresponding to 2nd crediting period^{/PDD/},
- the updated GS Passport corresponding to 2nd crediting period^{/GSP/},
- the updated emission reduction calculation spread sheet^{/XLS/},
- the periodic verification reports and Monitoring Reports of 1st crediting period^{/VER/},
- further supporting documents made available to the validator as well as
- information collected through performing on-site interviews.

Furthermore publicly available information, such as the host country legislation, was considered as far as available and required.

The project reduces GHG emissions due to construction and installation of a new energy efficient cookstoves (rocket stoves) in rural communities in Siaya County, Kenya. The improved cookstoves consume less fuel wood leading to thermal energy, time and money savings. The stove users are able to afford the stoves installed at subsidized price and also payments can be made through instalments for members of Community Savings and Loaning Groups (CSLs).

The stove lifespan is estimated at 7 years. It was also confirmed through the interview with the PP that there is no change of technology between the 1st and the 2nd crediting period.

Project implementation started in October 2010 with the construction of the first efficient stove on 04 October 2010.

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

Table A-1: Project Location

No.	Project Location
Host Country	Republic of Kenya
Region:	Siaya County
Project location address:	Ugunja, 40606, Siaya, Kenya
Latitude:	00° 10' 59.88" N
Longitude:	34° 17' 59.99" E

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

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

Parameter	Unit	Value
Type	-	Rocket Stove
Number to be Installed	-	58,800
Fuel Wood use	t/year	1.25
Power Rating	kW	3.2 ¹
Stove Savings per year	GWh	0.006466
ER per stove per month	tCO ₂ e	0.1930
ER per stove per year	tCO ₂ e	2.35
Materials	-	Mud, bricks, sawdust
Producers	-	Local Artisans

¹ The technologies each have continuous useful energy outputs of less than 150kW per unit

SECTION B. Validation team, technical reviewer and approver

B.1. Validation team member

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of DOE or outsourced entity)	Involvement in			
						Desk review	On-site inspection	Interview(s)	Validation findings
1.	Team Leader (also verifier) ²	EI	Lubanga	David	-	☒	☒	☒	☒

B.2. Technical reviewer and approver of the validation report for RCP

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	Winter	Stefan	TÜV NORD CERT GmbH
2.	Approver	IR	Winter	Rainer	TÜV NORD CERT GmbH

² The verifier has conducted the GS project in Taiwan (GS1350), and the people in Taiwan Speak Mandarin, the verifier can understand the local language.

SECTION C. Means of validation

C.1. Desk review

>>

During the desk review all documents initially provided by the client and publicly available documents relevant for the validation were reviewed. The main documents are listed below:

- the registered GS PDD (including the monitoring plan)^{/PDD-R/},
- the registered GS Passport^{/GSP-R/},
- the Gold Standard Local Stakeholder Consultation Report of 1st crediting period^{/LSCR/},
- the GS validation report of 1st crediting period^{/VAL/},
- the updated PDD corresponding to 2nd crediting period^{/PDD/},
- the updated GS Passport corresponding to 2nd crediting period^{/GSP/},
- the updated emission reduction calculation spread sheet^{/XLS/},
- BS/PS surveys and report
- BFT/PFT studies
- the periodic verification reports and Monitoring Reports of 1st crediting period including the claimed emission reductions for the project^{/VER/},

Other supporting documents, such as publicly available information on the GS website and background information were also reviewed.

C.2. On-site inspection

Duration of on-site inspection: 25/09/2017 to 28/09/2017				
No.	Activity performed on-site	Site location	Date	Team member
1.	Opening meeting and introductions	Ugunja, Siaya County, Kenya	25/09/2017	David Lubanga
2	Records check – hard paper and database	Ugunja, Siaya County, Kenya		
3	Interview with TYCSD key Officials	Ugunja, Siaya County, Kenya		
4	Sampling of HHs to be visited	Ugunja, Siaya County, Kenya		
5	Findings Summary	Ugunja, Siaya County, Kenya		
6	Visiting sampled Households	Ugunja, Siaya County, Kenya	26/09/2017	
6	Visiting sampled Households	Ugunja, Siaya County, Kenya	27/09/2017	
6	Close Meeting	Ugunja, Siaya County, Kenya	28/09/2017	

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.	Buoga	Jared	TYCSD/Director	25/09/2017	- Programme Development - Number of Staff - Achievements	David Lubanga
2.	Ngesa	Nicholas	TYCSD/Assistant Director		- Coordination of programmes - Number of staff	
3.	Orina	Job	myClimate/LOME		- Training of artisans and lead artisans - Community involvement - Information flow - Data flow - Data correctness, security & integrity - QA/QC measures	

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
					- Complementary LSC - Changes to Baseline SD Indicators	
5.	Amollo	Joshua	TYCSD/Project Officer - CSL		- Number of CSL groups - Achievements of CSL groups - Evolution of CSL groups - Tembea Sacco	
6.	Omondi	Victor	TYCSD/Data Manager		- Information Flow - QA/QC procedures	
7.	Otieno	Erick	TYCSD/Field Officer - Construction		- Training - Data recording	
8.	Adhiambo	Caroline	TYCSD/Field Officer		- Monitoring - Stove maintenance - Community Involvement - Challenges - Work conditions	
9.	Okello	Daniel	TYCSD/Field Officer		- Monitoring - Stove maintenance - Community Involvement - Challenges - Working conditions	
10.	Abong'o	Daniel	TYCSD/Field Officer		- Monitoring - Stove maintenance - Community Involvement - Challenges - Working conditions	
11.	Owino	Emilly	TYCSD/Field Officer		- Monitoring - Stove maintenance - Community Involvement - Challenges - Working conditions	
12.	Omondi	Florence	Kodiene/User	26/09/2017	- Construction Date - Payment method - Use of baseline stove - Comparisons with old stove - Household characteristics - Maintenance - Cooking habits - Community groups	
13.	Atieno	Magarita	Kodiene/User			
14.	Adipo	Claris	Kodiene/User			
15.	Atieno	Consolata	Kodiene/User			
16.	Ochieng	Josephine	Sigoma Uranga/User			
17.	Oyao	Angeline	Sigoma Uranga/User			
18.	Achuoyo	Grace	Sigoma Uranga/User			
19.	Juma	Josephine	Gangu/User			
20.	Auma	Leonida	Kochieng' B/User			
21.	Ochieng'	Philister	Kochieng' A/User			
22.	Akinyi	Symprose	Ojwando B/User			
23.	Ngesa	Gaudensia	Ojwando A/User			
24.	Wando	Jane	Got Osimbo/User			

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
25.	Akinyi	Martha	Got Osimbo/User	27/09/2017		
26.	Apondi	Jane	Got Osimbo/User			
27.	Adhiambo	Joyce	Got Osimbo/User			
28.	Okoth	Henrika	Siranga/User			
29.	Atieno	Christine	Siranga/User			
30.	Adhiambo	Monica	Simur/User			
31.	Akinyi	Caroline	Simur/User			
32.	Alwiri	Seline	Ligingo/User			
33.	Akoth	Yerine	Ligingo/User			
34.	Aoko	Gaudensia	Kagonya/Use r			
35.	Auma	Josephine	Uradi/User			
36.	Ndonj	Lucia	Uyayi/User			

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

Area of validation findings	No. of CL	No. of CAR	No. of FAR
Compliance with PDD form	0	0	0
Compliance with Passport form	0	4	0
Application of baseline and monitoring methodology and standardized baseline	0	3	1
Validity of original baseline or its update	0	2	0
Estimated GHG emission reductions or net anthropogenic GHG removals	1	2	0
Validity of monitoring plan	0	4	0
Crediting period	0	0	0
Project participants	0	0	0
Others (please specify) – Complementary Local stakeholder consultation process and its outcome	0	0	0
Others (please specify) - Sustainable Development assessment of “Do No Harm”	0	0	0
Others (please specify) - Sustainable Development assessment of SD Matrix	0	0	0
Others (please specify) – Revised SD monitoring plan	0	0	0
Total	1	15	1

SECTION D. Validation findings

D.1. Compliance with PDD & Passport forms

Means of validation	A draft revised PDD was submitted to the validation team directly by the project participant. By means of the UNFCCC website it has been checked and determined that the latest PDD template CDM-PDD-FORM has been used. It has been checked whether the latest instructions for filling out the PDD template have been followed. Every section has been checked against the respective guidance. Further it has been checked whether the latest instructions for filling out the GS Passport template have been followed. Every section has been checked against the respective guidance. The following sources of information have been used in this context: • /PDD/ • /PDD-T/ • /GSP-T/ • /unfccc/ • /GSP/
----------------------------	--

Findings	☒	The latest reporting template CDM-PDD-FORM as listed on the UNFCCC website has been used for the PDD.
	☐	The latest instructions for filling out the PDD have been followed. No adverse finding has been identified in the course of this validation.
	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 14, CAR 15, & CAR 16
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.
		The project participants used the later version of the PDD form for the updated PDD The project participants used a later version of the GS passport form (GSv2.2) for the updated passport than the version of the passport form of the registered passport. It is confirmed that the information transferred to the later version of the PDD and the GS Passport forms are materially the same as that in the registered PDD and Passport.

D.2. Application of baseline and monitoring methodology and standardized baseline

Means of validation	By means of comparison of the PDD with (i) the applied GS methodology (ii) if applicable, a standardized baseline the validation team has checked whether the updated PDD is in compliance with the requirements of the applied methodology. The following sources of information have been used in this context: /PDD/ /METH/ /gs/			
Findings	☒	The updated PDD is completely in accordance with the approved methodology applicable for the CDM project		
	☒	The breakdown of PDD accordance of the referenced tools is as follows:		
		1	Title (of the tool)	Tool to calculate the emission factor for an electricity system
			Version	05.0
			PDD compliance	☐ full compliance ☐ findings have been raised ☒ N/A (for MP)
		2	Title (of the tool)	Assessment of the validity of the original/current baseline and update the baseline at the renewal of the crediting period
			Version	03.0.1
			PDD compliance	☒ full compliance ☒ findings have been raised ☐ N/A
		3	Title (of the tool)	Baseline, project and/or leakage emissions from electricity consumption and monitoring of electricity generation
			Version	02.0
	PDD compliance		☐ full compliance ☐ findings have been raised ☒ N/A	
	☐	The breakdown of PDD accordance of the applicable SB is as follows:		
		1	Title (of the SB)	N/A
		Version	-	
	MP compliance			

	☐	In this context the following CARs, CLs, FARs have been raised: - CAR 07
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.
		For the methodology it is confirmed that all applicable references in the updated PDD are correct and in accordance with the applicable requirements in the GS toolkit and GS requirements. All applicability conditions of the updated methodology are still met.

D.3. Validity of original baseline or its update

Means of validation	As per the applied GS methodology, a baseline scenario is defined by the typical baseline fuel consumption patterns in a population that is targeted for adopting the new project technology. Only one baseline scenario was identified for the project activity, that is, rural end-users predominantly using inefficient wood stoves. In order to check the validity of the original baseline or its updates for the 2nd crediting period, the validation team has applied the following stepwise approach: Step 1: Check of assessment to the validity of the current baseline for the next crediting period Step 1.1: Check of assessment to compliance of the current baseline with relevant mandatory national and/or sectoral policies Step 1.2: Check of assessment to the impact of circumstances Step 1.3: Check of assessment to whether the continuation of use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested. Step 1.4: Check of assessment of the validity of the data and parameters Step 2: Check of the update to the current baseline and the data and parameters Step 2.1: Check of the update to the current baseline Step 2.2: Check of the update to the data and parameters
Findings	Step 1: Check of assessment to the validity of the current baseline for the next crediting period The baseline is still in line with the definition of the latest version of the applied methodology. Only one baseline scenario was identified for the project activity, that is, rural end-users predominantly using inefficient wood stoves. However the baseline itself i.e. the calculation of baseline emissions has been checked regarding the continued validity of underlying assumptions and parameter values. The assessment steps are described in the following subsections. <i>Step 1.1: Check of assessment to compliance of the current baseline with relevant mandatory national and/or sectoral policies</i> The baseline of the PDD has been assessed to be compliant with the national legislation and policies applicable for the project activity at the time of validation. There is no law proscribing or policy regulating the use of the baseline technology in rural households in Kenya. On the basis of this analysis the validation team confirms that the baseline is still in compliance with the currently applicable national legislation and other national and/or sectoral policies. Therefore the baseline did not need to be adjusted due to changes in this respect. <i>Step 1.2: Check of assessment to the impact of circumstances</i> The baseline scenario is the continuation of the pre-project scenario. The use of the inefficient three-stone fireplace does not require any investment and there is no market

	related to it except the periodic purchase of fuel wood. Hence, the baseline scenario is not affected by changes in circumstances, e.g. market conditions, market prices etc. <i>Step 1.3: Check of assessment to whether the continuation of use of current baseline equipment(s) or an investment is the most likely scenario for the crediting period for which renewal is requested.</i> If the baseline scenario has been identified as the continuation of the pre-project scenario it is necessary to assess whether an investment and/or exchange of the baseline equipment (e.g. due to expiry of the equipment's lifetime) during the upcoming crediting period is to be deemed the most likely scenario. If so the baseline needs to be updated. In case of this project, there is no baseline equipment which is to be exchanged. Households with no access to an improved cookstove will continue with the baseline practice. Thus the validation team confirms the conclusion that no changes to the baseline are required due to the likeliness of investments in equipment which impacts the baseline. <i>Step 1.4: Check of assessment of the validity of the data and parameters</i> The parameters which have been determined ex-ante and fixed in the registered PDD are basically still valid. • The CO₂ emission factor for wood (EF_{b,CO_2} & EF_{p,CO_2}) remains 1.7472 tCO₂/t wood calculated from EF of wood in tCO₂e/TJ and NCV of wood in TJ/ton fuel from the the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Tables 1.2/2.5 which has not been updated at the time of the renewal of the crediting period • The non-CO₂ emission factor for wood ($EF_{b,non-CO_2}$ & $EF_{p,non-CO_2}$) have been updated due to changes in the global warming potentials (GWP) of CH₄ from 21 to 25 and of N₂O from 310 to 298 for the second commitment period. The overall value is the sum of the CH₄ and N₂O emission factors expressed in tCO₂e/ton fuel. The values for the 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Table 2.5 have not been updated • The UNFCCC default value of 92%³ for $f_{NRB,i,y}$ is the most recent data available at the time of submission of project documentation for validation. The same shall be updated as the default UNFCCC value is no longer valid. As prescribed by the applied methodology, the NRB renewability can be re-examined at any time over the course of the project by conducting a new NRB assessment or adopting new updated default values by the host country DNA/CDM EB. • The values for $P_{b,y}$ and $P_{p,b,y}$ have been updated based on the biennial BFT/PFT updates as required by the applied GS methodology. These changes have been appropriately considered in the updated PDD and ex-ante ER calculations. <i>Step 2: Check of the update to the current baseline and the data and parameters</i> <i>Step 2.1: Check of the update to the current baseline</i>
--	---

³ <https://cdm.unfccc.int/DNA/fNRB/index.html>

	As per the check in step 1 above, it is confirmed that the current baseline does not need to be updated.	
	<i>Step 2.2: Check of the update to the data and parameters</i> Refer to the check results of step 1.4.	
	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 07 & CAR 08, FAR 01
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.
	The original baseline scenario of the project as per the registered PDD is still valid for the 2 nd crediting period. Most of the data and parameters determined ex-ante have been updated for the second crediting period.	

D.4. Estimated GHG emission reductions or net anthropogenic GHG removals

Means of validation	For validation of the estimated GHG emission reductions the client has provided the validation team with the following documentation: - Updated PDD/^{PDD/} - XLS spreadsheets/^{XLS/}. - Tembea BS/PS Report	
	Further, the validation team has downloaded from the GS website the applicable version of the GS methodology/ ^{gs/} .	
	Via checking the updated PDD, it is confirmed the calculation of emission reductions have been done as per the applied methodology.	
	The baseline fuel and project fuel are the same as well as baseline and project emission factors. Therefore, the overall GHG reductions achieved by the project activity in year y are calculated as per equation 1 of the methodology:-	
	1) Emission reductions ER_y:	
	$ER_y = \sum_{b,p} (N_{p,y} * U_{p,y} * P_{p,b,y} * NCV_{b, fuel} * (f_{NRB,b,y} * EF_{fuel, CO2} + EF_{fuel, nonCO2})) - \sum LE_{p,y} \quad (1)$	
	Σ _{b,p}	Sum over all relevant (baseline b/project p) couples
	N _{p,y}	Cumulative number of project technology-days included in the project database for project scenario p against baseline scenario b in year y
	U _{p,y}	Cumulative usage rate for technologies in project scenario p in year y, based on cumulative adoption rate and drop off rate (fraction)
	P _{b,p,y}	Specific fuel savings for an individual technology of project p against an individual technology of baseline b in year y, in tons/day, and as derived from the statistical analysis of the data collected from the field tests
	f _{NRB,b, y}	Fraction of biomass used in year y for baseline scenario b that can be established as non-renewable biomass (drop this term from the equation when using a fossil fuel baseline scenario)
	NCV _{b,fuel}	Net calorific value of the fuel that is substituted or reduced (IPCC default for wood fuel, 0.015 TJ/ton)
	EF _{fuel,CO2}	CO2 emission factor of the fuel that is substituted or reduced. 112 tCO2/TJ for wood/wood waste.

	$EF_{\text{fuel, nonCO2}}$ Non-CO2 emission factor of the fuel that is reduced $LE_{p,y}$ Leakage for project scenario p in year y (tCO₂e/yr) From the foregoing, the following is the estimated emission reductions per stove per year: $ER_{\text{stove-year}} = 365 * 0.9 * 0.0041 * (0.92 * 1.7472 + 0.1356) - 0 = 2.35 \text{ tCO}_2\text{e}$ <i>Assumptions:</i> - - The number of project technology days for a Tembea stove is assumed to be 365 in year 1 for a stove - Usage rate is assumed to be 90% in year 1 - Fuel savings are calculated as the difference between baseline fuel consumption and project fuel consumption via paired PFT studies conducted in June/July 2017 - The value for emission factors $EF_{\text{fuel,CO2}}$ 1.7472 tCO₂e/t fuel is computed using the 2006 IPCC default values. - The total value for non-CO2 emission factor for wood fuel is calculated as 0.1356 tCO₂e/t fuel. This is derived from the calculations using the applicable IPCC values and GWP values for CH₄ and N₂O applicable the second commitment period. 2) Leakage emissions LE_y: Leakage risks have been assessed once more and are deemed very low thus negligible as the case above presents. Hence, $\sum LE_{i,y} = 0$ ER generated in year y depend on the number of installations which is continuous, and the stove usage rate. The ER estimates per stove/year are as follows $ER_y = ER_y - LE_y$ $= ER_y - 0$ $= 2.35 \text{ tCO}_2\text{e} - 0 = 2.35 \text{ tCO}_2\text{e}$ The estimated amount of GHG emission reductions of the project is 1,014,371 tCO₂e during the second crediting period (7 years) from 01/01/2018 to 31/12/2024, resulting in estimated average annual emission reductions of 144,910 tCO₂e. The excel ER calculations have been duly checked. Further it has been checked whether the results have been correctly transferred to the updated PDD for determination of ex-ante ER. The validation team has further checked the updated PDD against the latest version of the applicable methodology incl. the referenced methodological tools for consistency. Special focus was laid on the changes against the previous crediting period.				
Findings	<table border="1"> <tr> <td data-bbox="395 1805 464 1966">☐</td><td data-bbox="464 1805 1442 1966">The calculation of ERs is done as per the applied methodology version 2.0. The calculation in the Excel spreadsheet and the corresponding calculation tables in the PDD have been checked and no mistakes have been identified. The estimation of emission reductions for the 2nd crediting period is deemed plausible and conservative.</td></tr> <tr> <td data-bbox="395 1966 464 2074">☒</td><td data-bbox="464 1966 1442 2074"> The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 11 </td></tr> </table>	☐	The calculation of ERs is done as per the applied methodology version 2.0. The calculation in the Excel spreadsheet and the corresponding calculation tables in the PDD have been checked and no mistakes have been identified. The estimation of emission reductions for the 2 nd crediting period is deemed plausible and conservative.	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 11
☐	The calculation of ERs is done as per the applied methodology version 2.0. The calculation in the Excel spreadsheet and the corresponding calculation tables in the PDD have been checked and no mistakes have been identified. The estimation of emission reductions for the 2 nd crediting period is deemed plausible and conservative.				
☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 11				

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.
		The calculation in the Excel spreadsheets and the corresponding calculation tables in the PDD have been checked and mistakes identified have been corrected. The estimation of emission reductions for the 2nd crediting period is deemed plausible and conservative. Fuel savings as a result of the project activity were determined through KPT studies conducted during the months of June/July in the project area. Paired samples were used to compare both baseline fuel consumption and project woodfuel consumption each over a 7-day period with fuel wood purchased by the PP. The methodology for has been assessed as well as calculations and sampling procedures

D.5. Validity of monitoring plan

Means of validation	The validation team has checked the monitoring plan of the updated PDD against any required changes due to the update of the baseline and other methodological changes. Further, changes due to editorial updates of the applicable templates have been checked. The monitoring plan in the PDD and passport has not been updated as the new methodology version does not require significant changes to the same. The monitored parameters ($P_{p,y}$, $U_{p,y}$, $N_{p,y}$, $LE_{p,y}$, & Similar cook stove project activities in the project area) will be monitored the same way and retain the same measuring method and frequencies QA/QC procedure <i>Information flow</i> Stove data is captured both in the Stove Purchase Agreement and the Stove Passport. The Stove Purchase Agreement contains user agreement on ceding carbon credit rights as well as other terms of conditions such as allowing the TYCSD staff to carry out monitoring activities. Once a stove is installed, an artisan completes the Artisan Construction Data Sheet. A lead artisan follows up to verify the recorded data and completes another form – the Lead Artisan Construction Summary Sheet. Both documents are submitted to the data Manager for cross-checking, duplication and other potential errors that may occur. The data also submitted to the finance Manager for payments to the artisans. Samples of both data sheets over the different years were compared in the PP offices to ascertain the integrity and correctness of the data recorded in database Random monitoring and checks are done on sampled households per month for control <i>Training of artisans</i> Artisans are trained in stove construction prior to start of work, to ensure quality of stoves installed in households <i>Training of enumerators</i> Enumerators for HH BS/PS monitoring surveys as well as PFTs are trained on how to accurately capture desired values <i>Document backup</i> Data is kept in soft copy database and is stored at myClimate servers on a quarterly basis Authorities and responsibilities regarding monitoring plan have been described in section B.7.3 of the updated PDD.
----------------------------	---

		Data management and quality control measures have been confirmed with PP through interviews onsite with the PP project staff. In detail all parameters, ex-ante values, SD parameters and applicable formulae have been checked to determine the required changes for the next crediting period. Besides, based on conducted interviews with related personnel the validation team has assessed the feasibility of the required changes.
Findings	☒	The validation team has assessed all the required changes due to the updated methodological requirements and the assessment of the monitoring plan. The validation team has concluded that - all necessary changes have been appropriately reflected in the updated PDD, - the monitoring plan in the updated PDD is in compliance with the applied monitoring methodology, - the monitoring arrangements described in the updated PDD can be implemented and are feasible within the project design.
	☐	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.
		All necessary changes have been appropriately reflected in the updated PDD, the monitoring plan in the updated PDD is in compliance with the applied monitoring methodology, and the monitoring arrangements described in the updated PDD can be implemented and are feasible within the project design.

D.6. Crediting period

Means of validation		According to the Annex-Z Gold Standard Procedures for the renewal of a crediting period^{/PRCP/}, “the start date of the renewed crediting period is defined as the first day after the end date of the previous crediting period, provided the application for a renewal of the crediting period is submitted to Gold Standard prior to the end of the previous crediting period”. The application for a renewal of the crediting period is being submitted to Gold Standard prior to the end of the previous crediting period. Hence the start date of the renewed crediting period is defined as the first day after the end date of the previous crediting period, i.e. 01/01/2018.
Findings	☒	As the respective requirements are met, the project’s 2nd crediting period may start immediately after the expiration of the 1st one, given that all other applicable criteria are met. It is further confirmed that the start date (01/01/2018) and the length of the crediting period (7 years) are in compliance with the Gold Standard Procedures.
	☐	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.
		It is thus confirmed that the start date and the length of the 2 nd crediting period (7 years) are in compliance with the Gold Standard Procedures for RCP.

D.7. Project participants

Means of validation	The validation team has checked the revised PDD/ ^{PDD/} against the registered PDD/ ^{PDD-R/} to check whether the names of the PP in the PDD are consistent with that in the previous PDD/previous GS-Passport and GS project webpage/ ^{gspw/} .	
Findings	☒	The names of the project participants as listed in the revised PDD (sections A.4. and appendix 1) are consistent with those listed on the dedicated GS project website/ ^{gspw/} and registered PDD/ ^{PDD-R/} .
	☐	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.
	The project participants have not changed	

D.8. Post-registration changes

Type of post-registration changes (PRCs)	Confirmation (Y/N)	Validation report for PRCs	
		Version	Completion date
Temporary deviations from the registered monitoring plan, monitoring methodology or standardized baseline	N	-	-
Corrections	N	-	-
Inclusion of a monitoring plan to a registered project activity	N	-	-
Permanent changes from registered monitoring plan, monitoring methodology or standardized baseline	N	-	-
Changes to the project design of a registered project activity	N	-	-
Types of changes specific to afforestation and reforestation project activities	N	-	-

D.9. Complementary Local stakeholder consultation process and its outcome

Means of validation	The validation team has checked the updated GS-Passport, it is stated that the PP conducted a complementary stakeholder consultation for the renewal of the crediting period on 28/07/2017/^{GSP/}. The validation team has checked how the complementary stakeholder consultation was conducted by interviewing the PP and some of the attendees who are also stove users. The validation opinion of the same is detailed below. PP held a complementary stakeholder consultation meeting for the project prior to the submission of the request for a renewal of the crediting period on 28/07/2017 in Siaya town.^{GSP/}. Via checking the participant lists/^{GSP/}, it is confirmed that 41 stakeholders attended the stakeholder consultation meeting. No negative comments were received regarding to the impact to the sustainability development by the project. During the onsite visit, the validation team interviewed two people and confirmed that local stakeholders are satisfied about the project and do not have any negative comments. They informed the validation team that they welcome such projects. They do not have any grievances from the project as such and are aware of the grievance mechanism and how to contact Tembea in case of grievances. The validation team has observed that there is no negative impact on environment or human activities.
----------------------------	---

Findings	☒	Project participants discuss if and why there is or is not a need to conduct a complementary stakeholder consultation for the renewal of the crediting period. Project participants can choose to invite relevant stakeholders for comments electronically or via a physical meeting, but will be required to justify the same. Whenever possible, project participants shall conduct the complementary consultation prior to the submission of the request for a renewal of the crediting period.
	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 15
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.
		A complementary LSC was deemed to be necessary as PP is expanding to other regions of Siaya county. PP held a complementary stakeholder consultation meeting for the project prior to the submission of the request for a renewal of the crediting period at the Distiction Hotel, Siaya Town. An invitation tracking table (mainly through letters, telephones and email) is included in the latest GS Passport. The number of attendees and their names were also included. Via checking the GS Passport ^{/GSP/} it is verified that no negative comments were received that reuired alteration of the project design. A second stakeholder feedback round was therefore not conducted.

D.10. Sustainable Development assessment of “Do No Harm”

Means of validation	The validation team has also checked sustainable development indicators with respect to the level of risk associated with the eleven Safeguarding Principles of the Do-No Harm Assessment (DNHA). The validation opinion of the same is detailed below.	
	1. The project respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The project is not complicit in Human Rights abuses.	The households interviewed by the validation team, had a positive opinion on the project. Purchases of the stoves is purely a voluntary effort after project sensitization and awareness campaigns on the benefits of an improved cookstove. As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	2. The project does not involve and is not complicit in involuntary resettlement.	The project stoves are installed in household homes and therefore this is not a project that requires displacement of any segment of the local population. As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	3. The project does not involve and is not complicit in the alternation, damage or removal of any critical cultural heritage.	Through onsite visit it was confirmed and evidenced that bricks are purchased from local producers who produce bricks for house construction. Other materials such as mud are locally produced. Therefore, there is impact on land from brick productionand stove construction as the stoves are installed in household kitchens with no critical cultural heritage involved

		As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	4. The project respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights	The validation team has interviewed the staff employed by the PP. It was confirmed that no restrictions have been imposed on the staff members regarding their rights as workers of TYCSD. They are provided with motorbikes for field work and monitoring, good working place, and holidays. As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	5. The project does not involve and is not complicit in any form of forced or compulsory labour	All the Tembea staff are contracted by means of a labor contract which does not involve forced or compulsory labour. Artisans and Lead artisans are paid on work done which is voluntary involvement. The interviews with the staff also confirms this. As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	6. The project does not employ and is not complicit in any form of child labour	No evidence of child labour was noted in the office or in the field As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	7. The project does not involve and is not complicit in any form of discrimination based on gender, race, religion, sexual orientation or any other basis.	The staff employed by the PP are both local people of all genders and regions within and around Siaya county As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	8. The project provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments	Hence, the project has provided office workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments. Artisans and lead artisans are not exposed to hazardous materials or dangerous work situations that could risk health conditions, injury or death. As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	9. The project takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle.	Through onsite visit it was confirmed and evidenced that bricks are purchased from local producers who produce bricks for house construction. Other materials such as mud are locally produced. Therefore, the impact on land from brick production is not directly caused by the project. As such there is no risk involved and therefore the project does not violate this safeguarding principle.

	10. The project does not involve and is not complicit in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value or (d) recognized as protected by traditional local communities		The validation team can confirm that all Tembea stoves are constructed and installed within the confines of the HHs kitchens and is done so by free will. No degradation or conversion of any critical area is involved As such there is no risk involved and therefore the project does not violate this safeguarding principle.
	11. The project does not involve and is not complicit in corruption		There was no evidence of corruption involved as far as the project is concerned. Via the onsite investigation and interviews, it is confirmed that all the cost of construction of the stoves is covered by each household and subsidies from carbon credits. There is no government involvement in the project. Therefore, no potential corruption activities have been observed As such there is no risk involved and therefore the project does not violate this safeguarding principle.
Findings	☒	The Do-No-Harm Assessment (DNHA) is conducted with respect to the validity of the updated baseline. Project participants discuss any necessary revision in the scores of the 11 Safeguarding Principles of the Do-No-Harm Assessment (DNHA) following a possible change of the baseline.	
	☒	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.	
		The validation team considers the “Do no harm” assessment has been based on the accurate local situation and the corresponding mitigation measures are included in the GS Passport. It is analyzed in the GS Passport that it would create low risks of relevance to the project activity in all aspects of “Do no harm” assessment. The validation team also considers that no mitigation measures are required for the project activity.	

D.11. Sustainable Development assessment of SD Matrix

Means of validation	The validation team has assessed the scores of the Sustainable Development indicators depending on the baseline which can lead to a revision of the sustainable development monitoring plan. The validation team has also assessed any changes in the scores of the twelve sustainable development indicators as per the sustainable development assessment guidance (Annex-I). The validation opinion is detailed below.	
	1. Air quality	As per the baseline of the project, if the project was not implemented, households will continue using the three-stone fire to meet their cooking and heating needs. Since the baseline and project fuel is the same, the impacts of reduced fuelwood consumption is measured quantitatively. The use of a more efficient cooking method leads to less firewood, complete combustion and less smoke and soot. Furthermore, heat retention is enhanced due to the design of

		the stove. Positive impact on air quality is measured qualitatively from interviews during monitoring surveys. Thus, this sustainable indicator scores a “+”.
	2. Water quality and quantity	Underground and surface water quality and quantity may be enhanced through reduction in tree-felling. However, the impact is impossible to measure and attribute it to the project activity. Thus, this indicator scores a “0”.
	3. Soil condition	Soil condition may be improved due to reduced deforestation and soil erosion. However, the impact is impossible to directly measure and attribute it to the project activity. Hence there is no impact on soil condition in the 2 nd crediting period. The indicator scores of “0” is correct.
	4. Other pollutants	No any harmful pollutants are produced. Thus, this indicator scores a “0”.
	5. Biodiversity	Biodiversity is improved due to reduced deforestation as a result of the project activity. However, the impact is difficult to measure. Thus, this indicator scores a “0”.
	6. Quality of employment	Artisans are trained and promoted to lead artisans upon demonstration of quality work. Their compensation is deemed to be fair in comparison of the local conditions. Skills acquired from training and work is useful within and without work. Thus, this sustainable indicator scores a “+”.
	7. Livelihood of the poor	Time and money spent on fuel per household is significantly reduced due to use of the Tembea efficient cookstove. Households have an opportunity to pay by installments through their Community Savings and Loan groups (CSLs) that that now stand at 1,620 and a total membership of around 45,000. Members can also benefit from being able to pay for healthcare, school fees and other purchases from these established CSLs. Thus, this sustainable indicator scores a “+”.
	8. Access to affordable and clean energy services	The purpose of the project activity is provide an efficient cookstove for each household that will lead to measurable and quantifiable reduction in fuelwood consumption compared to the baseline scenario. The impact of this SD indicator is measured by installations in the sales database. Thus, this sustainable indicator appropriately scores a “+”.
	9. Human and institutional capacity	The project leads to training of both men and women in stove construction. Women role is enhanced through their saving culture and income generating activities through their respective CSLs and growing awareness of environmental issues within the community. Thus, this sustainable indicator scores a “+”.
	10. Quantitative employment and income generation	The project offers employment mainly to the youth through stove construction, assessments, monitoring, awareness, and management positions as seen onsite. This has a real impact on the economic well being of the community thus contributing to overall reduction in poverty. Thus, this indicator scores a “+”.
	11. Balance of payments and investment	No balance of payments is involved or measurable from the project activity. Thus, this sustainable indicator scores a “0”.
	12. Technology transfer and technological self-reliance	The project does not involve technology transfer as it improves an existing technology. Thus, this sustainable indicator scores a “0”.

Findings	☒	The Sustainable Development(SD) Assessment is conducted with respect to the validity of the updated baseline. Project participants discuss any necessary revision in the scores of the 12 SD indicators following a possible change of the baseline.
	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context: - CAR 11
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.
The indicators within the components mentioned above have been set out in the Sustainable Development Assessment Matrix in the passport and the project's performance has been assessed using the scoring system as follows: • -: negative impacts • 0: no, or negligible impacts, i.e. there is no impact or the impact is considered insignificant to stakeholders • + positive impacts The project shows a positive performance in the sustainable development components. The validation team hereby confirms that the sustainable development indicators relevant for the project activity have been assessed using the Gold Standard Sustainable Development (SD) assessment matrix as required by the Gold Standard version 2.2. It is able to verify that the sustainable development matrix is prepared as per the existing sources of information, the GS validation report as well as the stakeholder consultation, and the scoring is reproducible and verifiable. The project activity contributes to the sustainable development of the region.		

D.12. Revised SD monitoring plan

Means of validation	DOE has validated the revised sustainability monitoring plan in section G of the Gold Standard Passport and confirms that the revised sustainability monitoring plan contains all necessary parameters that are clearly described and that the means of monitoring described in the plan complies with the requirements of Gold Standard Standard 2.2 and the result of outcome sustainability assessment provided in section F of the Gold Standard Passport (Do no harm assessment in section F.1 and Sustainable development matrix in section F.2). The revised sustainability monitoring plan is included in the GS Passport as per the requirements in the GS Toolkit Annex I. The validation of each non-neutral indicator is tabulated as follows:	
	1. Air quality	As the project leads to significant reduction in fuelwood use, it reduces the emissions other than GHG such as soot from improper combustion and Respirable Suspended Particulate Matter (RSPM). Incidents of kitchen pollution with excessive smoke leading to respiratory and eye problems are a good qualitative measure. The validation team agrees that "Air quality" is a suitable monitoring indicator as it can reflect the environmental condition. Annual monitoring will be carried out for the assessment of air quality via monitoring surveys by a dedicated staff. Therefore, it can be considered to be used as a SD indicator.
	2. Quality of Employment	Stove artisans are trained in areas of construction and quality. Stoves that do not meet the quality standards are not disseminated to users. The training ensures that proper construction is done on the stoves to optimize their efficiency. The validation team agrees that "Quality of Employment" is a suitable monitoring indicator as it can reflect the skills gained. Annual monitoring will be carried out for the

		assessment of Quality of Employment. Therefore, it can be considered to be used as a SD indicator.
	3. Livelihood of the poor	Improvements in living conditions as a result of the project activity are measured three-fold. Less time saved in gathering firewood relative to the baseline scenario, money saved from buying firewood, and the general impact of the project through CSLs. The validation team agrees that “Livelihood of the poor” is a suitable monitoring indicator as it can reflect the actual project socio-economic impact. Annual monitoring will be carried out for the assessment of Livelihood of the poor. Therefore, it can be considered to be used as a SD indicator.
	4. Access to affordable and clean energy services	Indicator is measured through records from the sales database and monitoring surveys to determine the number of installations and actual active users of the efficient cook-stoves. The validation team agrees that “Access to affordable and clean energy services” is a suitable monitoring indicator. Annual monitoring will be carried out for the assessment of Access to affordable and clean energy services. Therefore, it can be considered to be used as a SD indicator.
	5. Human/institutional capacity	Indicator is determined through the number of women trained in savings in savings and loans in their groups. Women are also trained to create awareness of the stove benefits within their communities. This way they are better able to access the potential efficient stove beneficiaries from the localities and create awareness and demand for the Tembea stoves. The validation team agrees that “Human/institutional capacity” is a suitable monitoring indicator. Annual monitoring will be carried out for the assessment Human/institutional capacity. Therefore, it can be considered to be used as a SD indicator.
	6. Quantitative employment and income generation	The project would provide employment opportunities for project staff. Artisans and Lead artisans are also able to receive incomes from their stove-making activities which would otherwise be impossible without the project activity. The validation team agrees that “Quantitative employment and income generation” is a suitable monitoring indicator as it can reflect the actual amount of employment opportunities created by the project monitoring. The improvement of income generation can be also indicated by the staff salary records. Annual monitoring will be carried out for the assessment of quantitative employment and income generation. Therefore, it can be considered to be used as a SD indicator in quantitative employment and income generation.
Findings	☒	Project participants discuss prepare a revised sustainable development monitoring plan to accommodate any changes and/or comments from the local stakeholders. This can potentially include new mitigation measures as per new comments by stakeholders. Changes in the scores of the SD indicators due to the new baseline can also lead to a revision of the sustainable development monitoring plan. The changes in the scores of the SD indicators shall be assessed as per the sustainable development assessment guidance discussed above.
	☒	The respective requirements have widely been complied with; however; the following issues needed to be addressed in this context:
		- CAR 7

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.
		As there is no change of the baseline comparing the 1 st crediting period, and no new comments proposed by stakeholders, hence the monitoring plan is the same as the registered GS passport. The monitoring parameters are same, only the current situation of parameter updated based on the latest data source. The DOE hereby confirms that the project participants are able to implement the revised SD monitoring plan.

SECTION E. Internal quality control

Before the submission of the final VAL RCP report a technical review of the whole validation procedure was carried out. The technical reviewers are competent GHG auditors being appointed for the scope this project falls under. The technical reviewers are not considered to be part of the validation team and thus not involved in the decision making process up to the technical review.

As a result of the technical review process the validation opinion and the topic specific assessments as prepared by the validation 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 validation has been carried out by a senior assessor located in the accredited premises of TÜV NORD.

After this step the submission for requesting the renewal of crediting period is conducted.

SECTION F. Validation opinion

The myclimate Foundation. has commissioned the TÜV NORD JI/CDM Certification Program to re-validate the GS project “*Energy Efficient Cook Stoves for Siaya Communities, Kenya*” for the purpose of renewal of the crediting period. The validation is based on the relevant GS requirements.

The Gold Standard Documentation and supporting documents were reviewed against the criteria as set out in the Gold Standard Requirements, the Gold Standard Toolkit, respective Annexes and CDM requirements, as applicable. The subsequent background investigation, follow-up interviews and review of comments by parties, stakeholders and NGOs have provided TÜV NORD JI/CDM Certification Program with sufficient evidence to validate the fulfillment of the stated criteria applicable for RCP.

In detail the conclusions can be summarized as follows:

The current baseline is in line with the national and/or sectoral policies and circumstances at the time of requesting renewal of crediting period.

The project meets all requirements of procedures set by the Gold Standard Procedures For The Renewal of a Crediting Period.

The monitoring plan of GHG parameters is transparent and adequate and in line with the applicable monitoring methodology *Technologies and Practices to Displace Decentralized Thermal Energy Consumption (Version 2.0)*.

The revised monitoring plan of SD parameters is transparent and adequate.

The calculation of the project emission reductions is carried out in a transparent and conservative manner, so that the calculated emission reductions of **1,014,371 tCO₂e** are most likely to be achieved within the second renewable crediting period of 7 years.

The conclusions of this report show, that the project, as it was described in the project documentation, is in line with all criteria applicable for the renewal of the crediting period.

Kigali, 04/12/2017



David Lubanga
TÜV NORD JI/CDM Certification Program
Validation Team Leader

Appendix 1. Abbreviations

BAU	Business as usual
CA	Corrective Action / Clarification Action
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CER	Certified Emission Reduction
CL	Clarification Request
CO₂	Carbon dioxide
CO₂e	Carbon dioxide equivalent
CP	Certification Program // Crediting Period
DNA	Designated National Authority
EB	CDM Executive Board
ER	Emission Reductions
ETS	Emission Trading Scheme
FAR	Forward Action Request
GHG	Greenhouse gas(es)
GS	Gold Standard
GSR	Gold Standard Requirement
GST	Gold Standard Toolkit
IPCC	Intergovernmental Panel on Climate Change
MP	Monitoring Plan
MR	Monitoring Report
PA	Project Activity
PCP	CDM Project Cycle Procedure
PDD	Project Design Document
PP	Project Participant
PPA	Power Purchase Agreement
PRC	Post-registration changes
PS	CDM Project Standard
QC/QA	Quality control/Quality assurance
RCP	Renewal of Crediting Period
TPCG	Taiwan power grid
SD	Sustainability Development
SDM	SD Matrix
TYCSD	Tembea Youth Centre for Sustainable Development
UNFCCC	United Nations Framework Convention on Climate Change
VER	Voluntary Emission Reduction
VVS	CDM Validation and Verification Standard

Appendix 2. Competence of team members and technical reviewers



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JICDM Certification Program

Mr. Stefan Winter

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2020-07-27
VCS	Senior Assessor (Validation, Verification) Technical Reviewer	2020-07-27

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. 5, Date: 2017-07-20



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JICDM Certification Program

Mr. David Lubanga

SCHEME	STATUS	VALID UNTIL
CDM	Lead Assessor (Validation, Verification)	2018-10-20
VC S / ISO 14064-2	Lead Assessor	2018-10-20

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
3.1	Energy demand

251 - Rev. 4, Date: 2015-10-21



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JICDM Certification Program

Mr. Rainer Winter

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2019-07-01
JI	Senior Assessor Technical Reviewer	2019-07-01
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2019-07-01

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.1	Thermal Energy Generation
1.2	Renewables
4.1	Cement and lime production
4.2	Paper
5.1	Chemical Industry
5.2	Caprolactam, nitric and adipic acid
8.1	Mining/mineral production
9.1	Aluminium and magnesium production
9.2	Iron, steel and Ferro-alloy production
11.1	Emissions of fluorinated gases
11.2	Refrigerant gas production
12.1	Chemical industry
13.1	Solid waste and wastewater

003 - Rev. 10, Date: 2016-07-01

003_S01-VA060-F20_2016-07-01_rev10.doc

S01-VA060-F20 rev10 / 2012-10-25



Statement of Competence

Appointment and authorization according to the procedures of the TÜV NORD JICDM Certification Program

Mr. Kunal Rami

SCHEME	STATUS	VALID UNTIL
CDM	Senior Assessor (Validation, Verification) Technical Reviewer	2020-03-26
VCS / ISO 14064-2	Senior Assessor Technical Reviewer	2020-03-26

Authorization status for technical areas within sectoral scopes:

CODE	TECHNICAL AREA
1.2	Renewables
6.1	Construction
13.1	Solid waste and wastewater

224 - Rev. 6, Date: 2017-03-27

224_S01-VA060-F20_2017-03-27_rev6.doc

S01-VA060-F20 rev10 / 2012-10-25

Appendix 3. Documents reviewed or referenced

No.	Author	Reference	Title	References to the document	Provider
1.	PP	/GSP/	RCP GS Passport	RCP GS Passport “Energy Efficient Cook Stoves for Siaya Communities, Kenya” - Version No. 3.2.1, dated 13/08/2017 - Version No. 3.2.2, dated 13/08/2017 - Version No. 3.2.3, dated 29/10/2017 - Version No. 3.2.4, dated 26/11/2017	
2.	PP	/BSPS/	171016_Tembea_BS_PS_Report_v02		PP
3.	PP	/PDD/	RCP Project Design document	RCP Project Design document “Energy Efficient Cook Stoves for Siaya Communities, Kenya” - Version No. 3.2.1, dated 01/08/2017 - Version No. 3.2.2, dated 16/10/2017 - Version No. 3.2.3, dated 29/10/2017	PP
4.	PP	/XLS/	Emission reduction calculation spreadsheets	- 170810_project_size_Tembea_2nd_CP - 170810_Tembea_ER_forecast_2018_2024_v2 - 170331_Tembea_Cook Stove Project_sales - 170718_BPFT_baseline_2017_analysis_V03 - 171010_Tembea_ER_forecast_2018_2024_v3 - 171016_baseline survey_2017_analysis_V02 - 171016_project_size_Tembea_2nd_CP_v02 - 170331_Tembea_Cook Stove Project_sales - 171027_Tembea_ER_forecast_2018_2024_v4	PP
5.	UNFCCC	/METH/	Technologies and Practices to Displace Decentralized Thermal Energy Consumption, Version 2.0	https://www.goldstandard.org/sites/default/files/revised-tpddtec-methodology_april-2015_final-clean.pdf	UNFCCC
6.	TÜV NORD	/CPM/	Certification Program Manual	TÜV NORD JI / CDM Certification Program Manual (incl. procedures and forms)	TÜV NORD
7.	PP	/GSP-R/	Registered GS Passport	Registered GS Passport named “Energy Efficient Cook Stoves for Siaya Communities, Kenya” (Version No. 3.2, dated 10/07/2012)	PP

No.	Author	Reference	Title	References to the document	Provider
8.	GS	/GSR/	Gold Standard Requirements Version 2.2	http://www.goldstandard.org/resources/energy-requirements	GS website
9.	GS	/GST/	Gold Standard Toolkit Version 2.2	http://www.goldstandard.org/resources/energy-requirements	GS website
10.	GS	/GSP-T/	Gold Passport template (GSv2.2)	http://www.goldstandard.org/resources/	GS website
11.	IPCC	/IPCC/	IPCC	- IPCC Good Practice Guidance & Uncertainty Management in National Greenhouse Gas Inventories, 2000 - Revised 2006 IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual	IPCC Website
12.	UNFCCC	/KP/	Kyoto Protocol (1997)	-	UNFCCC
13.	UNFCCC	/MA/	Marrakesh – Accords	Decision 3/CMP. 1 (Marrakesh – Accords & Annex to decision (17/CP.7))	UNFCCC
14.	PP	/PDD-R/	Registered GS PDD	Registered GS Project Design Document named “Energy Efficient Cook Stoves for Siaya Communities, Kenya” (Version No. 3.2, dated 10/07/2012)	PP
15.	UNFCCC	/PDD-T/	PDD Template	Project Design Document template (Version No. 10.1, 28/06/2017)	UNFCCC
16.	PP	/PHT/	Photographs	Photographs of project stoves/kitchens from Onsite visit	PP
17.	DOE & PP	/VER/	Previous periodic Verification Documents	Previous periodic Monitoring Report and Verification Report for CDM project “Energy Efficient Cook Stoves for Siaya Communities, Kenya” https://products.markit.com/br-reg/public/project.jsp?project_id=103000000002050	GS Markit Website
18.	GS website	/gs/	Gold Standard Website	http://www.goldstandard.org/	GS website
19.	GS website	/gspw/	Energy Efficient Cook Stoves for Siaya Communities, Kenya project webpage	https://products.markit.com/br-reg/public/project.jsp?project_id=103000000002050	GS Markit Website
20.	GS	/PRCP/	GS 2.2 ANNEX-Z Gold Standard Procedures for the renewal of a crediting period	http://www.goldstandard.org/resources/energy-requirements	GS Website
20.		/GPT/	Guidelines for Field Performance Tests of Energy Saving Devices and Kitchen Performance Tests (FTs - KT) - Climate Care	http://www.ipmorgancimatecare.com/media/documents/pdf/ClimateCare_Guidelines_for_Performance_Tests_and_KPTsx.pdf	

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

Table 1. FAR from previous Verification/Validation

FAR ID	-	Section no.	-	Date: DD/MM/YYYY
Description of FAR				
Project participant response (1st round)				Date: DD/MM/YYYY
Documentation provided by project participant (1st round)				
☐	Changes in the PDD	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: DD/MM/YYYY
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☐ The finding is closed		

Table 2. CL from this verification

CL ID	01	Section no.	B.6.1	Date: 25/09/2017
Description of CL				
PDD version 3.2.1, section B.6.1, It is stated that the assumed $U_{p,y}$ value is 100%. However, values of 90 and 93% have been applied in the calculations for ER stove year and ER for stove per month respectively. Please clarify this approach				
Project participant response (1st round)				Date: 18/10/2017
90% as been applied in all documents				
Documentation provided by project participant (1st round)				
☒	Changes in the PDD	Section(s): B.6.1	New version No.: 3.2.1	
☐	Changes in MR	Section(s):	New version No.:	
☒	Changes in XLS	Worksheet(s):	New version No.: 3	
☐	Other:			
DOE assessment (1st round)				Date: 19/10/2017
PDD version 3.2.1, section B.6.1 It is assumed that 90% of the stoves will be in operation at any one given time. The value is applied in both monthly and annual calculations. The assumption is reasonable as the incident of use is found to be much higher. However, this is an ex-post monitored value				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

Table 3. CAR from this verification

CAR ID	01	Section no.	A.2	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section A.2, 1. Values indicated for per capita baseline fuel consumption are incorrect and inconsistent with the provided reference spreadsheet 2. The referenced spreadsheet version 2.0 is not the latest version 3. The emission reductions table is neither correct nor consistent with the provided reference spreadsheet for ER forecast				
Project participant response (1st round)				
1. The pdd has been corrected based on the correct analysis figures 2. the latest version (v3) has been uploaded 3. all sheets have been included				

Documentation provided by project participant (1st round)		Date: 18/10/2017
☒ Changes in the PDD	Section(s):A.2	New version No.: 3.2.1
☐ Changes in MR	Section(s):	New version No.:
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		Date: 19/10/2017
Revised PDD version 3.2.1, section A.1 (template version 10.1) - The value has been changed to 1.24Kg/day per capita consistent with the BFT analysis - The latest BFT analysis has been corrected to version 3.0 - The table is now consistent with the ER and installation focus		
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	02	Section no.	A.4.3	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section A.4.3, - The Tembea stove lifespan is estimated at 7 years. Please clarify how this was arrived at and the experience so far. How have calculations reflected the stove lifetime? - The yearly and total installations shall be consistent with all spreadsheets				
Project participant response (1st round)				
- We use the monitoring usage survey to help estimate drop-off rates, and the aging effect, so far all the stoves are working and indeed the old stoves have high usage rates. In the second crediting we have eliminated stoves annually to account for aging - I have updated the sheets				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☒ Changes in the PDD	Section(s):A.4.3		New version No.: 3.2.1	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment (1st round)				Date: 19/10/2017
- Revised PDD v3.2.1 section A.6 (PDD template version 10.1) - Stove lifetime is defined as 7 years. Monitoring surveys have shown that stoves of 2011 are still working and in good working condition. The same was confirmed through visiting stoves of each age group in the DOE sample onsite. - The estimated average monthly stove installation have been corrected and now consistent with the relevant excel spreadsheet				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	03	Section no.	B.2	Date : 25/09/2017
Description of CAR				
PDD version 3.2.1, section B.2, - From the results of the Kitchen test (2017), it is clear that the Tembea stove consumption has reduced from 1.32 to 1.25 tons of wood fuel per year. A clarification is requested - Calculations of useful energy and stove rating will be updated as per the latest test information				
Project participant response (1st round)				
- in our assessment this is due to improved skills on stove usage...lighting and usage - the calculations have been updated				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.2		New version No.: 3.2.1	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				

DOE assessment (1st round)		Date: 19/10/2017
PDD version 3.2.1, section B.2		
1. OK 2. OK as updated		
Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	04	Section no.	B.4	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section B.4,				
1. Values for fuel savings shall be updated as per latest survey results 2. It shall be clarified how 24.2 sticks translate into 53kg/week in the baseline case, and 14.7 sticks translate into 24Kg/week in the project scenario 3. The confidence/precision values are not correct 4. Values in leakage analysis (b,c) shall be updated as per the latest Survey/KPT results 5. The referenced spreadsheet is not the latest				
Project participant response (1st round)				
1. fuel savings values updated 2. 2. The calculation is based on the commonly used unit..households are not able to refer their fuel usage in kgs but rather how many sticks. For accurate measurement weigh scale is used to find figures used in the calculations 3. I have corrected the same 4. Section reviewed given application of fixed NRB value 5. Latest file used				

Documentation provided by project participant (1st round)			Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.4	New version No.: 3.2.1	
☐ Changes in MR	Section(s):	New version No.:	
☐ Changes in XLS	Worksheet(s):	New version No.:	
☐ Other:			

DOE assessment (1st round)		Date: 19/10/2017
PDD version 3.2.1, section B.4		
1. Fuel savings for a project stove have been updated to 0.0041 t/day 2. Weigh scale were applied and calibrated before use. The same was demonstrated onsite 3. The values have been corrected and in line with the applied methodology 4. Not OK as some values are still not correct 5. Now referenced as version 3.0 which is the latest		
Project participant response (2nd round)		
4. The section has been revised		

Documentation provided by project participant (1st round)			Date: 21/10/2017
☒ Changes in the PDD	Section(s): B.4	New version No.: 3.2.3	
☐ Changes in MR	Section(s):	New version No.:	
☐ Changes in XLS	Worksheet(s):	New version No.:	
☐ Other:			

DOE assessment (2nd round)		Date: 27/10/2017
PDD version 3.2.3, section B.4		
4. Corrected		
Conclusion Tick the appropriate checkbox	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	05	Section no.	B.4	Date: 25/09/2017
Description of CAR				

PDD version 3.2.1, section B.4, In accordance with the GS Annex Z, the project participant is requested to carry out an assessment of the baseline validity using the latest version of the CDM Methodological Tool: <i>Assessment of the validity of the original/current baseline and update of the baseline at the renewal of the crediting period.</i>		
Project participant response (1st round)		
1. An assessment of the validity has been undertaken in the PDD, kindly refer for more information.		
Documentation provided by project participant (1st round)		Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.4	New version No.: 3.2.1
☐ Changes in MR	Section(s):	New version No.:
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		Date: 19/10/2017
PDD version 3.2.1, section B.4 Baseline validity has been carried out in accordance with the CDM methodological tool. The baseline scenario remains the same and the fixed values have been updated accordingly		
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	06	Section no.	B.6.2	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section B.6.2, 1. EF_{b,non-CO2} , & EF_{p,non-CO2} Please note that the values for these parameters are not correct and not consistent with the provided spreadsheets. Latest CH ₄ and N ₂ O GWP values shall be applied 2. f_{NRB,i,y} The value for this parameter shall be updated accordingly				
Project participant response (1st round)				
1. value have been updated				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.6.2		New version No.: 3.2.1	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment (1st round)				Date: 19/10/2017
PDD version 3.2.1, section B.6.2, 1. GWP values have been updated as well as emission factors 2. f _{NRB} corrected to 92%.				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	07	Section no.	B.6.3	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section B.6.3, 1. The value for ER _{stove-year} and fuel savings shall be corrected in line with corrections in all the parameters CAR 07 and the assumed U _{p,y} value (s) 2. Emission factors and BE, PE and ER calculations shall be corrected accordingly				
Project participant response (1st round)				
1. values have been updated 2. values have been updated				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.6.3		New version No.: 3.2.1	
☐ Changes in MR	Section(s):		New version No.:	

☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (1st round)		Date: 19/10/2017
PDD version 3.2.1, section B.6.3		
1. Revised and consistent with excel spreadsheets		
2. OK as revised		
Conclusion <i>Tick the appropriate checkbox</i>	☒ Additional action should be taken (finding remains open) ☐ The finding is closed	

CAR ID	08	Section no.	B.6.4	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section B.6.4, The ER table shall be revised with the correct values				
Project participant response (1st round)				
Kindly clarify if you mean the years applied? Corrections undertaken				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.6.4		New version No.: 3.2.1	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment (1st round)				Date: 19/10/2017
PDD version 3.2.1, section B.6.4 Revised. Please correct the crediting years				
Project participant response (2nd round)				
Crediting years revised in section B 6.4 of the PDD				
Documentation provided by project participant (1st round)				Date: 21/10/2017
☒ Changes in the PDD	Section(s): B.6.4		New version No.: 3.2.2	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment (2nd round)				Date: 22/10/2017
PDD version 3.2.2, section B.6.4 The crediting years have been indicated as 2018 through 2024				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	09	Section no.	B.7.1	Date: 25/09/2017
Description of CAR				
PDD version 3.2.1, section B.7.1, The SD indicators shall be updated for the second crediting period especially if initial objectives have been met or exceeded				
Project participant response (1st round)				
1. Revised in the passport				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☒ Changes in the PDD	Section(s): B.7.1		New version No.: 3.2.1	
☐ Changes in MR	Section(s):		New version No.:	
☐ Changes in XLS	Worksheet(s):		New version No.:	
☐ Other:				
DOE assessment (1st round)				Date: 19/10/2017
SD indicators description and scores have not been updated as the baseline and objectives remain the same. The same shall be part of the monitoring plan				

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

CAR ID	10	Section no.	B.8	Date:	25/09/2017
Description of CAR					
PDD version 3.2.1, section B.8, Date of the BS/PS shall be updated					
Project participant response (1st round)					
1. Revised					
Documentation provided by project participant (1st round)					Date:
☒ Changes in the PDD					Section(s): B.8 New version No.: 3.2.1
☐ Changes in MR					Section(s): New version No.:
☐ Changes in XLS					Worksheet(s): New version No.:
☐ Other:					
DOE assessment (1st round)					Date:
PDD version 3.2.1, section B.7.3 (new template) The date has been updated					
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	11	Section no.	All	Date:	25/09/2017
Description of CAR					
Excel Files;					
1. 170810_project_size_Tembea_2nd_CP - B24:B30 – The stove numbers are inconsistent with the PDD and other calculations - Total stove years are manually inserted. Calculations shall be linked to the actual number of stoves					
2. 170810_Tembea_ER_forecast_2018_2024_v2 - The methodology version shall be updated in the tabs 'ER-per_stove_year' and 'ER-per_stove_month' - Tab: ER-per_stove_year: Cumulative Usage rate of 0.9 is assumed and applied. - Tab: ER-per_stove_month: Cumulative Usage rate of 0.93 is applied.					
3. 170522_Tembea_BPFT_Sampling_ver01 - Stove life is 7 years. This means for the 2nd CP, stoves from 2012 are still eligible. Stoves can be dropped out with each passing year. If not replaced. It is not clear why only stoves from 2016 are included					
4. 170331_Tembea_Cook Stove Project_sales (Sales Record) - Tab: Number constructed per month: Why 2010 & 2011 excluded? Even if dropped out due to age? - Very few phone numbers of stove buyers. How is continuous monitoring, maintenance or surveys conducted?					
Project participant response (1st round)					
1. <i>The document has been revised</i> 2. <i>Methodology revised, single usage rate has been applied</i> 3. <i>we used stoves from 2016, because we needed households that have not used the Tembea stoves for more than year, and most likely to still have the baseline stove so that we can gather from them both baseline and project conditions, this is hard with households that have used project stove for long.</i> 4. <i>2010 was pilot year and partly 2011, so we needed the analysis...however the stoves in the database, and no they are not included but will be gradually dropped in second crediting. Many households give phones number of siblings or those of the chairperson of the group such numbers were not found useful hence a strict rule to only include a phone number if it belongs to stove user/owner.</i>					

Documentation provided by project participant (1st round)		Date: 18/10/2017
☐ Changes in the PDD	Section(s):	New version No.:
☐ Changes in MR	Section(s):	New version No.:
☒ Changes in XLS	Worksheet(s):	New version No.: 2
☐ Other:		
DOE assessment (1st round)		Date: 19/10/2017
1. 171016_project_size_Tembea_2nd_CP_v02 - Stove forecast has been updated in line with the excel workbook 171010_Tembea_ER_forecast_2018_2024_v3 - OK as revised 2. 171010_Tembea_ER_forecast_2018_2024_v3 - Methodology version has not been updated in either tabs. Please see cell K4 - Cumulative usage rate U_y has been assumed as 0.9 for both calculations 3. 170522_Tembea_BPFT_Sampling_ver01 - OK as clarified 4. 170331_Tembea_Cook Stove Project_sales (Sales Record) - Stove age will be considered during the crediting period and stoves of ages above 7 years will be dropped. However, during the onsite assessment, sampled stoves of 2011 were found to be in good operating condition. It was also established that it was not easy to get phone numbers from stove buyers as any people did not have or telephone numbers changed over time and could not be relied on		
Project participant response (2nd round)		
The document has been revised with correct methodology		
Documentation provided by project participant (1st round)		Date: 27/10/2017
☐ Changes in the PDD	Section(s):	New version No.:
☒ Changes in MR	Section(s):	New version No.: 4
☐ Changes in XLS	Worksheet(s):	New version No.:
☐ Other:		
DOE assessment (2nd round)		Date: 27/10/2017
Now indicated as methodology version 2.0		
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	12	Section no.	All	Date: 25/09/2017
Description of CAR				
GS Passport version 3.2.1, GS Passport Template version 2.2 shall be applied and all sections completed accordingly				
Project participant response (1st round)				
1. Latest version used				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☐ Changes in the PDD	Section(s):		New version No.: 3.2.1	
☒ Changes in GS Passport	Section(s): All		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: 19/10/2017
GS Passport version 3.2.1 Latest GS Passport Template version 2.2 has been applied				
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed			

CAR ID	13	Section no.	E.1/E.2	Date: 25/09/2017
Description of CAR				

GS Passport version 3.2.1, section E.1 & E.2			
1. Please update these sections with all the information required by the <i>Gold Standard Procedures for the Renewal of a Crediting Period</i> (Annex-Z)			
2. Clarify why the initial SFR has been excluded from the revised GS Passport			
Project participant response (1st round)			
1. Section revised			
2. Section included			
Documentation provided by project participant (1st round)			Date: 18/10/2017
☐	Changes in the PDD	Section(s):	New version No.:
☒	Changes in GS Passport	Section(s): E.1 & E.2	New version No.: 3.2.1
☐	Changes in MR	Section(s):	New version No.:
☐	Changes in XLS	Worksheet(s):	New version No.:
☐	Other:		
DOE assessment (1st round)			Date: 19/10/2017
GS Passport version 3.2.1, section E.1 & E.2			
1. Sections have been updated with relevant information required by the GSv2.2 template as well as the Annex Z			
2. Details of the initial SFR have been included in the E.2 of the Passport			
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

CAR ID	14	Section no.	F.1	Date: 25/09/2017
Description of CAR				
GS Passport version 3.2.1, section F.1 & F.2				
Please update these sections in line with the <i>Gold Standard Procedures for the Renewal of a Crediting Period</i> (Annex-Z)				
Project participant response (1st round)				
1. Section revised				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☐	Changes in the PDD	Section(s):	New version No.:	
☒	Changes in GS Passport	Section(s): F.1 & F.2	New version No.: 3.2.1	
☐	Changes in MR	Section(s):	New version No.:	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			
DOE assessment (1st round)				Date: 19/10/2017
GS Passport version 3.2.1, section F.1 & F.2				
Since the baseline remains valid, reassessment of the SD matrix and the DNH is deemed to be not necessary				
Conclusion <i>Tick the appropriate checkbox</i>		☐ Additional action should be taken (finding remains open) ☒ The finding is closed		

CAR ID	15	Section no.	G	Date: 25/09/2017
Description of CAR				
GS Passport version 3.2.1, section G				
Section not completed as per GSv2.2 passport & GS Annex-Z				
Project participant response (1st round)				
1. Section revised				
Documentation provided by project participant (1st round)				Date: 18/10/2017
☐	Changes in the PDD	Section(s):	New version No.:	
☒	Changes in GS Passport	Section(s): G	New version No.: 3.2.1	
☐	Changes in MR	Section(s):	New version No.:	
☐	Changes in XLS	Worksheet(s):	New version No.:	
☐	Other:			

DOE assessment (1st round)		Date: 19/10/2017
GS Passport version 3.2.1, section G		
OK corrected and relevant values updated based on results of the BS surveys		
Conclusion <i>Tick the appropriate checkbox</i>	☐ Additional action should be taken (finding remains open) ☒ The finding is closed	

Table 4. FAR from this verification

FAR ID	01	Section No.	B.6.2	Date: 25/09/2017
Description of FAR				
The 92% default value for $f_{NRB,i,y}$ is no longer valid. The same shall be updated prior to verification or request for issuance during the first periodic verification				
Project participant response				Date: DD/MM/YYYY
The value will be updated before verification visit				
Documentation provided by project participant				
☒	Changes in the PDD	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 <i>Tick the appropriate checkbox</i>	☒ To be checked during the next periodic verification			