

Validation report for GS4GG Project Activity

BASIC INFORMATION			
Title of the project activity	Title: CCT Clean Cooking Project, Tanzania GS reference number: GS23462		
Scale of the project activity	☒ Large-scale ☐ Small-scale ☐ Microscale		
GS Version applicable	GS4GG		
Version number of the validation report	02		
Completion date of the validation report	29/05/2026		
Date and Version number of the PDD to which this report applies	Version 3.0, dated 07/05/2026		
Project developer	Clean Cooking Technologies S.R.L. (CCT Italy)		
Project Representative	Clean Cooking Technologies S.R.L. (CCT Italy)		
Project Participants and any communities involved	Clean Cooking Technologies, S.R.L. (CCT Tanzania)		
Host Party	United Republic of Tanzania		
Applied methodology	Methodology applied: GS4GG Methodology for Metered & Measured Energy Cooking Devices, <u>Version 1.2</u> , Dated: 13/12/2022		
Certification Pathway (Project Certification/Impact Statements & Products)	Impact Statements & Products		
Activity Requirements applied:	GS4GG: Community Services Activity Requirements, <u>Version 1.2</u> , Dated: 24/10/2019		
Product Requirements applied:	GHG Emissions Reduction & Sequestration, <u>Version 3.2</u> , Dated: 12/12/2025		
Regular/Retroactive:	Regular		
Mandatory sectoral scopes	Sectoral scope 3: Energy demand		
Conditional sectoral scopes, if applicable	N/A		
Estimated amount of SDG Impact Certified	SUSTAINABLE DEVELOPMENT GOALS TARGETED	SDG IMPACT (DEFINED IN B.6)	ESTIMATED ANNUAL AVERAGE
	SDG 13 - Climate Action (mandatory)	Amount of GHGs emissions avoided or sequestered	172,335 tCO _{2e}
	SDG 1 - No Poverty	Proportion of population living in households with access to basic services	95 Percentage
	SDG 3 - Good Health and Well Being	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions	100 Percentage
	SDG 4 – Quality Education	Number of employees provided skill development training	100 Number

	SDG 5 - Gender Equality	Average time saving associated with cooking time and fuel collection	329 Hours saved / household / year
	SDG 7 - Affordable and Clean Energy	Number of beneficiaries: Households	150,000 Number of households
	SDG 8 - Decent work and Economic Growth	Total number of jobs	100 Number
	SDG 15- Life on Land	Total non-renewable wood fuel saved	129,801 Tonnes / year
Name and UNFCCC reference number of the VVB	4K Earth Science Private Limited UNFCCC Ref No.: A6.4E-0006		
Name, position and signature of the approver of the validation report	 Mr. Stalin S Regional Manager		

SECTION A. Executive summary

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4K Earth Science Private Limited has been contracted by 'Clean Cooking Technologies S.R.L. (CCT Italy)' to perform a validation of the GS project 'CCT Clean Cooking Project, Tanzania' (GS Ref. No. 23462) in Tanzania.

The scope of the validation is defined as an independent and objective review of the GS project design document /10/, the project's baseline study /26/, monitoring plan and other relevant documents listed under appendix 3 of this report. The information in these documents is reviewed against the requirements of 'Gold Standard for Global Goals' /01/ in conjunction with the CDM Validation and Verification Standard for Project Activities (Version 03) /02/, Project Cycle Procedure for Project Activities (Version 03.0) /02/, Project Standard for Project Activities (Version 03.0) /02/, Kyoto Protocol requirements /03/, GS Validation and Verification Standard V2.0 /01/ and UNFCCC rules.

The report is based on the assessment of the GS project design document /10/, application of standard auditing techniques including but not limited to desk review, follow up actions (i.e. interviews) and also the review of the applicable approved methodological /01/ and relevant tools, GS4GG guidance and CDM decisions.

The proposed Gold Standard (Individual) Large Scale Project Activity is a voluntary initiative by Clean Cooking Technologies S.R.L. (CCT Italy) /13/. The Project aims to distribute electric cookstoves, i.e., Induction Stoves & Electric Pressure Cookers (EPC), to households and communities in Tanzania. The project will be implemented nationwide across the United Republic of Tanzania as confirmed during site visit. Initially, the project will be implemented in the Dar es Salaam region of Tanzania and then expanded to other regions in Tanzania as per demand. The project will be implemented in urban and peri-urban localities in Tanzania that have access to electricity but still rely on solid fuels (firewood and charcoal) for cooking and use traditional stoves or three-stone fires as their primary cooking method as confirmed during site visit observations and interview with PD. In the future, the project will also serve rural households once reliable grid electricity becomes available to them.

Baseline Scenario: The latest Tanzania DHS shows that 89.3% of the total households in Tanzania Mainland primarily rely on solid fuels for cooking (73.6% Urban Households and 96.8% rural households) as confirmed from baseline study /26/ used by the PD. In Tanzania, household air pollution remains a major public health concern, primarily due to the widespread use of firewood and charcoal for cooking. 39,170 deaths occurred in 2019 in Tanzania as a result of household air pollution from using solid fuels for cooking as confirmed from IEA: Access to Clean Cooking/26/.

Purpose of Project: The purpose of the proposed project activity is to distribute high-quality energy-efficient induction stoves & electric pressure cookers to households and communities in Tanzania. The replacement of traditional methods of cooking by electric stoves, hence avoiding the amount of woody biomass used for cooking, as well as the amount of GHG emitted into the atmosphere, and alleviating deforestation pressure in Tanzania. The project is set to replace traditional stoves, three-stone fires, or open fires, which rely on woody biomass, with electric stoves. The electric stoves will utilize the electricity as fuel. It's important to highlight that the fuel used in the baseline scenario is solid fuels, i.e., firewood or charcoal, while the fuel in the project is electricity, and hence the project is a fuel switch.

Proposed Project Technology: Clean Cooking Technologies (CCT Italy) is introducing 'CleKoo', an energy-efficient induction stove & electric pressure cooker in the proposed project. CCT will also provide pots compatible with an electric stove, be versatile for various meals, and be easy to use by the households as confirmed during site visit observations and interview with PD, stakeholders and end users. The project plans to distribute the following stove types initially.

- Induction Stoves
- Electric Pressure Cookers

The technical details for all induction stoves and EPCs are presented in Section A.3 of the PDD /10/. The validation team has checked the technology specifications of the project technologies against the Technology Specifications /19/, Efficiency Certificate /20/, Technical Life Supportive/Lifetime

Guarantee Certificate /21/, Declaration of Stove Meter Calibration /22/, and IoT-based Metering System /23/.

Location of Project: The United Republic of Tanzania is the host country for the planned project. The proposed project will be implemented across the entire host country, i.e., Tanzania, as presented in Section A.2 of the PDD /10/ and confirmed during the site visit. The project will initially be carried out in the Dar es Salaam region and subsequently expanded to other regions based on demand, as verified during site-visit interviews with the PD. There are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/.

Implementation Framework: Clean Cooking Technologies S.R.L. (CCT Italy) is the Project Developer, stove manufacturer, and supplier as confirmed during interview with PD. The project is implemented through partnerships with local partners, coordinated by CCT Tanzania, which ensures last-mile distribution and maintenance as confirmed from site visit observation and interview with PD. CEFA /13/, a local partner in Dar es Salaam, supports on-ground implementation, while future collaborations with other local NGOs are planned to accelerate project delivery in Tanzania.

Project Start Date: The project is started on 10/03/2026 as verified from First end user agreement /08/ and interview with PD and first end user.

Contribution to sustainable development: The project will also aim to deliver significant co-benefits. Some of which (SDG 1,3,4,5,7,8,13 & 15) will also be certified under Gold Standard Certification.

The average annual GHG emission reductions from the project activity are expected to be 172,335 tCO₂e as verified from the ER sheet /11/.

The review of the project design documentation and the subsequent follow-up interviews have provided 4KES with sufficient evidence to determine the project's fulfilment of all the stated criteria. In our opinion, the project meets all applicable GS4GG requirements.

☒ The project is recommended with a request for registration.

☐ The project is not recommended for request for registration.

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 VVB or outsourced entity)	Involvement in			
						Desk/document review	On-site inspection	Interviews	Validation findings
1.	Team Leader and Technical expert (TA 3.1) (GS Approved Auditor)	IR	Sharma	Chetan Swaroop	4KES- Central Office	x		x	x
2.	Local Expert and Technical expert (TA 3.1)	EI	Kilindu	Atupele Burton	4KES- Central Office	x	x	x	
3.	Validator (GS Approved Auditor)	IR	Sharma	Darshan Kumar	4KES- Central Office	x			

4.	Validator (GS Approved Auditor)	IR	Pandey	Vikas	4KES- Central Office	x	x	x	x
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B.2. Technical reviewer and approver of the validation report

No.	Role	Type of resource	Last name	First name	Affiliation (e.g. name of central or other office of VVB or outsourced entity)
1.	Technical Reviewer & Expert (TA 3.1)	EI	Badaya	Rohit	4KES - Central office
2.	Approver	IR	S	Stalin	4KES - Central office

SECTION C. Means of validation

C.1. Desk/document review

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The report is based on the assessment of the project design document, application of standard auditing techniques including but not limited to desk review, follow up actions (i.e. interviews) and also the review of the applicable approved methodological and relevant tools, GS4GG guidance and CDM decisions.

All the documents used for arriving validation conclusion are listed in Appendix 03 and referenced accordingly in validation report.

C.2. Site Visit

The validation team has conducted physical site-visit interviews along with a desk review. Validation team has used the following means for its assessment and to justify that they are sufficient for the purpose of validation.

- Complete desk review of the final GS-PDD (Version 3, dated 07/05/2026) /10/, as well as all applicable country legal requirements /29/ and supportive evidence have been checked by the Validation team.
- During the desk review, technical specification of project technology /19/, /20/, /21/, /22/, /23/, photographs /18/, sample distribution database /24/, baseline studies /26/, End user agreement /08/ and other relevant background documents were provided and assessed. The project description in the GS-PDD /10/ was verified from these documents.
- By taking follow up actions by conducting interviews with PD representatives/Employees related to maintenance, sales, training, customer relationship/Stakeholders etc. to gather information about knowledge of project design, implementation, management system of the PA, /19/, /20/, /21/, /22/, /23/, photographs /18/, sample distribution database /24/, baseline studies /26/, End user agreement /08/, stakeholder consultation /16/, monitoring plan, start date /08/, Methodology applicability /01/, Digital SDG impact tool /12/ etc. Cross-checked evaluation under the scope of all information and references provided in PDD /10/.
- The validation team conducted interviews with baseline users to assess baseline practices and usage patterns. A total of 25 baseline users were interviewed to evaluate baseline appliances and usage patterns. The validation team also interviewed 5 end users randomly selected from sample distribution database /24/ to confirm the project technology usage patterns.
- Cross checks between information provided by interviewed personnel (i.e. by checking sources) to ensure that no relevant information has been omitted.

Details of interviewees, topics covered and additional information presented in the below section "C.3 Interviews".

C.3. Interviews

No.	Interviewee			Date	Subject	Team member
	Last name	First name	Affiliation			
1.			Founder & CEO, Clean Cooking Technologies S.R.L.,	08/04/2026	1. Project design and Implementation	Remote Audit (Microsoft Teams): Mr. Chetan Swaroop Sharma Physical Site Visit: Mr. Atupele Burton Kilindu (Local Expert and Technical expert (TA 3.1) Vikas Pandey: Validator (GS Approved Auditor)
2.			Proprietor & Carbon Consultant, Carbon to Community		2. Baseline assessment	
3.			Chief Operating Officer, Clean Cooking Technologies S.R.L.,		3. Issues in the PDD	
4.			Business Development and Operational Analyst, Clean Cooking Technologies S.R.L.,		4. Roles and responsibilities	
5.			Project Manager, CEFA	09/04/2026 to 11/04/2026	5. Applicability of the methodology	
6.			CCT project coordinator, CEFA		6. Emission reduction	
7.			Field Officer, CEFA		7. Monitoring requirement	
8.			Field Officer, CEFA		8. Monitoring procedure	
9.			Field Officer, CEFA		9. Data collection	
10.			Field Officer, CEFA		10. Start date	
11.			Field Officer, CEFA		11. LSC	
12.			Field Officer, CEFA		12. VER Rights	
13.			Field Officer, CEFA		13. Sustainable Development parameters	
14.			Stakeholder: Accountant General and Managing Director, Interfini, Daees		14. Grievance Mechanism	
15.			Stakeholder: Managing Director, Ruka Creatives	09/04/2026 to 11/04/2026	15. Environmental impacts	
16.			Stakeholder: Project Manager Officer, Ministry of Energy, Tanzania		16. Trainings to user	
					17. Stakeholder consultation process	
					18. Safeguarding principles	
					19. Identification of users, Sales and distribution methods, trainings received, maintenance and repair etc.	
					Safeguarding principles, Project scenario, Baseline scenario, Grievance mechanism, Environmental impact, Stakeholder consultation process, Sustainable	

17.			Stakeholder: Researcher, The Kesho Trust		development, baseline etc.	
18.			Stakeholder: Managing Chair, Person Beresha (Women Groups)			
19.			Stakeholder: Local people, communities			
20.			Stakeholder: Local people, communities			
21.			Stakeholder: Local people, communities			
22.			Stakeholder: Local people, communities			
23.			Stakeholder: Local people, communities			

Baseline users (Date of Interview: 09/04/2026 to 11/04/2026):

No.	Participants name	GPS	Location	Subject	Team member
1.		-6.80650 39.26266	Magomeni	Baseline technology, practice and usage etc.	Physical Site Visit: Mr. Atupele Burton Kilindu (Local Expert and Technical expert (TA 3.1)) Vikas Pandey: Validator (GS Approved Auditor)
2.		-6.80638 39.26227	Magomeni		
3.		-6.80636 39.26234	Magomeni		
4.		-6.80014 39.25355	Manyanya		
5.		-6.80020 39.25350	Manyanya		
6.		-6.61532 39.09740	Bunju Kiyonzire		
7.		-6.61264 39.69370	Bunju B		
8.		-6.61270 39.69380	Bunju B		
9.		-6.63501 39.08071	Kitunda		
10.		-6.63314 39.07547	Bunju Kidela		
11.		-6.62513 39.08361	Bunju Kidela		
12.		-6.62513 39.08361	Bunju Kidela		
13.		-6.63006 39.08263	Kidela		
14.		-6.81795 39.24233	Kigogo		
15.		-6.81795 39.24233	Kigogo		

16.		-6.81790 39.24240	Kigogo		
17.		-6.81792 39.24245	Kigogo		
18.		-6.820 39.250	Kigogo		
19.		-6.818 39.253	Kigogo Fresh		
20.		-6.819 39.254	Kigogo Fresh		
21.		-6.790 39.254	Mwananamala		
22.		-6.789 39.252	Mwananamala		
23.		-6.789 39.252	Mwananamala		
24.		-6.789 39.253	Mwananamala B		
25.		-6.790 39.255	Mwananamala B		

Some of the questions asked from the Household users regarding baseline technology and usage:

Questions to be asked from baseline households (Note: in case any efficient stove received from somewhere recently, all the questions belong to scenario before getting the improved stove).
<i>Date</i>
<i>Name</i>
<i>Gender</i>
<i>Location</i>
<i>GPS coordinates</i>
Occupation:
Number of People live/eat:
Characteristics of the household's residence:
Type of stove used:
Activity for which it is used
What type of fuel is used?
Quantity of fuel used in a year?
Any seasonal variation in dry or rainy season
Ratio of the fuel type used?
Do you buy or collect your fuel?
Expenditure on fuel used in a Year?
Boundary for collecting the fuel?
Time spent for collecting fuel?
Where do you cook?
Regularly cooked dishes (Names)?
No. of meals per day
Are you satisfied with your baseline stove?
Is electricity available?
What ventilation features does the kitchen area have?

Has someone in the household experienced coughing due to stove?
Has someone in the household visited a healthcare professional in the past 30 days due to any of the conditions mentioned in the previous question?

Project users (Date of Interview: 09/04/2026 to 11/04/2026):

S. No.	Name	UID	GPS	Location	Subject	Team member
1.		867856033987600	-6.73657	MBEZI	Project technology usage, air quality, Baseline technology, practice and usage etc.	Physical Site Visit: Mr. Atupele Burton Kilindu (Local Expert and Technical expert (TA 3.1) Vikas Pandey: Validator (GS Approved Auditor)
			39.21595			
2.		867858039116390	-6.71859	GOBA		
			39.14062			
3.		863576041438701	-6.72999	MSUMIA		
			39.09655			
4.		866782046407546	-6.80626	Salanga Kimara		
			39.13938			
5.		866782044001994	-6.781	Sinza Mori		
			39.233			

Some of the questions asked from the Household regarding project technology and usage:

Name of primary cook:
Occupation
Phone number
GPS Coordinates
Location
Type of stove distributed and model:
Unique serial number of the ICS: (With Photo)
Whether the household was surveyed?
Date of distribution of ICS
How did you receive the ICS
Number of adult/children live/eat (Separately)
Present condition of ICS/Kitchen
Are the ICS in use?
How many days of use in a week?
Type of activity ICS used for:
Last time used:
How many stoves (along with their types) are used for cooking in this household?
What is the type of fuel used by you while using the project ICS stove?
Does the household have electricity connection?
Is electricity available for at least 18 hours per day on most days?
Does the household have access to internet at the premises?
Ratio of fuel used
No. of meals in a day
What was baseline stove used previously, and baseline fuel used.
Do the baseline stove had a chimney or hood or grate?
Are you still using the baseline stove/other stove (define accordingly):
Type of fuel used and Quantity in a day?
Ratio of meals cooked by project technology/baseline technology or other stove (if still used) in a timeframe i.e. day

Where do you usually cook?
Have you signed any form while received ICS?
Did you receive any training while receiving ICS?
Are you aware about VER rights?
Has your household received any clean cooking stove such as an improved firewood or charcoal stove, LPG stove, induction stove, electric pressure cooker, biogas stove, bioethanol stove or any similar stove — from a government programme or Carbon project.
Is their Improvement in air quality (smoke/PM emissions) after using the project stove.
Have you experienced time/money saved due to reduced fuel consumption in the project ICS usage:
Quantity of fuel that is consumed in baseline scenario every day
Quantity of fuel that is consumed in project scenario every day
Do you know whom to contact in case of damage or questions?

C.4. Sampling approach

The validation team checked baseline practices and usage during physical site-visit interviews conducted by the audit team on a random basis from baseline users identified in the project area (Dar es Salaam where the project initial distribution is planned) with survey forms completed by the validation team.

4KES validation team carried out random sampling and using professional judgment, assessed the acceptability of the baseline study /26/ data against records collected by the audit team.

In total, 25 baseline households and 5 project end-users were interviewed. The validation team interviewed household representatives and completed survey forms.

The VVB sample results were cross-checked with the baseline study /26/ and found to be in compliance. Accordingly, the baseline study /26/ is accepted by the validation team.

Furthermore, the baseline studies /26/ were accepted by the validation team as follows:

1. The Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS), conducted by the Tanzania National Bureau of Statistics (NBS) and the Office of the Chief Government Statistician (OCGS) in collaboration with the Ministry of Health, Tanzania Mainland, and the Ministry of Health, Zanzibar; and
2. The Household Energy Consumption Survey Report 2023: Mainland Tanzania, jointly implemented by the National Bureau of Statistics (NBS) and the Ministry of Energy, with support from Expertise France (EF) and funding from the European Union (EU).

C.5. Clarification requests (CLs), corrective action requests (CARs) and forward action requests (FARs) raised

During the validation, 01 CL and 08 CARs from the preliminary review, along with 16 CARs raised during the desk review and site visit, were successfully closed. Additionally, 01 FAR was raised during this validation. Refer to Appendix 4 of this report for further details.

SECTION D. Validation findings

D.1. Compliance with PDD form

Means of validation	Validation team checked the Project Design Document /10/ with applicable version of PDD template available in the GS website (i.e., version 1.5) /01/.
Findings	CAR-01 and CAR-02 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
Conclusion	The validation team confirms that the proposed project activity meets the requirement of GS4GG /01/ and the PDD /10/ is completed using the valid version of the PDD template /01/ and PDD template guide /01/ form appropriate to the type of project activity.

D.2. Description of project activity

Means of validation	The proposed Gold Standard (Individual) Large Scale Project Activity is a voluntary initiative by Clean Cooking Technologies S.R.L. (CCT Italy) /13/. The Project aims to distribute electric cookstoves, i.e., Induction Stoves & Electric Pressure Cookers
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(EPC), to households and communities in Tanzania. The project will be implemented nationwide across the United Republic of Tanzania as confirmed during site visit. Initially, the project will be implemented in the Dar es Salaam region of Tanzania and then expanded to other regions in Tanzania as per demand. The project will be implemented in urban and peri-urban localities in Tanzania that have access to electricity but still rely on solid fuels (firewood and charcoal) for cooking and use traditional stoves or three-stone fires as their primary cooking method as confirmed during site visit observations and interview with PD. In the future, the project will also serve rural households once reliable grid electricity becomes available to them.

Purpose of Project: The purpose of the proposed project activity is to distribute high-quality energy-efficient induction stoves & electric pressure cookers to households and communities in Tanzania. The replacement of traditional methods of cooking by electric stoves, hence avoiding the amount of woody biomass used for cooking, as well as the amount of GHG emitted into the atmosphere, and alleviating deforestation pressure in Tanzania. The project is set to replace traditional stoves, three-stone fires, or open fires, which rely on woody biomass, with electric stoves. The electric stoves will utilize the electricity as fuel. It's important to highlight that the fuel used in the baseline scenario is solid fuels, i.e., firewood or charcoal, while the fuel in the project is electricity, and hence the project is a fuel switch.

Implementation Framework: Clean Cooking Technologies S.R.L. (CCT Italy) is the Project Developer, stove manufacturer, and supplier as confirmed during interview with PD. The project is implemented through partnerships with local partners, coordinated by CCT Tanzania, which ensures last-mile distribution and maintenance as confirmed from site visit observation and interview with PD. CEFA /13/, a local partner in Dar es Salaam, supports on-ground implementation, while future collaborations with other local NGOs are planned to accelerate project delivery in Tanzania.

Project Start Date: The project is started on 10/03/2026 as verified from First end user agreement /08/ and interview with PD and first end user.

Contribution to sustainable development: The project will also aim to deliver significant co-benefits. Some of which (SDG 1,3,4,5,7,8,13 & 15) will also be certified under Gold Standard Certification.

The average annual GHG emission reductions from the project activity are expected to be 172,335 tCO_{2e} as verified from the ER sheet /11/.

The location of the project activity

The United Republic of Tanzania is the host country for the planned project. The proposed project will be implemented across the entire host country, i.e., Tanzania, as presented in Section A.2 of the PDD /10/ and confirmed during the site visit. The project will initially be carried out in the Dar es Salaam region and subsequently expanded to other regions based on demand, as verified during site-visit interviews with the PD. There are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/.

Host Party	United Republic of Tanzania
Region/State/Province	All regions in Tanzania
District/ Municipality	All Districts and Municipalities across the above regions
Location	Urban & Peri-urban
City or Village	All in the above regions

The geographical location of the United Republic of Tanzania is shown in the map below. The country lies on the East African plateau, between Latitude 6°22'8.5" S (6.369° S) and Longitude 34°53.329' E (34.8888° E) as verified during the site visit and using Google Earth

The Geo-coordinate of Dar es Salaam is given below.

S.No.	Regions	Latitude	Longitude
1.	Dar es Salaam	6°48'58"S	39°16'49"E



Figure: Map of Tanzania¹

The Location of the project is mentioned under section A.2 of the GS PDD /10/ which is also confirmed during the PD interviews/sample household visit.

The technologies/measures to be employed and/or implemented by the project activity

This project will replace traditional solid fuel stoves (charcoal & firewood) and three-stone fire / open fire with electric stove (induction stove or electric pressure cooker). Therefore, in the absence of the proposed project activity, the baseline scenario would be the use of inefficient cooking technologies with the use of charcoal and firewood for meeting similar thermal energy requirements as confirmed during site visit observations and interview with PD, stakeholders and end users.

The project involves the dissemination of two electric cooking technologies, namely induction stove and electric pressure cookers (EPCs). Each project household will receive only one electric cooking technology. Both technologies will not be distributed simultaneously to a single household. This mutually exclusive distribution approach avoids double counting of emission reductions, ensures clear attribution per household. The Validation Team confirms that the PD will not distribute both technologies to the same household in order to prevent double counting, as verified during the interview with the PD.

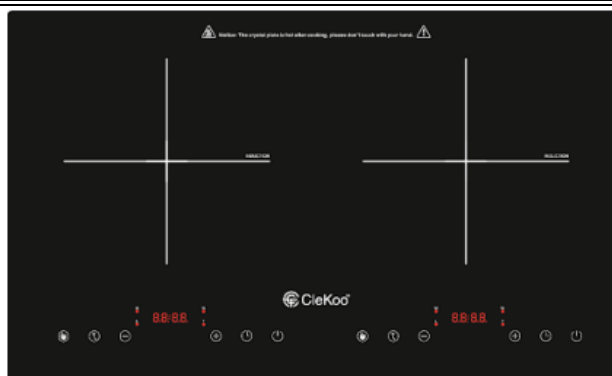
The project plans to distribute the following stove models initially

CleKoo Single: Single
IoT Induction Stove

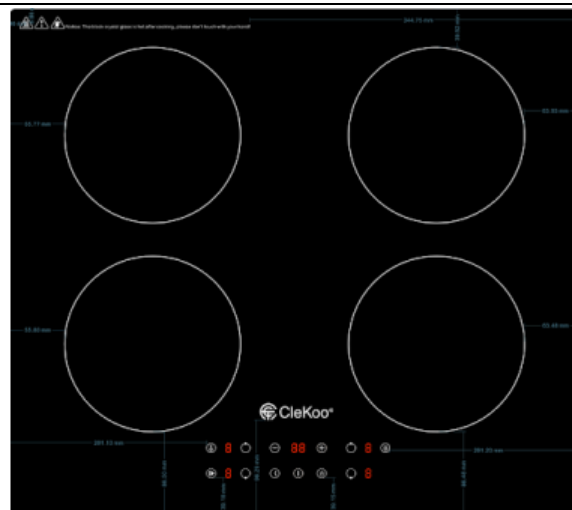


¹ Source ([Link](#))

CleKoo Double: Double IoT induction stove



CleKoo Four: Four-burner IoT induction stove



CleKoo EPC 8 L: 8-liter IoT Electric Pressure Cooker

CleKoo EPC 10 L: 10-liter IoT Electric Pressure Cooker

CleKoo EPC 12 L: 12-liter IoT Electric Pressure Cooker

CleKoo EPC 15 L: 15-liter IoT Electric Pressure Cooker



Technical Specifications of Induction Stove

Parameter	CleKoo – Single	CleKoo Double	CleKoo Four
Brand	Clean Cooking Technologies		
Type	Induction stove		
Color	Black		
Product Dimensions	581.7 x 360.7 x 68.6 mm	600 x 360 x 640 mm	590 x 520 x 580 mm
Weight	2.2 kg	4 kg	8.8 kg
Rated Power	1*2kW	2 x 1.8 kW	7.4 kW (4 x 1.8kW, with boost to 4 x 2.2KW)
Rated Voltage/Frequency	220 – 240 VAC / 50-60Hz		

	Min/max Allowed Voltage	88-280 VAC			
	Temperature Level	80°-240°C			
	Thermal Efficiency	Single Fire:84.58% ² Double Fire: 84.69% Four Fire: 85.41			
	Type of Fuel	Electricity			
	Technical Life	7 years or more ³			
	Type of Stove	Portable – Induction Stove			
	Timer	0-4 hours			
	Material Topware	Glass-ceramic			
	Special Features	Induction cooktop, ultra-slim design, 8 adjustable power levels, child safety lock, overheating protection, and easy to clean and store			
	Standard	IEC 60335-2-9:2019			
	IoT breakout board	GSM/GPRS			
	Communication Standard	2G			
	Measuring energy consumed and time of use	Adjustable: at every initiation and at every time setting (for instance, every 60 seconds). It can be adjusted remotely as desired.			
	Data access	Via cellular transfer. GSM/GPRS			
	Instructions	Instructions for safe installation and clean usage data exports from metering systems in CSV format			
Technical Specifications of Electric Pressure Cookers:					
Parameter	CleKoo EPC 8 L	CleKoo EPC 10 L	CleKoo EPC 12 L	CleKoo EPC 15 L	
Power	1.2 kW	1.6 kW	1.6 kW	1.95 kW	
Capacity	8 L	10 L	12 L	15 L	
Working pressure	0-65 kPa	0-65 kPa	0-65 kPa	0-65 kPa	
Rated Voltage	220 V - 240 V	220 V - 240 V	220 V - 240 V	220 V - 240 V	
Rated Frequency	50 Hz	50 Hz	50 Hz	50 Hz	
Product Size	375 x 375 x 360 mm	410 x 410 x 370 mm	410 x 410 x 380 mm	410 x 410 x 390 mm	
Technical Life	7 years or more ⁴				
Inner tank size (outer diameter x height)	240 x 180 mm	275 x 195.5 mm	275 x 200.5 mm	275 x 205 mm	
Control	Digital display + touch; panel + auto menus	Digital display + touch; panel + auto menus	Digital display + touch; panel + auto menus	Digital display + touch; panel + auto menus	
Material	Inner pot stainless steel;	Inner pot stainless steel;	Inner pot stainless steel;	Inner pot stainless steel;	

² Induction stoves operate by transferring electromagnetic energy directly to the cooking vessel, and their thermal efficiency is determined by the technology itself rather than the number of burners or pots used. Accordingly, a uniform thermal efficiency of 84.58% is conservatively applied across all induction stove configurations, with minor variations in test results attributed to external conditions rather than differences in stove performance.

³ With continuous repair & replacement of stove as per requirement.

⁴ With continuous repair & replacement of stove as per requirement.

	heating plate, aluminum; lid & shell stainless steel	heating plate, aluminum; lid & shell stainless steel	heating plate, aluminum; lid & shell stainless steel	heating plate, aluminum; lid & shell stainless steel
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Other models for all e-cooking technologies (induction stoves and electric pressure cookers) for households may also be distributed in the proposed project over time.

The technical details for all induction stoves and EPCs are presented in Section A.3 of the PDD /10/. The validation team verified the technology specifications of the project technologies during the site visit and against the Technology Specifications /19/, Efficiency Certificate /20/, Technical Life Supportive/Lifetime Guarantee Certificate /21/, Declaration of Stove Meter Calibration /22/, and IoT-based Metering System /23/.

Scale of the project

The project is a large-scale, as demonstrated in Section A.4 of the GS PDD /10/ and in line with the Gold Standard for Global Goals GHG Emissions Reduction and Sequestration Product Requirements, version 3.2 (published 12/12/2025), Section 9.1 /01/.

Funding sources of project

The project is a voluntary action taken by Clean Cooking Technologies S.R.L. (CCT Italy). No ODA will be diverted to the implementation of the project. A declaration confirming that there is no diversion of ODA has been duly signed by CCT and submitted to GS during the preliminary review of the proposed project. The validation team has checked the ODA declaration /14/ form and found Ok.

The project will be supported by a diverse group of private investors and off takers, ensuring robust financial backing for its implementation as confirmed during site visit interview with PD and stakeholders.

The initial phase, which involves distributing 5,000 induction stoves, is financed by the EDP Group as confirmed from contractual agreement between project implementor and private investors i.e., EDP Group /13/.

All carbon credit generated by the project will initially be owned by Clean Cooking Technologies S.R.L. (CCT Italy). Any transfer of carbon credits to a buyer, investor, off taker, or other party will be governed by a separate contractual agreement as confirmed during site visit interview with PD and stakeholders.

There are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/.

Eligibility with GS4GG Requirements:

The proposed project falls under Section 3.1.1 of GS4GG Principles & Requirements (Version 2.1) /01/, Section 3 of GS4GG Community Services Activity Requirements (Version 1.2) /01/, and Section 5 of GS4GG GHG Emissions Reduction & Sequestration Product Requirements (Version 3.2) /01/, with the following eligibility criteria.

As per Section 3.1.1 of GS4GG Principles & Requirements, Version 2.1 (published 31/01/2025), compliance with the relevant eligibility criteria is demonstrated below.:

Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
Types of Project	Eligible projects shall include physical action/implementation on the ground. Pre-identified eligible project types are identified in the Eligibility Principles and Requirements section.	The project is already one of the pre-identified types as per section 3.1.1 (a) and automatically eligible for Gold Standard Certification as per section 4.1.3 of GS4GG

			Principles & Requirements ver 2.1 /01/. The proposed project applies GS-approved Methodology i.e., “Metered & Measured Energy Cooking Devices” version 1.2, published on 13/12/2022 /01/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Location of Project	Projects may be located in any part of the world.	The project is located in the United Republic of Tanzania. The Location of the project is mentioned under section A.2 of the GS PDD /10/ which is also confirmed during the PD interviews/sample household visit. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Project Area, Project Boundary and Scale	The Project Area and Project Boundary shall be defined. Projects may be developed at any scale although certain rules, requirements and limitations may apply under specific Activity Requirements, Impact Quantification Methodologies and Products Requirements. In order to avoid double counting the Project shall not be included in any other voluntary or compliance standards programme unless approved by Gold Standard (for example through dual certification). Also, if the Project Area overlaps with that of another Gold Standard or other voluntary or compliance standard programme of a similar nature, the Project shall demonstrate that there is no double counting of impacts at design and performance certification (for example use of similar technology or practices through which the potential arises for double counting or misestimation of impacts amongst projects)	The boundary for the Project in terms of a geographical area is defined as the territorial boundary of the United Republic of Tanzania. The project will be implemented in entire Tanzania. The Location of the project is mentioned under section A.2 of the GS PDD /10/ which is also confirmed during the PD interviews/sample household visit. The proposed project is a large-scale project. The project is a large-scale, as demonstrated in Section A.4 of the GS PDD /10/ and in line with the Gold Standard for Global Goals GHG Emissions Reduction and Sequestration Product Requirements, version 3.2 (published 12/12/2025), Section 9.1 /01/. Clean Cooking Technologies as a project developer will ensure that: • The proposed project is neither registered as a GS/CDM/VERRA project activity nor included in another registered GS PoA/Project.

		• The proposed project is not a deregistered project activity. • The proposed project is not a project that has been excluded from a registered GS/CDM/VERRA PoA. The validation team confirms that no cookstove projects are registered in Tanzania other than those listed on the Gold Standard platform. Only two projects are distributing electric ICS: GS11323 (electric pressure cookers only) and GS12082 (electric pressure cookers and induction stoves). The registry review further verifies that no instances of double counting have been identified, and project records remain consistent across the reviewed registries /31/. The Project Area is defined as the entire territorial boundary of the United Republic of Tanzania. As the project boundary covers the entire host country (i.e., Tanzania), it is acknowledged that other voluntary e-cooking carbon projects may exist or be implemented within the same project boundary. The presence of such activities has been considered in the assessment of project boundaries and overlap risks. To prevent double counting and physical overlap, the project applies the following safeguards: • Each induction stove and electric pressure cooker distributed under the project is uniquely identifiable through a serial number, IMEI, or equivalent unique identification method. • Beneficiary household details, including location and address, are recorded at the time of distribution. • A centralized distribution and monitoring database is maintained to ensure that no device included in another carbon project is included in this project. • Prior to stove distribution, local partners verify that beneficiaries have not received clean cooking technologies under any other carbon-financed or compliance-based program.
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			These measures ensure that emission reductions claimed under this project are unique, additional, and not counted under any other carbon crediting mechanism. The same has been checked during site visit interview with end user and PD and sample distribution data base /24/. The system of a unique ID number for each unit, along with its location, serves to avoid double-counting under the Project. The same has been checked during site visit interview with end user and PD and sample distribution data base /24/. The project activity uses a digital customer tracking system /23/. This ensures that technology uses and end users can only be assigned to a single activity, and only be counted once, thus ensuring that double counting will not occur as verified from the site visit, end user contracts /08/ and distribution database /24/. The aforesaid ensures that the Distribution database is free from any material errors and there is no risk of double counting of impacts at the design or performance certification stages. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Host Country Requirements	Projects shall be in compliance with applicable Host Country's legal, environmental, ecological and social regulations.	The project complies with the United Republic of Tanzania's legal, environmental and ecological, and social regulations. The validation team has checked the Host Country's legal, environmental, ecological, and social regulations /29/ and confirms that the project complies with the United Republic of Tanzania's legal, environmental and ecological, and social regulations. The Government of Tanzania recognizes the critical importance of cooking energy and has implemented various measures to promote efficient, safe, affordable, and accessible cooking solutions. These efforts aim to increase the nationwide adoption of clean cooking methods. However,

			despite the existence of policies and strategies across multiple sectors and institutions, the lack of coordination and national guidelines has hindered the widespread uptake of these solutions. To overcome these obstacles, the government, in collaboration with key stakeholders, has introduced the 'National Clean Cooking Strategy 2024-2034 ⁵' /29/. This strategy aims to achieve an 80% adoption rate of clean cooking technologies among Tanzanians by 2034. Clean cooking, as defined in the strategy, involves the use of energy sources and technologies that minimize toxic emissions while ensuring safety and efficiency. The strategy aligns with both national and international frameworks, including the United Nations Sustainable Development Goals (SDGs) for 2030, the African Union Agenda 2063, Tanzania's Sustainable Energy for All (SEforALL 2015), and the National Development Vision 2025. There are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Contact Details	As part of the Project Documentation the Project Developer shall provide (i) name and (ii) contact details of all Project Participants; AND in case of an organisation (iii) the legal registration details and (iv) documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the	Detailed contact information has been provided in Appendix 2 of PDD /10/. Clean Cooking Technologies S.R.L. (CCT Italy) /13/ is the Project Developer and stove manufacturer as confirmed during site visit interview with PD. CCT Italy is a legally registered entity in Italy and is authorized to conduct business activities within the relevant jurisdictions as verified from

⁵ National Clean Cooking Strategy (2024-34), THE UNITED REPUBLIC OF TANZANIA MINISTRY OF ENERGY, May 2024 ([Link](#))

		required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors). Gold Standard retains the right (at its own discretion) to refuse use of the Standard where reputational concerns are highlighted.	company registration certificate /13/. In addition, Clean Cooking Technologies S.R.L. (Tanzania) is a legally registered entity in Tanzania and is authorized to operate within the host country as verified from company registration certificate /13/. Documentation including certificates of registration confirms that both entities are in good standing, defined as being legally registered, permitted to operate within the jurisdiction, and with no evidence of insolvency or any legal or criminal notices placed against the company or its directors as verified from company registration certificates and agreements /13/ provided by the PD. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Legal Ownership	Full and uncontested legal ownership of any Products that are generated under Gold Standard Certification, (for example carbon credits) shall be demonstrated. Where such ownership is transferred from project beneficiaries this must be demonstrated transparently and with full, prior and informed consent (FPIC). Note that for certain Project types there is a requirement for full and uncontested legal land title/tenure to be demonstrated. These are contained within specific Activity or Product Requirements. All projects shall immediately report to Gold Standard any land title/tenure disputes arising.	Clean Cooking Technologies S.R.L. (CCT Italy) is the stove manufacturer as well as Project Developer of the proposed project as confirmed during site visit interview with PD. The carbon credits generated through the use of the distributed stoves are initially owned by the beneficiary households. The ownership of carbon credits (GS VERs) will be transferred from project beneficiaries (households) to Cooking Technologies S.R.L. (CCT Italy) as confirmed during site visit interview with PD, end user and stakeholders and verified from Sample end users' agreement /08/. Full and uncontested legal ownership of the product generated by the project (GS VERs) under Gold Standard Certification will be with Clean Cooking Technologies S.R.L. (CCT Italy) as verified from agreements /13/ between PD and other participants and from Sample end users' agreement /08/ provided by the PD. The transfer of ownership of carbon credits (GS VERs) discussed during the Local Stakeholder

		Consultation (LSC) meeting to ensure full prior and informed consent (FPIC) as confirmed during site visit interview with stakeholders who attended the LSC meeting. The transfer of ownership of carbon credits (GS VERs) written in the beneficiary agreement in English and in Local Language (Swahili) that each household will signs while receiving the stove as verified from Sample end users' agreement /08/ provided by the PD. The Local Partner will ensure that all participating beneficiary households of the proposed project freely and willingly, with free and prior informed consent, sign the carbon waiver agreement, reinforcing CCT ownership of all carbon rights arising pursuant to the project as confirmed Sample end users' agreement /08/ provided by the PD and site visit interview with PD and end users. One of our current local implementation partners is CEFA, which supports on-the-ground project activities. A portion of the revenue generated from the sale of carbon credits will be shared with CEFA based on project performance, in accordance with the contractual agreement between CEFA and CCT. Where agreed, CEFA may alternatively opt to receive compensation in the form of carbon credits instead of monetary revenue, as stipulated in the CEFA–CCT contract. The validation team has confirmed the same CEFA contract agreement with PD /13/ and site visit interview with PD. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Other Rights	As well as legal title and ownership, the Project Developer shall also demonstrate where required uncontested legal rights and/or permissions concerning changes in use of other resources required to service the Project (for example, access rights, water rights etc.). Any known disputes or Not applicable No such activity is carried out therefore this condition is not applicable. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/.

		contested rights must be declared immediately to Gold Standard by the Project Developer and resolved prior to further project implementation in affected areas.	Hence the eligibility criterion has been met.
	Official Development Assistance (ODA) Declaration	All Project Developers applying for project activities located in a country named by the OECD Development Assistance Committee's ODA recipient list and seeking Gold Standard Certification for carbon credits shall declare the Official Development Assistance (ODA) support. The Project Developer shall follow the GHG Emissions Reduction & Sequestration Product Requirements and submit the declaration at the time of Design Certification.	No ODA is involved in the project. A declaration by the project developer is being submitted. A declaration confirming that there is no diversion of ODA has been duly signed by CCT and submitted to GS during the preliminary review of the proposed project. The validation team has checked the ODA declaration /14/ form and found Ok. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Start date of the project	The start date may include the date on which contracts have been signed for equipment or construction/operation services required for the Project. Minor pre-project expenses, such as the contracting of services/payment of fees for feasibility studies or preliminary surveys, shall not be considered in the determination of the start date as they do not necessarily indicate the commencement of implementation of the Project. For distributed technology projects, the start date is the date of implementation of the first unit under the project.	The start date of the project is the date of first stove distributed under the project. The project is started on 10/03/2026 as verified from First end user agreement /08/ and interview with PD and first end user. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
According to para 4.1.3. of GS4GG Principles & Requirements version 2.1 published 31/01/2025 /01/ 'A Project type is automatically eligible for Gold Standard Certification if there are Gold Standard published Activity Requirements and/or Gold Standard Approved Methodologies associated with it or as referenced in Gold Standard Product Requirements. The proposed project aims at distributing electric stoves (induction stoves & electric pressure cookers) that fall under the Activity Requirements of 'Community Services Activity Requirements (Version 1.2) /01/' (as indicated in Section 3.1.1 (b) End-use energy efficiency), with the following Eligibility Criteria. General eligibility criteria as per GS4GG Community Service Activity Requirements (v1.2) As per section 2 of GS4GG Community Services Activity Requirements Version 1.2 dated October 2019 /01/, project type eligibility criteria as defined below:			

	Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
	1. Eligible Project Types	All CSA Projects shall lead to climate change mitigation and/or adaptation by providing or improving access to services/resources at the household or community or institution level. Eligible services include electricity and energy, water and sanitation, waste management, housing, etc.	The goal of the proposed project is to distribute electric stoves (induction stoves & electric pressure cooker) in households and communities in the United Republic of Tanzania. The proposed electric stoves (induction stoves & electric pressure cooker) avoid woody biomass consumption (energy requirement) as compared to the baseline scenario without affecting the level and quality of services or products required at the household. Therefore, there will be a reduction/avoidance of CO_{2e} emissions from the combustion process. Hence, the proposed project activity mitigates climate change by increasing access to clean cooking technologies. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	2. GENERAL ELIGIBILITY CRITERIA - Type of project	(b) End-use energy efficiency: Project activities that reduce energy requirements as compared to baseline scenario without affecting the level and quality of services or products, where the end-user of the products and services are clearly identified and when the physical intervention is required at the user end. For example, efficient cooking, heating, lighting, etc.	The project involves the distribution of energy-efficient electric stoves (induction stoves & electric pressure cooker) to households and communities (end-users) in the United Republic of Tanzania. The project is an “End-Use Energy Efficiency Improvement: Project Activities that reduce woody biomass consumption (energy requirement) as compared to the baseline scenario without affecting the level and quality of services or products, where the end user of the products and services is identified, and when the physical intervention is required at the user end. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.

	3. GENERAL ELIGIBILITY CRITERIA – Project Area, Boundary and scale	Project Area and Boundary shall be defined in line with the applicable Impact Quantification Methodologies and Product Requirements.	The project area is the location of the electric stove (induction stove & electric pressure cooker) beneficiaries in United Republic of Tanzania. The project boundary will be limited to the geographical boundary of United Republic of Tanzania. The Location of the project is mentioned under section A.2 of the GS PDD /10/ which is also confirmed during the PD interviews/sample household visit. The project is a large-scale project. The project is a large-scale, as demonstrated in Section A.4 of the GS PDD /10/ and in line with the Gold Standard for Global Goals GHG Emissions Reduction and Sequestration Product Requirements, version 3.2 (published 12/12/2025), Section 9.1 /01/. The applied methodology, “Methodology for Metered & Measured Energy Cooking Devices” version 1.2 published on 13/12/2022 /01/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	4. GENERAL ELIGIBILITY CRITERIA – Suppressed Demand	Certain Impact Quantification methodologies allow projects to account Suppressed Demand scenario when establishing a baseline. In such cases, the application of Suppressed Demand baseline is limited to Small Scale and Microscale Projects. Where a Suppressed Demand baseline is applied, it is not possible to ‘stack’ Gold Standard Certified Impact Statements or Products as the definition of the baseline may be contradictory.	Not applicable to the proposed project activity. The project is a large-scale, as demonstrated in Section A.4 of the GS PDD /10/ and in line with the Gold Standard for Global Goals GHG Emissions Reduction and Sequestration Product Requirements, version 3.2 (published 12/12/2025), Section 9.1 /01/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion is not applicable.
	5. GENERAL ELIGIBILITY	(a) Projects involving the distribution of a large number of devices for services such as heating,	Clean Cooking Technologies S.R.L. (CCT Italy) is the Project Developer of the proposed project and stove manufacturer as

	CRITERIA – Legal Ownership	cooking, lighting, electricity generation, water treatment technology such as water filter, etc. shall provide a clear description of the ownership of the Products that are generated under Gold Standard Certification all along the investment chain. In line with the FPIC requirement, the proofs that end-users are aware of and willing to give up their rights on Products shall be provided. (b) The transfer of Product ownership shall be discussed during local stakeholder consultations for projects.	confirmed during site visit interview with PD. Full and uncontested legal ownership of the product generated by the project (GS VERs) under Gold Standard Certification will be with Clean Cooking Technologies S.R.L. (CCT Italy) as verified from agreements /13/ between PD and other participants and from Sample end users' agreement /08/ provided by the PD. The ownership of carbon credits (GS VERs) will be transferred from project beneficiaries (households) to Clean Cooking Technologies S.R.L. (CCT Italy) as confirmed during site visit interview with PD, end user and stakeholders and verified from Sample end users' agreement /08/. The transfer of ownership of carbon credits (GS VERs) discussed during the Local Stakeholder Consultation (LSC) meeting to ensure full prior and informed consent (FPIC) as confirmed during site visit interview with stakeholders who attended the LSC meeting. The transfer of ownership of carbon credits (GS VERs) will also be written in the beneficiary agreement in English and in the Local Language (Swahili) that each household will sign while receiving the stove as verified from Sample end users' agreement /08/ provided by the PD. The Local Partner will ensure that all participating beneficiary households of the proposed project freely and willingly, with free and prior informed consent, sign the carbon waiver agreement, reinforcing CCT Italy ownership of all carbon rights arising pursuant to the project as confirmed Sample end users' agreement /08/ provided by the PD and site visit interview with PD and end users. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/.
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			Hence the eligibility criterion has been met.
	6. GENERAL ELIGIBILITY CRITERIA Efficiency improvement	Section 5.1.1 of GHG Emissions Reduction and Sequestration Product Requirement v.2.3, the project type of End-Use Energy Efficiency Improvement.	This is eligible as improving the efficiency of e-cooking devices, and this is an optional requirement The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	7. GENERAL ELIGIBILITY CRITERIA	Section 3.1.1 of GHG Emissions Reductions and Sequestration Product Requirement v.2.3, the projects generate GSVERs and PD has provided GS with satisfactory justification that no double counting of emission reduction occur	No double counting of emission reduction occurs, which is explained in criteria no. 3 of GS4GG Principles & Requirements justification table under section A.1.1 of the PDD /10/. Hence, it is eligible under this optional requirement No double counting of emission reduction occurs, as described in Sections A.1.1, A.3 and B.2 of the PDD /10/, wherein measures such as unique device identification, household-level traceability, and exclusion of devices included under other voluntary/compliance carbon programs have been implemented. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	ELIGIBILITY PRINCIPLES AND REQUIREMENTS as per section 4		
	Principle 3 – Stakeholder Inclusivity	CSA projects shall have specific stakeholder consultation requirements for certain project types including, but not limited to, hydropower and projects using biomass resource as given in Annex A - Additional eligibility criteria for specific project types of the document.	Not applicable, as the project falls into the category Annex B – Positive List. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	Principle 4 – Demonstration of Real Outcomes	New Projects may seek Certification and receive Issuance of Gold Standard Certified Impact Statements or Products for a maximum of two Design Certification Renewal Cycles i.e., a total of 15 years issuance.	The project has a maximum crediting period of 15 years (initially 5 years and then two renewals of 5 years) in line with the GS4GG Principles and Requirements /01/. The Validation team confirm that project activity is in compliance

		with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
Principle 5 – Financial Additionality & Ongoing Financial Need	1. All projects seeking the issuance of Certified Impact Statements and/or Products shall demonstrate Financial Additionality in accordance with the Principles & Requirements and the applicable Product requirements 2. Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of Design Certification: (a) Positive list (Annex B of this document) (b) Projects located in LDC, SIDS, LLDC4 Eligibility (c) Microscale projects 3. All CSA projects shall demonstrate Ongoing Financial Need as per the Principles & Requirements	The additionality and need for ongoing financial support have been demonstrated using the applicable GS4GG Activity Requirements: Community Services Activity Requirements (v1.2) in section B.5 of the GS PDD /10/. The project is implemented in Tanzania, which is a Least Developed Country (LDC) as per the UN LDC list dated 19 Dec 2024 ⁶ as verified from UN Committee for development policies list of LDC /30/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
Eligibility under Gold Standard GHG EMISSIONS REDUCTION & SEQUESTRATION PRODUCT REQUIREMENTS (Optional Requirement) >> As per section 2 of GS4GG GHG Emissions Reduction & Sequestration Product Requirements Version 3.2 dated 12/12/2025 /01/, general eligibility criteria as defined below:		
Eligibility Criteria Category	Eligibility criterion - Required condition	Justification
1. GENERAL ELIGIBILITY CRITERIA#1	Unless otherwise stated elsewhere in the Principles & Requirements, Projects involving a mix of eligible and ineligible components can only claim credits for the Emission Reductions and/or sequestration associated with the eligible component of the project.	The project involves the distribution of electric stoves (induction stoves & electric pressure cooker). The proposed project applies GS-approved Methodology for “Metered & Measured Energy Cooking Devices” version 1.2, published on 13/12/2022 /01/. Hence, as per the GS4GG Principles and Requirements version 2.1 /01/ section 4.1.3 (a), the project becomes automatically eligible.

⁶ https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/Ldc_list.pdf

			The project does not involve any ineligible component. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	2. GENERAL ELIGIBILITY CRITERIA#2	Bundled Projects: Projects are submitted together for certification within a bundle, each Project within the bundle shall individually conform to all GS4GG Requirements. Eligibility criteria with regards to the scale of the Project shall apply to the bundle as a whole and not to the individual Projects.	Not Applicable. The project is an individual project. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has not applicable.
	3. GENERAL ELIGIBILITY CRITERIA#3	Voluntary project activities (VPAs): Where a group of Projects are submitted together for Gold Standard Design Certification within a Programme of Activities, each of these Projects shall conform to all Requirements including the Programme of Activity Requirements. A microscale VPA can only be part of a Microscale PoA and shall conform to all requirements including those listed in Annex A of the Programme of Activity Requirements.	Not Applicable. The project is an individual project. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion is not applicable.
	4. Location of project	VER Projects may be located in any host country or state. However, where host countries or states have mandatory operational schemes to reduce GHG emissions in any form (e.g., cap & trade, carbon tax etc.), Projects shall only be eligible if the Project Developer has either: - provided Gold Standard with satisfactory justification that no double counting of emission reductions occur or - committed to retiring eligible units equal to the quantity of Gold Standard VERs, which must be done prior to VER issuance.	The proposed project is implemented in the United Republic of Tanzania. Tanzania does not have a mandatory greenhouse gas emissions cap, emissions trading system (ETS), carbon tax, or any other legally binding compliance-based carbon pricing mechanism at the national, regional, sub national, or local level that includes the scope of the proposed project. There is no national or sub national cap and trade system or compliance market in Tanzania under which

			emission reductions from the clean cooking sector are regulated or traded. All carbon market activities in the country currently operate under voluntary carbon standards only. While Tanzania is developing institutional readiness for potential future participation under Article 6 of the Paris Agreement, no operational emissions trading scheme or mandatory emissions cap was in force at the time of validation of project. Therefore, the project complies fully with GS4GG eligibility requirements regarding host country emissions caps and emissions trading systems. There are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	5. ELIGIBLE GREENHOUSE GASES	Only Carbon Dioxide (CO₂), Methane (CH₄) and/or Nitrous Oxide (N₂O) are eligible for GSVERs or GSCERs, provided Projects comply with all GS4GG Requirements and eligibility criteria. Projects involving the reduction of eligible and non-eligible greenhouse gases (GHGs) shall be eligible for the crediting of emission reductions associated with eligible GHGs only.	The project only considers the reduction of Carbon Dioxide (CO₂), Methane (CH₄), and Nitrous Oxide (N₂O) Emissions for Gold Standard crediting. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	6. Types of project	GS VERs project	The project involves the distribution of electric stoves

		The Following Project types are eligible for issuance of Gold Standard VERs: a) Renewable Energy Supply; b) End-Use Energy Efficiency Improvement; c) Waste Handling & Disposal; d) Land Use and Forests. e) Carbon Dioxide Removal (Working definition)	(induction stoves & electric pressure cooker) to households and communities. The proposed project type is an automatically eligible project type for Gold Standard Certification due to the following: This Project is eligible as per GS4GG Community Services Activities Requirements v1.2 /01/ sections 3.1.1(b) as an “End-Use Energy Efficiency Improvement Project which states that: <i>Project Activities that reduce energy requirement as compared to the baseline scenario without affecting the level and quality of services or products, where the end user of the products and services are clearly identified and when the physical intervention is required at the user end.</i> The proposed project applies GS GS-approved Methodology for “Metered & Measured Energy Cooking Devices” version 1.2, published on 13/12/2022 /01/. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	7. ODA Declaration	GS VERs project Projects are ineligible for carbon crediting under GS4GG if the OFFICIAL DEVELOPMENT ASSISTANCE (ODA) is provided to the project under the condition that the credits generated by the Project will be transferred, either directly or indirectly, to the donor country providing ODA support. Project Developer submitting a Project located in a country named by the OECD Development Assistance	No ODA is involved in the project. A declaration by the project developer is being submitted. A declaration confirming that there is no diversion of ODA has been duly signed by CCT and submitted to GS during the preliminary review of the proposed project. The validation team has checked the ODA declaration /14/ form and found Ok. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/.

		Committee's ODA recipient list shall sign and submit the ODA Declaration.	Hence the eligibility criterion has been met.
	8. Project Scale	GSVER Projects may be registered as 'large scale', 'small scale' (for the applicability of methodologies and tools only) or 'microscale'. Scale is defined in the relevant Activity Requirements or where these do not exist then per following paragraphs. All Projects exceeding the small scale thresholds are defined as large scale. Small scale projects are defined following CDM project standard for project activities, as below; Type 1: Renewable energy Projects: maximum output capacity of 15 MW(e) or 45MW(th). Type 2: End-use energy efficiency project improvement: activities that reduce energy consumption, on the supply and/or demand side, with a maximum energy saving of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period. In this context, for project activities that improve thermal energy efficiency, the maximum energy saving of 60 GWh(e) per year is equivalent to 180 GWh(th) per year saving; Type 3: Other project activities: project involves technologies such Safe Water Supply, Waste management, etc. not included in Type I or Type II that result in GHG emission reductions not exceeding 60,000-ton CO_{2e} per year in any year of the crediting period.	The proposed project is a Large-Scale Project. The proposed project applies GS GS-approved Methodology for "Metered & Measured Energy Cooking Devices" version 1.2, published on 13/12/2022 /01/. MECD methodology /01/ allows large-scale project activities. The Validation team confirm that project activity is in compliance with the GS4GG requirements /01/. Hence the eligibility criterion has been met.
	It can be concluded that the project will contribute to GHG emission reduction along with direct environmental, social and economic benefits to the users and supporting staff.		

Findings	CAR-03, CAR-04, CAR-05 and CAR-06 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
Conclusion	The assessment team confirms that GS PDD /10/ contains a transparent and accurate description of the project activity and provides reader a clear understanding of the project activity.

D.3. Application and selection of methodologies and standardized baselines

D.3.1. Application of methodologies and standardized baselines

Means validation	of	This project applies the following tools and Methodology: 1. Methodology for Metered & Measured Energy Cooking Devices version 1.2 published on 13/12/2022 /01/. 2. Default value for fNRB from CDM TOOL33: Default values for common parameters version 03.0 /02/ 3. Grid Emission Factor: Harmonised grid emission factor dataset provided by UNFCCC: Harmonized IFI Default Grid Factors 2021 v3.2 /02/ 4. Digital SDG Impact Tool dated 31/10/2023 /01/ 5. Guideline for Sampling and surveys for CDM project activities and programmes of activities, version 4.0 /02/ 6. Cookstove Usage Rate Guidelines ver 2.0, published on 27/10/2020 /01/ This version of the applied methodology is ICVCM approved for CCP as verified from List of ICVCM Approved methodologies /32/. Under section B.2 of the GS PDD /02/, project has been assessed for all the applicability conditions of the applied methodology /01/.									
		<table><tr><th>Sr. No</th><th>Methodology requirement</th><th>applicability</th><th>Justification</th></tr></table>	Sr. No	Methodology requirement	applicability	Justification					
	Sr. No	Methodology requirement	applicability	Justification							
	<table><tr><td>1.</td><td>This methodology is applicable to project activities that introduce technologies that reduce or avoid greenhouse gas (GHG) emissions and quantify emission reductions from cooking devices through direct measurement of energy or fuel consumed, in households (hereinafter referred as end-users).</td><td></td><td> The project activity involves the distribution of electric cooking devices (i.e., induction stoves & electric pressure cookers) to households and communities that reduce/avoid greenhouse gas (GHG) emissions and quantify emission reductions from use of electric stoves for cooking through direct measurement of energy consumed in each household. Justification provided by the PD is found convincing. The validation team confirms that the project activity involves the distribution of electric cooking devices, specifically induction stoves and electric pressure cookers, to households and communities. This was verified during site-visit interviews with the PD, end users, and stakeholders, and further substantiated through review of relevant documents /10/, /11/, /16/, /19/, /20/, /21/, /22/, /23/, /24/. Hence the methodology applicability criterion is met. </td></tr><tr><td>2.</td><td>This methodology may be applied by project developers promoting the installation of e-cooking devices, where the actual amount of energy or fuel used in the project scenario is measured</td><td></td><td>The project involves the promotion and distribution of electric cooking devices in households and</td></tr></table>	1.	This methodology is applicable to project activities that introduce technologies that reduce or avoid greenhouse gas (GHG) emissions and quantify emission reductions from cooking devices through direct measurement of energy or fuel consumed, in households (hereinafter referred as end-users).		The project activity involves the distribution of electric cooking devices (i.e., induction stoves & electric pressure cookers) to households and communities that reduce/avoid greenhouse gas (GHG) emissions and quantify emission reductions from use of electric stoves for cooking through direct measurement of energy consumed in each household. Justification provided by the PD is found convincing. The validation team confirms that the project activity involves the distribution of electric cooking devices, specifically induction stoves and electric pressure cookers, to households and communities. This was verified during site-visit interviews with the PD, end users, and stakeholders, and further substantiated through review of relevant documents /10/, /11/, /16/, /19/, /20/, /21/, /22/, /23/, /24/. Hence the methodology applicability criterion is met.	2.	This methodology may be applied by project developers promoting the installation of e-cooking devices, where the actual amount of energy or fuel used in the project scenario is measured		The project involves the promotion and distribution of electric cooking devices in households and		
1.	This methodology is applicable to project activities that introduce technologies that reduce or avoid greenhouse gas (GHG) emissions and quantify emission reductions from cooking devices through direct measurement of energy or fuel consumed, in households (hereinafter referred as end-users).		The project activity involves the distribution of electric cooking devices (i.e., induction stoves & electric pressure cookers) to households and communities that reduce/avoid greenhouse gas (GHG) emissions and quantify emission reductions from use of electric stoves for cooking through direct measurement of energy consumed in each household. Justification provided by the PD is found convincing. The validation team confirms that the project activity involves the distribution of electric cooking devices, specifically induction stoves and electric pressure cookers, to households and communities. This was verified during site-visit interviews with the PD, end users, and stakeholders, and further substantiated through review of relevant documents /10/, /11/, /16/, /19/, /20/, /21/, /22/, /23/, /24/. Hence the methodology applicability criterion is met.								
2.	This methodology may be applied by project developers promoting the installation of e-cooking devices, where the actual amount of energy or fuel used in the project scenario is measured		The project involves the promotion and distribution of electric cooking devices in households and								

	directly in real-time for every device or otherwise monitored via measurement. The methodology includes the following metered cooking devices, but is not restricted to: a. electric cookstove b. electric pressure cooker (EPC) and other devices with characteristics where the cooking energy is influenced by factors other than temperature such as cooking pressure, c. LPG cookstove, d. biogas stoves, e. bio-ethanol cookstoves. In the case of cooking devices using fuel, the amount of fuel purchased for cooking by each customer shall be recorded with arrangements to ensure the fuel is used for cooking and to prevent the alternative use of the fuel.	communities that reduce GHG emissions. The actual amount of energy used (electricity) in each of the beneficiary households in the project scenario will be measured directly using IoT devices in real-time for every e-cooking device. The project involves the distribution of the following metered cooking device: a. Induction stoves b. Electric pressure cookers Each e-cooking device operates on electricity and is equipped with an IoT-based metering system. This system continuously monitors and records electricity consumption for every user. All monitored data is securely stored on the CCT platform. The validation team has reviewed the IoT-based metering system /23/ implemented by the PD and confirms that it is consistent with the requirements of the applied methodology. Refer to MECD 10 in GS PDD /10/ for details. The validation team confirms that the project activity involves the distribution of electric cooking devices, specifically induction stoves and electric pressure cookers, to households and communities. This was verified during site-visit interviews with the Project Developer, end users, and stakeholders, and further substantiated through review of relevant documents /10/, /11/, /16/, /19/, /20/, /21/, /22/, /23/, /24/. Hence the methodology applicability criterion is met.
	3. Project shall choose a technology design that has predictable performance in that it is proven to be efficient and durable under field conditions; for fuel-based cookstoves, the rated thermal efficiency shall be higher than the baseline technology efficiency and at least 40%.	The project involves the distribution of high-efficiency electric stoves (induction stoves & electric pressure cookers) that demonstrate predictable performance. The thermal efficiency of induction stoves are: Single Fire:84.58% Double Fire: 84.69% Four Fire: 85.41% The validation team has reviewed the efficiency of all induction stoves using the Efficiency Certificate /20/ and

		confirms that the values are consistent. Induction stove technology operates on the principle of electromagnetic energy transfer directly to the cooking vessel, resulting in thermal efficiency that is inherently independent of the number of burners or pots used simultaneously. Accordingly, the thermal efficiency of an induction stove is a function of the technology itself rather than the configuration (single pot, double pot, or multi pot). Minor variations observed in Water Boiling Test (WBT) results are attributable to external factors such as water temperature and ambient conditions and do not reflect differences in underlying stove efficiency. Therefore, for the purpose of this Project Design Document and as a conservative, technology-consistent assumption, a uniform thermal efficiency value of 84.58% (lowest of all three) is applied across all induction stove configurations (single pot/double pot/four pot). The validation team has reviewed the efficiency of all induction stoves using the Efficiency Certificate /20/ and confirms that the values are consistent. As per the Case 2 given under section 3.5.3 of the applied methodology /01/, Electric Pressure Cooker falls under Case 2. It is not possible to determine thermal efficiency of an Electric Pressure Cooker. The validation team confirms that it is not possible to determine the thermal efficiency of an Electric Pressure Cooker under Case 2, as specified in Section 3.5.3 of the applied methodology /01/. Refer to MECD 9 in GS PDD /10/ for details. Hence the methodology applicability criterion is met.
4.	The technologies each have continuous useful energy outputs of less than 150kW per unit (defined as the total useful energy delivered from start to end of operation of a unit divided by time of operation). For technologies or practices that do not deliver thermal energy in the project scenario but only displace thermal energy supplied in the baseline	The energy output of the different electric stove models is as follows: Induction Stoves: • CleKoo Single: 2 kW • CleKoo Double: 3.6 kW • CleKoo Four: 7.4 kW Electric Pressure Cooker:

	scenario, the 150kW threshold applies to the displaced baseline technology.	• CleKoo EPC 8 L: 1.2 kW • CleKoo EPC 10 L: 1.6 kW • CleKoo EPC 12 L: 1.6 kW • CleKoo EPC 15 L: 1.95kW The output of all the electric cooking devices proposed to be distributed in the project is less than 150kW of threshold of applied methodology for household cooking devices. Please refer to the technical datasheet for details /19/. The validation team has reviewed the specific energy output values for all induction stove models and electric pressure cookers proposed for distribution under the project activity, as per the technology specifications /19/. Hence the methodology applicability criterion is met.
5.	The project activity is implemented by a project developer and can include additional project participants listed in Appendix 2 of the PDD template. The individual households may be represented collectively by community organizations, etc., but do not individually act as project participants.	This project is being developed by Clean Cooking Technologies S.R.L. (CCT Italy) as a Project Developer and only Project Participant. The details of the CCT Italy is given in Appendix 2 of this document. CCT Italy also the technology provider, including manufacturer and supplier of the electric cooking stoves distributed under the project. Project implementation will be carried out by CCT Tanzania, a subsidiary of CCT Italy, together with any additional local NGO(s), as applicable. The addition of any other Project Participant in the project in future will be in line with the applicable Gold Standard Requirement and Guideline. The individual households do not individually act as project participants. Individual households will not act as project participants. The validation team confirms that individual households and other stove users will not act as project participants. This was verified through interviews with end users, the Project Developer, and stakeholders, as well as review of the end-user contract/08/. Hence the methodology applicability criterion is met.
6.	The project developer must design incentive mechanism(s), which should be	An incentive mechanism will be designed to discourage the use of

	effective as fast as possible, for the elimination of inefficient baseline stoves that are replaced by the project cooking devices and describe the incentive mechanism.	inefficient baseline stove in the project scenario. It could include the following as example: • Distribution of electric stoves along with utensils to eligible households at a subsidized price same has been verified during site visit interview with End user. • Etc. This is only one example. The program needs to be co-designed with the local partners. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met.
7.	To avoid double counting or double claiming, the projects proponent must - clearly communicates to all project participants the entity that is claiming ownership rights of and selling the emission reductions resulting from the project activity. For technology producers and the retailers of the improved technology or the renewable fuel in use, this must be communicated by contract or clear written assertions in the transaction paperwork. If the claimants are not the project technology end users, the end users will need to be informed and notified that they cannot claim for emission reductions from the project. - inform and notify the end users that they cannot claim emission reductions from the project or use of devices distributed as part of project activity, and - exclude from the project activity, cooking devices included in any other voluntary market or CDM project activity/PoA and strive not to displace the cooking devices of another CDM or voluntary project/PoA to avoid double counting or double claiming with other mitigation actions.	Clean Cooking Technologies S.R.L. (CCT Italy) serves as the project developer, sole project proponent, technology provider, and manufacturer of the electric stoves for this initiative as confirmed during site visit interview with PD. Project implementation will be carried out by CCT Tanzania, a subsidiary of CCT Italy, together with any additional local NGO(s), as applicable as verified from company registration certificates and agreements /13/ provided by the PD. The entity claiming ownership rights of the emission reductions from the project is Clean Cooking Technologies S.R.L. as confirmed during site visit interview with PD, end user and stakeholders and verified from Sample end users' agreement /08/. To avoid double counting or double claiming, the following measures will be taken but not limited to these only: 1. CCT or its local partner will communicate its ownership rights and intention of claiming the emission reductions resulting from the project activity to the following parties by contract or clear written assertions in the transaction paperwork: a. all other new project participants, project technology producers, and retailers of the project technology and

		b. CCT or its partner informs and notifies the end users that they cannot claim emission reductions from the project, and c. CCT or its partner excludes from the project activity, cooking devices included in any other voluntary market or CDM project activity/PoA and strives not to displace the cooking devices of another CDM or voluntary project/PoA. Before the distribution of the project stove, the local partner will ensure that the beneficiary does not have any operational clean cooking technology received from any voluntary or compliance or government program. as confirmed during site visit interview with PD, end user and stakeholders and verified from Sample end users' agreement /08/. There are no other project participants and technology provided in the project at the time of validation of project. Any addition of a project participant in the future will be undertaken in accordance with the applicable Gold Standard requirements and guidelines. Further, to ensure no double counting, each stove distributed in the project is also identified by a unique serial number. The households in this project will not be part of another Voluntary Carbon Project. The same has been checked during site visit interview with end user and PD and sample distribution data base /24/. When distributing the project stoves to the households, an agreement is signed by both parties: The Beneficiary Agreement. This document, signed by each party involved in the project, clarifies the rights and duties for each. For the household, it mentions that: - They agree to discontinue the use of the traditional stove being replaced by the project stove.
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		- They will inform the local partner if there is any transfer of ownership of the project stove. - Households should not purchase or receive any improved cookstove or any other clean cooking technology from any other voluntary or compliance or government program. In case this is found, the household will be required to discontinue the use of stove purchased or received from another project. - They will not claim proprietary rights on the carbon credits generated: they waived them in exchange for the benefits received from the project. as verified from Sample end users' agreement /08/ provided by the PD. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met.
8.	Under this methodology, emission reductions cannot be claimed for fuel-switch only, so proposed project activities also need to introduce alternative technologies, i.e., technology switch is a source of emission reductions.	The project involves the distribution of electric cooking devices • Thus, the project involves claiming emission reductions for fuel switch (from biomass to electricity) and • Introduction of alternative cooking technology, i.e., electric stoves (induction stoves & electric pressure cookers). Technology switch from inefficient biomass stoves to efficient electric stove. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met.
9.	For project cooking devices that use fossil fuel, only emissions reductions from efficiency improvement are eligible.	Not Applicable. The project stove does not involve the use of any fossil fuel and only uses electricity. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is not met.

	10.	For project cooking devices that use grid electricity, emissions reductions from fuel switch and efficiency improvement are eligible.	The e-cooking device in the project uses grid electricity, and hence the project claims emission reductions for both fuel switch and energy efficiency improvements. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met.
	11.	The measured fuel or energy is used to calculate both baseline and project emissions. The project developer must have monitoring systems in place to monitor the fuel or energy consumption by all the project devices under the project to be recorded in a database, which is maintained by the project developer.	IoT device is inbuilt into each electric stove and will monitor the electricity consumption in each of the households. The measured quantity of energy consumed will be used to calculate both baseline and project emissions. The energy consumption and stove usage data will be stored on the CCT platform. The validation team has reviewed the IoT-based metering system /23/ implemented by the PD and confirms that it is consistent with the requirements of the applied methodology. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met.
	12.	The project shall not undermine or conflict with any national, sub-national or local regulations or guidance for thermal energy supply or fuel supply or use. The project shall document the national, regional and local regulatory framework for provision of thermal energy services of the type the project provides in the project boundary.	The project is explicitly designed to comply with all relevant Tanzanian national, sub-national, and local regulations regarding energy, environment, and social safeguards. The project aligns with Tanzania's Nationally Determined Contribution (NDC - 2021)⁷ /29/, the National Clean Cooking Strategy (2024–2034)⁸ /29/, and the National Carbon Trading Guidelines (2022)⁹ /29/. The project's activities, distribution of electric stoves directly support these national objectives and do not contradict any existing legal or policy requirements. There are no laws, policies, or mandatory requirements for

⁷ The United Republic of Tanzania, Nationally Determined Contributions (July 2021), ([Link](#))

⁸ Tanzania, National Clean Cooking Strategy (2024–2034) ([Link](#))

⁹ NATIONAL CARBON TRADING GUIDELINES, VICE PRESIDENT'S OFFICE, HE UNITED REPUBLIC OF TANZANIA, OCTOBER, 2022 ([Link](#))

		households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met.
13.	If the expected technical life of project technology is shorter than the crediting period, the project developer shall describe measures to ensure that end users are provided replacement technology of comparable quality at the end of the technical life, by either replacing with comparable or better technology, or retrofitting essential parts with performance guarantee. If neither of the prior conditions can be demonstrated, no emission reductions can be claimed for the technology after its technical life has ended.	In the project, PD has budgeted for breakage and repair/replacement costs throughout the life of the project. A repair and replacement policy/maintenance mechanism will be developed, so the end users are provided with replacement technology of comparable quality at the end of the technical life of the stove, by replacing it with comparable or better technology. After-sales support and warranty details are provided in the Carbon Rights Transfer Agreement. The same has been confirmed from Technical Life supportive/Lifetime guarantee certificate /21/. When replacing an old project stove with a new one, the latter will be assigned a new, unique serial number. The local partner will meticulously monitor and document these two stove identification numbers (old & new) within the distribution database. It is important to highlight that the replaced project stove will not be logged as a new entry in the distribution database and will remain with the old beneficiary. If neither of the prior conditions can be met, no emission reductions will be claimed for the technology after its technical life has ended. Justification provided by the PD is found convincing. Hence the methodology applicability criterion is met
14.	For project activities introducing bio-ethanol cookstoves, project participants shall demonstrate that the bioethanol cookstoves are designed, constructed and operated to the requirements (e.g. with regard to safety) of a relevant national or local standard or comparable literature. Latest guidelines issued by a	Not applicable. The project activities involve distribution of electric cooking devices.

		relevant national authority or an international organisation may also be used.	Justification provided by the PD is found convincing. Hence the methodology applicability criterion is not met
	The Validation team has found the justification convincing and in line with the applied methodology. Hence the methodology /01/ criteria are met.		
	It can be concluded by the assessment team that the project meets all the applicability criteria established in the methodology /01/.		
	Compliance with applicable Host Country's national/sub-national/local regulations, environmental, ecological, and social safeguards:		
	Applicable regulation	Provision in law	Project's compliance
	The United Republic of Tanzania Nationally Determined Contribution (NDC) July, 2021 ¹⁰	The United Republic of Tanzania has prioritized four mitigation sectors in the NDC. These sectors are energy, transport, forestry, and waste. As per the NDC, whether the low or high ambition scenario is realized ultimately depends on the level of international support. Energy Sector: Reducing the consumption of charcoal in urban and rural areas by promoting affordable alternative energy sources through a regulation policy for charcoal production and use.	The project activity contributes to a reduction in GHG emissions from the shift from inefficient biomass stoves (charcoal & firewood) based on switching to electric cooking devices, i.e., electric stoves (induction stoves & electric pressure cookers). The project significantly reduces woody biomass consumption, resulting in an improved living environment for recipients and reduced pressure on local forests. Tanzania's updated Nationally Determined Contribution (NDC, 2021)¹¹ recognizes the need to reduce greenhouse gas emissions from household energy use, particularly cooking. The country has explicitly committed to "reducing the consumption of charcoal in urban and rural areas by promoting affordable alternative energy sources through a regulation policy for charcoal production and use." This mitigation action, listed under the energy sector, reflects a national strategy to transition away from traditional biomass fuels toward cleaner and more sustainable energy options. In support of this transition, the NDC outlines broader goals to promote clean technologies for power generation, expand the use of natural gas for cooking and thermal services, and scale up climate-smart rural

¹⁰ The United Republic of Tanzania, Nationally Determined Contributions (July 2021), ([Link](#))

¹¹ The United Republic of Tanzania, Nationally Determined Contributions (July 2021), ([Link](#))

			electrification, including micro and mini-grid solutions. The validation team confirms that the project activity is aligned with the United Republic of Tanzania's Nationally Determined Contribution (NDC), July 2021 /29/.
	The United Republic of Tanzania National Carbon Trading Guidelines, October 2022¹²	Potential Sectors for Carbon Trading: The policy and legal frameworks, particularly Nationally Determined Contributions, outline priority sectors for climate change mitigation and adaptation actions in the country. The priority sectors identified in order to meet national mitigation targets are energy, transport, forestry and waste management. Others potential sectors include industrial processes and products use, agriculture and other land use. Energy Sector: The United Republic of Tanzania has various sources of energy. However, most of these sources are still unexploited thus the sector predominantly relies on un-environmentally friendly sources. The use of alternative sources of energy presents a huge opportunity for carbon trading. Potential investment areas for carbon trading in this sector include: a) The use of clean energy sources for power generation such as geothermal, wind, tidal, solar, use of natural gas, hydroelectric power and renewable biomass; b) Expanding the use of natural gas for cooking and other domestic use; c) Promotion of accessible and affordable energy efficient technologies;	The project activity promotes the distribution and adoption of electric cooking devices, which is in line with the Government objective of 'Promotion of accessible and affordable energy efficient technologies. Hence the proposed project activity is one of the potential sectors for carbon trading in Tanzania. The validation team confirms that the project activity is aligned with the The United Republic of Tanzania National Carbon Trading Guidelines, October 2022 /29/.

¹² The United Republic of Tanzania National Carbon Trading Guidelines, October 2022 ([Link](#))

	d) Promotion of co-generation activities such as combined generation of heat and power; and e) Other investments geared to reduce generation of greenhouse gases in the energy sector.	
THE UNITED REPUBLIC OF TANZANIA, MINISTRY OF ENERGY, NATIONAL CLEAN COOKING STRATEGY (2024-34), May 2024 ¹³	The main objectives of the Tanzania clean cooking strategy are: i. Increase public and Institutional awareness on the importance of using clean cooking solutions; ii. Strengthen the accessibility of raw materials and reliable infrastructure of clean cooking solutions; iii. Reduce the cost of clean cooking energy sources, appliances and efficient cook stoves; iv. Develop, update and harmonize enabling Policies, Laws, Regulations and Guidelines to facilitate the adoption of clean cooking solutions; v. Promote investments in clean cooking; vi. Build the capacity of implementers of clean cooking projects; vii. Broaden the scope of research and innovations in technologies related to cooking solutions; viii. Incorporate HIV/AIDS issues in clean cooking initiatives; ix. Incorporate gender equality issues in the clean cooking value chain; and x. Strengthen Good Governance in clean cooking. The Responsibilities of Private Sector in Tanzania Clean Cooking Strategy are:	The project involves the promotion and distribution of clean cooking technology i.e. energy efficient electric stoves (induction stoves & electric pressure cookers) in Tanzania. The project will create sensitization and public awareness on clean cooking. The Project Developer with the help of local partner will provide maintenance (repair / replacement) of the distributed stoves. The stove will be provided at subsidized cost to the eligible beneficiary households. The electric cooking will reduce household expenditure on fuel (firewood / charcoal) purchase. The project will help in improving gender equality in the region (SDG 5). The project will also provide job opportunities for the locals (SDG 8). The proposed project activity is in line with the Tanzania clean cooking strategy and help Government in meeting their target of providing reliable and sustainable access of clean cooking to low-income households in the country. The validation team confirms that the project activity is aligned with the THE UNITED REPUBLIC OF TANZANIA, MINISTRY OF ENERGY, NATIONAL CLEAN COOKING STRATEGY (2024-34), May 2024 /29/.

¹³ THE UNITED REPUBLIC OF TANZANIA, MINISTRY OF ENERGY NATIONAL CLEAN COOKING STRATEGY (2024-34), May 2024 ([Link](#))

	The Private Sector will collaborate with the Government to ensure reliable and sustainable access to clean cooking; participating in sensitization and public awareness on clean cooking; develop and implement programmes to enable low-income individuals in affording clean cooking solutions; collaborate with the Government to identify Policies, Laws, Regulations and Guidelines that hinder efforts in the distribution of clean cooking solutions; ensure the distribution network of clean cooking energy, appliances and cookstoves reaches to all areas of the country; and create clean cooking employment opportunities.	
	There are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/.	
Findings	CAR-07 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.	
Conclusion	The applied baseline and monitoring methodology and relevant tool are valid and applicable to the project activity. The assessment team concludes that on the basis of observations made during interviews and review of the documents, the project activity meets the requirement of the applied methodology /01/. The assessment team concludes there are no laws, policies, or mandatory requirements for households in Tanzania to purchase electric cooking devices for domestic use, as confirmed from the host country's legal, environmental, ecological, and social regulations /29/.	

D.3.2. Project boundary, sources and GHGs

Means of validation	The project boundary is specified in Section 3.1 of the applied GS methodology /01/. The project boundary is the United Republic of Tanzania as presented in Section A.2 of the PDD /10/ and confirmed during the site visit. The emissions accounted from the various sources in the physical boundary of the project activity are as follows:				
	Scenario	Source	GHGs	Included?	Justification/Explanation
	Baseline scenario	Combustion of non-renewable biomass/fossil fuel for cooking	CO ₂	Yes	The main source of emission in the baseline
			CH ₄	Yes	An important source of emissions
			N ₂ O	Yes	An important source of emissions
		Production of fuel, electricity, transport of fuel	CO ₂	No	An important source of emissions
			CH ₄	No	An important source of emissions
			N ₂ O	No	An important source of emissions
	Pr	Consumption of electricity for cooking	CO ₂	Yes	The main source of emissions in the project scenario

		CH ₄	No	Excluded (grid electricity)
		N ₂ O	No	Excluded (grid electricity)
		CO ₂	Yes	Transmission and distribution losses for providing electricity
		CH ₄	No	Excluded (grid electricity)
		N ₂ O	No	Excluded (grid electricity)
	The information was validated during the site visit interviews by Validation team and found the PD justification OK.			
Findings	No finding raised.			
Conclusion	The project boundary confirmed during the interviews along with the documentary evidence was found in conformance with the applied baseline methodology. All sources of GHG emissions required by the methodology have been included in the project boundary and are justified in reference to the project activity. There are no project emissions/leakage emissions of any sort which are not addressed by the applied methodology occurring because of the project activity.			

D.3.3. Baseline scenario

Means of validation	As per section 3.4 of the methodology /01/, "In the absence of the project activity, the general baseline scenario would be the use of single or multiple fuels/device combinations for meeting similar thermal energy needs by the representative end users" in the project Boundary. Based on the Tanzania latest Demographic and Health Survey (DHS) /26/ ¹⁴, the vast majority of Tanzanian households rely on traditional and polluting fuels and technologies for cooking. The DHS survey /26/ reveals that 93% of the population in Tanzania (82% urban households & 98% rural households) relies primarily on solid fuels such as firewood and charcoal for cooking. Firewood is the most commonly used fuel in Tanzania, accounting for 67% of households, followed by charcoal at 25%. Only 7% of the total population in the country uses clean fuels and technologies for cooking, with a large disparity between urban areas (18%) and rural areas (2%)¹⁵. As per DHS /26/, around 88.6% of the households in Tanzania Mainland (72.2% urban households & 96.4 rural households) either use a traditional solid fuel stove without a chimney or a three-stone fire, or an open fire as their primary stove for cooking¹⁶. These stoves are often poorly designed, made of clay, or simply three-stone are also very inefficient because they have poor air flow and no insulation and hence generate significant household air pollution. The same has been confirmed from baseline study /26/ and found Ok. The use of these traditional stoves has negative impacts at various levels, both social and environmentally. Indeed, the combustion of woody biomass (firewood or charcoal) for cooking in these traditional stoves generates Greenhouse Gases (GHG), and as a large amount of biomass is needed, it increases forest degradation and deforestation. The previously mentioned scenario leads to a high demand for woody biomass, including charcoal, which increases the pressure on natural resources and local forests. From 2002 to 2024, Tanzania lost 41.0 kha of humid primary forest, making up 1.0% of its total tree cover loss in the same period¹⁷. The same has been confirmed from baseline study /26/ and found Ok. Cooking location data further reveals that 50% of urban households prepare meals inside the house, often without a separate kitchen, while rural households more
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¹⁴ Table 2.2 Household characteristics: Cooking, Page 21, Tanzania - Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2022 ([Link](#))

¹⁵ Section 2.1.2 Cooking, Page 10, Tanzania - Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2022 ([Link](#))

¹⁶ Table 2.2 Household characteristics: Cooking, Page 21, Tanzania - Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2022 ([Link](#))

¹⁷ Primary Forest Loss in Tanzania, Global Forest Watch ([Link](#))

commonly cook in separate buildings (54.7%) or outdoors (23%)¹⁸. Although outdoor cooking reduces indoor smoke exposure, it does not eliminate exposure risks, particularly for women and children, who typically spend more time around cooking device/areas. The same has been confirmed from baseline study /26/ and found Ok.

As per the DHS report /26/, the primary reliance on solid fuels for cooking remains high across most regions in Tanzania. Even in Dar es Salaam, where infrastructure and energy access are comparatively better, 66.7% of the population relies on solid fuels for cooking. The same has been confirmed from baseline study /26/ and found Ok.

These figures illustrate the critical need for clean cooking technologies in both urban and rural areas. The high dependency on firewood and charcoal directly contributes to household air pollution, deforestation, and increased exposure to health risks, particularly for women and children. The baseline scenario in Tanzania strongly supports the rationale for introducing e-cooking, offering a safer, cleaner, and more sustainable alternative to traditional cooking practices.

In Tanzania, households spend an average of 0.9 hours per day collecting firewood, a task primarily carried out by women and children¹⁹. As per a survey conducted, according to Table 1 of the study, girls (females, n=63) spent 5.5–6.3 hours per week gathering firewood (based on women's and children's responses respectively), which translates to approximately 0.79–0.90 hours per day. For the total sample (n=114), the figures were 5.7–6.5 hours per week, equivalent to roughly 0.81–0.93 hours per day²⁰. This not only limits their time for income-generating or educational activities but also exposes them to risks of injury and violence, particularly in insecure areas. The burden of traditional cooking practices extends to serious health impacts, especially for children under five, who bear nearly half of the disease burden from household air pollution.

% of fuel type used in baseline scenario:

Place of Residence	% HH using Firewood for Cooking	% HH using Charcoal for Cooking	% HH using LPG for Cooking	Sum (>100% = fuel stacking) ²¹	Source
Mainland Tanzania	65.5%	44.0%	24.6%	134.1%	Table 18 Appendix, p.79, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) ²²

The same has been confirmed from Table 18 Appendix, p.79, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)²³ /26/ and found Ok. The survey is by a government body and hence accepted to the validation team.

¹⁸ Table 2.2 Household characteristics: Cooking, Page 21, Tanzania - Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS) 2022 ([Link](#))

¹⁹ Clean and Improved Cooking in Sub-Saharan Africa, World bank Group([Link](#))

²⁰ Implications of Environmental Chores for Schooling: Children's Time Fetching Water and Firewood in Tanzania
Link: <https://pmc.ncbi.nlm.nih.gov/articles/PMC6010040/#T1>

²¹ Sum exceeds 100%: households use multiple fuels for cooking (fuel stacking)

²² <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

²³ <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

Amount of fuel used in baseline scenario:

The amount of fuel used in baseline scenario for cooking is from official government publication:

Fuel Type	Amount of fuel (tonnes/capita/year)	Source
Wood	0.377	Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) ²⁴ /26/
Charcoal	0.081	
LPG	0.003	

The same has been confirmed from Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)²⁵ /26/ and found Ok. The survey is by a government body and hence accepted to the validation team.

Specific energy consumption in the baseline scenario:

Fuel Type	Energy Consumption (MJ/person/cookingevent)	Source
Firewood	4.03	Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) ²⁶
Charcoal	3.83	Table - 9- Scott, N.; Leach, M.; Clements, W. Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024, 17, 3318 ²⁷
LPG	0.94	

The same has been confirmed from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)²⁸ /26/ and Table - 9- Scott, N.; Leach, M.; Clements, W. Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024, 17, 3318²⁹ /26/ and found Ok

The validation team checked baseline practices and usage during physical site-visit interviews conducted by the audit team, on a random basis from baseline users identified in the project area, with survey forms completed by the validation team.

The validation team carried out random sampling and, using professional judgment, assessed the acceptability of the baseline study /26/ data against records collected by the audit team.

In total, 25 baseline households were interviewed. The validation team interviewed household representatives and completed survey forms.

The validation team sample results were cross-checked with the baseline study /26/ and found to be in compliance. Accordingly, the baseline study /26/ is accepted by the validation team.

Furthermore, the baseline study /26/ was conducted by the National Bureau of Statistics (NBS) for Mainland Tanzania and the Office of the Chief Government Statistician (OCGS) for Zanzibar, under the oversight of the Ministry of Health and the Ministry of Health Zanzibar and is therefore accepted by the validation team."

²⁴ <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

²⁵ <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

²⁶ <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

²⁷ <https://www.mdpi.com/1996-1073/17/13/3318>

²⁸ <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

²⁹ <https://www.mdpi.com/1996-1073/17/13/3318>

Findings	CAR-08 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
Conclusion	The assessment of the applied baseline suggests that the baseline methodology has been correctly applied, and the most appropriate and conservative baseline scenario has been selected: a) All data and values used by the project proponent have been listed and referenced in the PDD indication of their sources; b) Relevant documents have been used for the establishment of baseline scenario, interpreted appropriately; c) All the relevant national and sectoral policies and circumstances have been considered; d) The applied methodology's applicability has been found in accordance, and the baseline identification has been found appropriate by the assessment team. e) Justification has been provided in the revised GS PDD /10/ and found OK.

D.3.4. Demonstration of additionality

Means of validation	Specify the methodology, activity requirement or product requirement that establishes deemed additionality for the proposed project (including the version number and the specific paragraph, if applicable).	As per para 4.1.9 of the Gold Standard for the Global Goals Community Services Activity Requirements ver 1.2, Oct 2019³⁰: “Projects that meet any of the following criteria are considered as deemed additional and therefore are not required to prove Financial Additionality at the time of Design Certification: (a) Positive list (Annex B) (b) Projects located in LDC, SIDS, and LLDC (c) Micro-scale projects”
	Describe how the proposed project meets the criteria for deemed additionality.	(a) As per para 1.1.3 of Annex B of Gold Standard for the Global Goals Community Services Activity Requirements ver 1.2, the project falls under the positive list. The project is composed of isolated units (induction stoves & electric pressure cookers) where the users of technology are households and where each unit (either induction stove or electric pressure cooker) results in <= 600 tCO_{2e} of emission reductions per year (refer to cell AP7 & AP8 in the 'BE-PE-LE' tab of the Emission reduction Excel Sheet /11/ to see the estimated emission reduction from a Induction stove and electric pressure cooker). (b) The project is located in a Least Developed Country. As per the UN List of Least Developed

³⁰ <https://globalgoals.goldstandard.org/201-ar-community-services-activity-requirements/>

	Countries dated 19 December 2024, the United Republic of Tanzania is a Least Developed Country³¹. The project meets conditions (a) and (b) of para 4.1.9 of the Gold Standard for the Global Goals Community Services Activity Requirements ver 1.2 Oct 2019 and is therefore deemed additional. Hence, the project is automatically deemed additional. Validation team has checked the PD justification and found convincing. Hence the project is additional.
	<u>Prior consideration of the carbon revenues:</u> As the project is a regular project activity, hence the prior consideration is not applicable for the project activity. LSC was conducted before the start date i.e. on 09/01/2026 and the first date of submission is 14/01/2026. Project start date: 10/03/2026 as verified from start date supportive /08/.
Findings	No finding raised.
Conclusion	Based on the local and sectoral expertise, the assessment team confirms that the project is additional.

D.3.5. Sustainable Development Goals (SDG) outcomes

Means of validation	Specific contributions to be determined at project level are:		
	SUSTAINABLE DEVELOPMENT GOALS TARGETED	MOST RELEVANT SDG TARGET	SDG IMPACT INDICATOR (PROPOSED OR SDG INDICATOR)
	SDG 13 Climate Action (mandatory)	13.2: Integrate climate change measures into national policies, strategies, and planning	Amount of GHG emissions avoided or sequestered
	SDG 1 No poverty	1.4 By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	Proportion of population living in households with access to basic services
	SDG 3 Good Health and Well-being	3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration and reductions

³¹ https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/ldc_list.pdf

SDG 4 Quality education	4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	Number of employees provided skill development training
SDG 5 Gender Equality	5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	Average time saving associated with cooking time and fuel collection
SDG 7 Affordable and clean energy	7.1 By 2030, ensure universal access to affordable, reliable and modern energy services	Number of beneficiaries: Households
SDG 8 Decent Work and economic growth	8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	Total number of jobs
SDG 15 Life on Land	15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	Total non-renewable wood fuel saved

The validation team has reviewed the digital SDG tool /12/ and confirms that the SDG Target and SDG Impact are in accordance with GS4GG requirement /01/.

Methodological choice/ approaches for estimating the above-mentioned SDG outcomes are as follows:

Methodological choice/approach for estimating SDG 13 Impact

The project includes the distribution of electric stoves with the aim of reducing greenhouse gas (GHG) emissions from the burning of non-renewable woody biomass (firewood or charcoal) for cooking.

The outcome of SDG 13 (Climate Action) will be measured as reduced greenhouse gas emissions measured as tonnes of CO_{2e}, applying the GS methodology for “Metered and Measured Energy Cooking Devices”, version 1.2 /01/, published on 13th Dec 2022. The SDG 13 outcome will be certified as “Certified SDG 13 Impacts,” allowing the generation of carbon credits (GS VERs).

The emission reductions are calculated as follows (SDG 13):

$$ER_y = BE_y - PE_y - LE_y$$

Where:

ER_y	Emission reductions in year y (tCO _{2e} /year)
BE_y	Baseline emissions in year y (tCO _{2e} /year)
PE_y	Project emissions in year y (tCO _{2e} /year)
LE_y	Leakage emissions in year y (tCO _{2e} /year)

Baseline Emissions

The following approach has been adopted to calculate the baseline emissions from the referred methodology /01/.

Case 1 (Induction Stoves):

It is possible to determine the thermal efficiency of the project device and to know the useful energy that is being replaced.

The overall baseline emissions for the project in year y shall be calculated from the total useful energy (electric energy) used in the project multiplied by the baseline emission factor:

$$BE_y = EG_{p,useful,y} \times EF_{b,useful}$$

Where:

BE_y	Baseline emissions (tCO ₂ e) in year y
EG_{p,useful,y}	Amount of useful energy applied in the project in year y (TJ)
EF_{b,useful}	Baseline emissions factor (tCO ₂ e per TJ of useful energy)

The baseline emission factor shall be determined by applying the equation below:

$$EF_{b,useful} = \sum_k \left(\sum_{i,j} P_{b,i,j} \times \text{Percentage of fuel}_i \times (EF_{b,i,CO_2} \times f_{NRB_{i,y}} + EF_{b,i,non-CO_2}) \times NCV_{b,i} \right) \div \sum_k \left(\sum_{i,j} P_{b,i,j} \times \text{Percentage of fuel}_i \times NCV_{b,i} \times \eta_{b,i,j} \right)_k$$

Where:

EF_{b,useful}	Baseline emissions factor (tCO ₂ e per TJ of useful energy)
P_{b,i,j}	Amount of baseline fuel i used in device j in the baseline (tonnes)
EF_{b,i,CO₂}	CO ₂ emission factor of the baseline fuel i (tCO ₂ e/TJ)
EF_{b,i,nonCO₂}	Non-CO ₂ emission factor of the baseline fuel i (tCO ₂ e/TJ)
f_{NRB_{i,y}}	Non-renewability status of woody biomass fuel i during year y
NCV_{b,i}	Net calorific value of the baseline fuel type i (TJ/tonne)
η_{b,i,j}	Efficiency of baseline device j using fuel i (fraction)
K	Household k from the target population, where applicable
J	Baseline devices j
I	Baseline fuel i

In the above formula **P_{b,i,j}**, **EF_{b,i,CO₂}**, **EF_{b,i,nonCO₂}**, **f_{NRB_{i,y}}**, **NCV_{b,i}** and **η_{b,i,j}** are ex-ante parameters. They are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.

The induction stove (project device) uses electricity and corresponds to Case 1, the total electricity use in the project scenario is monitored and recorded, and the useful project energy in year y shall be calculated as follows:

$$EG_{p,useful,y} = \sum_d EG_{p,d,y} \times 0.0036 \times \eta_{p,d,y}$$

Where:

EG_{p,d,y}	Amount of electricity used in the project scenario by device d in year y (MWh)
0.0036	Conversion factor from MWh to TJ
η_{p,d,y}	Energy efficiency of the project device d in year y (fraction)
D	Project device d

Project electric stoves are geolocated and feature advanced IoT capabilities that provide real-time monitoring of energy usage. IoT is a final product consisting of processor, gprs module etc. that monitors data in real time. The validation team has checked the IoT-based monitoring system /23/ and found in line with applied methodology /01/ and GS4GG requirements /01/.

The thermal efficiency of the induction stove will determine through the manufacture specification.

Case 2 (Electric Pressure Cooker):

The baseline emissions shall be calculated from the total electric energy input used in the project scenario in year y, the energy ratio of the specific energy consumption of baseline device(s) and the project device, and the baseline emissions factor:

$$BE_y = \sum d EG_{p,d,y} \times SC_b/SC_p \times 0.0036 \times EF_{b,input}$$

Where:

BE_y	Baseline emissions (tCO ₂ e) in the year y
$EG_{p,d,y}$	The amount of electricity used in the project scenario by device d in year y (MWh)
0.0036	Factor to convert MWh to TJ
$EF_{b,input}$	Baseline emissions factor (tCO ₂ e per TJ of energy input)
SC_b	Specific energy consumption used in the baseline scenario (TJ/test per person)
SC_p	Specific energy consumption used in the project scenario (TJ/test per person)

The baseline emission factor shall be determined by applying the equation below:

$$EF_{b,input} = \frac{\sum_k \left(\sum_{i,j} P_{b,i,j} \times (EF_{b,i,CO_2} \times f_{NRB_{i,y}} + EF_{b,i,non-CO_2}) \times NCV_{b,i} \right)_k}{\sum_k \left(\sum_{i,j} P_{b,i,j} \times NCV_{b,i} \right)_k}$$

Where:

$EF_{b,input}$ = Baseline emissions factor (tCO₂e per TJ of energy input)

Project Emissions

The project device (electric stoves) uses electric energy; the project emissions in year y are then calculated using the following equation:

$$PE_y = \sum d EG_{p,d,y} \times EF_{el,y} \times (1+TDL_{j,y})$$

Where:

PE_y	Project emissions in year y (tCO ₂)
$EG_{p,d,y}$	Amount of energy used in the project scenario by device d in year y (MWh)
$EF_{el,y}$	Emissions factor of the electricity system in year y (tCO ₂ e/MWh)
$TDL_{j,y}$	Average technical transmission and distribution losses for source j in year y

Methodological choices/approaches for Other SDGs, i.e. 1,3,4, 5,7,8 & 15

The project's outcome in terms of its contribution towards other SDGs, apart from SDG 13, will be estimated in line with the GS SDG Impact Tool /12/ & Guideline /01/. The only SDG product that will be generated under the Gold Standard certification scheme is 'Verified Emission Reductions' (VERs) as per the measurement of SDG 13. The measurement of the other SDG outcomes will be done through the following parameters and the SDG Tool methodological approaches.

SDG	SDG INDICATOR	Monitoring Approach
SDG 1 No poverty	Proportion of population living in households with access to basic services	The usage of distributed electric stoves will be monitored using IoT-enabled devices installed in each stove. These devices will track stove operation and usage frequency to estimate the proportion of households effectively accessing clean cooking services under the project.

		Additionally, the usage survey will confirm the stove usage with sample households.
SDG 3 Good health and well being	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions	The monitoring surveys will be conducted with a sample of project households. The monitoring survey will ask question like “do you perceive less incidence of eye problems and or respiratory illness after installation of electric stove” to the primary cook. Subsequently, the percentage of households who perceive less incidence of eye problems and or respiratory illness in the project scenario thanks to the project stove will be estimated by comparing the percentage of households who perceive less incidence of eye problems and or respiratory illness in the baseline scenario.
SDG 4 Quality education	Number of employees provided skill development training	The project developer and local partner will maintain detailed records of employees hired under the project (full-time, part-time, and temporary), disaggregated by gender, who receive skill development or technical training during each monitoring period.
SDG 5 Gender Equality	Average time saving associated with cooking time and fuel collection	The Distribution Database and/or Monitoring Survey will gather information from sample households on the time spent per week in hours on unpaid domestic work activities such as traveling to the forest (round trip), firewood collection, and preparation for cooking, both in the baseline and the project scenario. Subsequently, the time saved in the project scenario thanks to the project stove will be estimated by comparing the time spent in the baseline scenario with that in the project scenario.
SDG 7 Affordable and clean energy	Number of beneficiaries: Households	During the distribution of stoves to each household, beneficiary details such as beneficiary name, address, GPS coordinates, telephone number, etc., will be recorded in the beneficiary agreement and will be transferred to the distribution database. The number of unique entries in the distribution database will represent the number of project beneficiaries, i.e., households.
SDG 8 Decent work and economic growth	Total number of jobs	Each headcount will be monitored through record-keeping and contractual agreements between the employee and employer.

		It's worth noting that employment opportunities can emerge at the office and field levels through the Project Developer, Local Partner levels as part of the carbon project.
SDG 15 Life on land	Total non-renewable wood fuel saved	Baseline fuel (firewood or charcoal) consumption will be determined through credible published literature. Monitoring surveys will assess ongoing biomass usage of post electric stove distribution. Non-renewable fuel savings will be calculated by multiplying per-household fuel savings by the number of operational stoves and the fraction of non-renewable biomass.

Ex-Ante estimation of SDG Impact

Ex-ante calculations of emission reductions related to outcomes of SDG 13 is estimated in ex-ante emission sheet the same has been checked from ER sheet /11/ by the validation team and other SDGs are shown in table below:

SDG targeted	SDG 1 No poverty
Parameter	Proportion of population living in households with access to basic services
SDG Unit	Percentage
Baseline Estimate (Value)	0 These values are an estimate based and will be verified during verification.
Baseline Estimation Approach	The distribution data / monitoring surveys confirm that, in the baseline scenario, no beneficiary household has access to an electric stove in the absence of the electric cooking project activity.
Project Estimate (Value)	95 These values are an estimate based and will be verified during verification.
Project Estimation Approach	Continuous monitoring using IoT device. The usage of distributed electric stoves (induction stove & electric pressure cooker) will be monitored using IoT-enabled devices installed in each stove. These devices will track stove operation and usage frequency to estimate the proportion of households effectively accessing clean cooking services under the project.
Net Benefit (annual average)	95

Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.

SDG targeted	SDG 3 Good health and Well Being
Parameter	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions
SDG Unit	Percentage
Baseline Estimate (Value)	0
Baseline Estimation Approach	The distribution data / monitoring surveys confirm that, in the baseline scenario, no households observe any reductions in PM2.5 or carbon monoxide (CO)

	concentrations due to the absence of electric stove project activity.
Project Estimate (Value)	100 These values are an estimate based and will be verified during verification.
Project Estimation Approach	The project stove (induction stove & electric pressure cooker) is a Tier 3 or a higher tier stove. Hence the information will be collected from sample households through monitoring surveys. Relevant question like “do you perceive less incidence of eye problems and or respiratory illness after installation of electric stove” will be included in the monitoring survey and should be asked to primary cook only.
Net Benefit (annual average)	100
Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.	
SDG targeted	SDG 4 Quality Education
Parameter	Number of employees provided skill development training
SDG Unit	Number
Baseline Estimate (Value)	0 These values are an estimate based and will be verified during verification.
Baseline Estimation Approach	The employment process confirms that no employees received relevant skill development training in the baseline scenario i.e. before the implementation of the project activity.
Project Estimate (Value)	100
Project Estimation Approach	Training count provided in the reporting period
Net Benefit (annual average)	100
Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.	
SDG targeted	SDG 5 Gender Equality
Parameter	Average time saving associated with cooking time and fuel collection
SDG Unit	Hours saved / household / year
Baseline Estimate (Value)	0
Baseline Estimation Approach	The distribution data / monitoring surveys confirm that there is no time saving on travelling, collecting, and preparing woody biomass for cooking in the absence of the electric cooking project activity. We have not accounted for time spent on cooking in baseline scenario.
Project Estimate (Value)	329 These values are an estimate based and will be verified during verification.
Project Estimation Approach	The Distribution database and / or Monitoring Survey will gather information on the time spent per week in hours on unpaid domestic work activities such as traveling to the forest (round trip), firewood collection, and preparation for cooking, both in the baseline and in the project scenario.

	Please note that this time does not include time spent on cooking per day. Subsequently, the time saved in the project scenario will be estimated by comparing the time spent in the baseline scenario with that in the project scenario.
Net Benefit (annual average)	329
Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.	
SDG targeted	SDG 7 Affordable and Clean Energy
Parameter	Number of beneficiaries: household
SDG Unit	Number
Baseline Estimate (Value)	0
Baseline Estimation Approach	The distribution data / monitoring surveys confirm that, in the baseline scenario, no households have access to electric cooking in the absence of our electric cooking project activity.
Project Estimate (Value)	150,000 These values are an estimate based and will be verified during verification.
Project Estimation Approach	During the distribution of stoves to each beneficiary household, details such as beneficiary name, address, GPS coordinates, telephone number, etc., will be recorded in the distribution database. The number of unique entries in the distribution database will represent the number of project beneficiaries, i.e., households.
Net Benefit (annual average)	150,000
Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.	
SDG targeted	SDG 8 Decent Work and economic growth
Parameter	Total number of jobs
SDG Unit	Number
Baseline Estimate (Value)	0
Baseline Estimation Approach	The employment data confirm that in the baseline scenario, no jobs are created in the absence of our electric cooking project activity.
Project Estimate (Value)	100 These values are an estimate based and will be verified during verification.
Project Estimation Approach	Each headcount will be monitored through record-keeping and contractual agreements between the employee and employer. It's worth noting that employment opportunities can emerge at office, factory, and field levels through the Project Developer, Local Partner as part of the carbon project.
Net Benefit (annual average)	100
Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.	
SDG targeted	SDG 13 Climate Action

Parameter	Amount of GHGs emissions avoided or sequestered
SDG Unit	tCO _{2e}
Baseline Estimate (Value)	0
Baseline Estimation Approach	The distribution data / monitoring surveys confirm that, in the baseline scenario, no emission reductions are achieved due to the absence of electric cooking project activity.
Project Estimate (Value)	171,715
Project Estimation Approach	Calculated using the formulas given in the applied methodology
Net Benefit (annual average)	172,335

Ex-ante calculations of emission reductions related to outcomes of SDG 13 is estimated in ex-ante emission sheet the same has been checked from ER sheet /11/ by the validation team.

SDG targeted	SDG 15 Life on Land
Parameter	Total non-renewable wood fuel saved
SDG Unit	Tonnes/year
Baseline Estimate (Value)	0
Baseline Estimation Approach	The distribution data / monitoring surveys confirm that no non-renewable wood fuel savings occur in the baseline scenario without the electric cooking project activity.
Project Estimate (Value)	129,801 These values are an estimate based and will be verified during verification.
Project Estimation Approach	Calculated based on the firewood save per household and number of households received electric cookstove
Net Benefit (annual average)	129,801

Both baseline and project estimates are justified under section D.3.6 of this report. Validation team has checked the calculation under the ER sheet /11/ and found OK.

The summary of ex-ante estimation of each SDG outcome is as follows:

SDG 13: Amount of GHGs emissions avoided or sequestered

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	53,643	11,366	40,163
Year 2	219,447	46,497	164,302
Year 3	292,596	61,996	219,070
Year 4	292,596	61,996	219,070
Year 5	292,596	61,996	219,070
Total	1,150,879	243,852	861,675
Total number of crediting years	5		
Annual average over the crediting period	230,176	48,770	172,335

SDG 1: Proportion of population living in households with access to basic services

YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
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Year 1	0	95%	95%
Year 2	0	95%	95%
Year 3	0	95%	95%
Year 4	0	95%	95%
Year 5	0	95%	95%
Total	0	95%	95%
Total number of crediting years	5		
Annual average over the crediting period	0	95%	95%
SDG 3: Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions			
YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	0	100%	100%
Year 2	0	100%	100%
Year 3	0	100%	100%
Year 4	0	100%	100%
Year 5	0	100%	100%
Total	0	100%	100%
Total number of crediting years	5		
Annual average over the crediting period	0	100%	100%
SDG 4: Number of employees provided skill development training			
YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	0	50	50
Year 2	0	50	50
Year 3	0	0	0
Year 4	0	0	0
Year 5	0	0	0
Total	0	100	100
Total number of crediting years	5		
Annual average over the crediting period	0	20	20
SDG 5: Average time saving associated with cooking time and fuel collection			
YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT
Year 1	329	0	329
Year 2	329	0	329
Year 3	329	0	329
Year 4	329	0	329
Year 5	329	0	329
Total	329	0	329
Total number of crediting years	5		

	Annual average over the crediting period			329	0	329
	SDG 7: Number of beneficiaries: Households					
	YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT		
	Year 1	0	50,000	50,000		
	Year 2	0	100,000	100,000		
	Year 3	0	0	0		
	Year 4	0	0	0		
	Year 5	0	0	0		
	Total	0	150,000	150,000		
	Total number of crediting years		5			
	Annual average over the crediting period			0	30,000	30,000
	SDG 8: Total number of jobs					
	YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT		
	Year 1	0	50	50		
	Year 2	0	50	50		
	Year 3	0	0	0		
	Year 4	0	0	0		
	Year 5	0	0	0		
	Total	0	100	100		
	Total number of crediting years		5			
	Annual average over the crediting period			0	20	20
	SDG 15: Annual average amount of non-renewable firewood saved by the project activity					
	YEAR	BASELINE ESTIMATE	PROJECT ESTIMATE	NET BENEFIT		
	Year 1	0	129,801	129,801		
	Year 2	0	129,801	129,801		
	Year 3	0	129,801	129,801		
	Year 4	0	129,801	129,801		
	Year 5	0	129,801	129,801		
	Total	0	649,005	649,005		
	Total number of crediting years		5			
	Annual average over the crediting period			-	129,801	129,801
	The detailed SDGs calculation is demonstrated in the separate ER spreadsheet /11/ by the PD and validated by the validation team with respect to correctness of all parameters and their sources.					
Findings	CAR-10, CAR-11, CAR-12 and CAR-15 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.					
Conclusion	The assessment team confirms that: a) The selection of the equations of the applied methodology /01/ is appropriate.					

	b) The assumptions used by the project have been clearly referenced and listed in the PDD /10/. c) The data included in the PDD /10/ has been adopted from authentic sources based on appropriate assumptions. d) Appropriate values are reasonably used relating to the project activity. e) The baseline methodology has been correctly applied for the calculation of emission reductions. f) The calculations are traceable and the values can be replicated using the data provided in the PDD /10/.
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D.3.6. Monitoring of SDGs

Means of validation	The monitoring plan for the project activity is provided in Section B.7 of the PDD /10/, based on the approved monitoring methodology /01/ and SDG-Impact tool /12/. The monitoring plan is being correctly applied to the project activity and is in compliance with the requirements of the applied methodology /01/. Parameters available at the time of validation (ex-ante) and mentioned under section B.6.2 of the GS PDD /10/ are: <table> <tr> <td>Data/parameter ID</td><td>MECD 1</td></tr> <tr> <td>Data/parameter</td><td>$P_{b,i,j}$</td></tr> <tr> <td>Unit</td><td>tonnes/person/year</td></tr> <tr> <td>Description</td><td>Amount of baseline fuel i used in device j in the baseline</td></tr> <tr> <td>Source of data</td><td> Case 1: - Official government publications or statistics. Case 2: - See MECD 7 The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team. </td></tr> <tr> <td>Value(s) applied</td><td> For Case 1: - Firewood Consumption – 0.377 tonnes/person/year - Charcoal Consumption – 0.081 tonnes/person/year - LPG Consumption – 0.003 tonnes/person/year The validation team has checked the value from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ and found Ok. This is a government data and hence accepted by the Validation team. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team. </td></tr> <tr> <td>Choice of data or Measurement methods and procedures</td><td> For Case 1: Official government publications Source of data: Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)³² </td></tr> <tr> <td>Purpose of data</td><td> - Calculation of Baseline Emissions Factor - Estimation of Baseline Emissions </td></tr> <tr> <td>Additional comment</td><td>The baseline fuel consumption value will be fixed for the crediting period.</td></tr> </table> <table> <tr> <td>Data/parameter ID</td><td>MECD 2</td></tr> </table>	Data/parameter ID	MECD 1	Data/parameter	$P_{b,i,j}$	Unit	tonnes/person/year	Description	Amount of baseline fuel i used in device j in the baseline	Source of data	Case 1: - Official government publications or statistics. Case 2: - See MECD 7 The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.	Value(s) applied	For Case 1: - Firewood Consumption – 0.377 tonnes/person/year - Charcoal Consumption – 0.081 tonnes/person/year - LPG Consumption – 0.003 tonnes/person/year The validation team has checked the value from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ and found Ok. This is a government data and hence accepted by the Validation team. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.	Choice of data or Measurement methods and procedures	For Case 1: Official government publications Source of data: Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)³²	Purpose of data	- Calculation of Baseline Emissions Factor - Estimation of Baseline Emissions	Additional comment	The baseline fuel consumption value will be fixed for the crediting period.	Data/parameter ID	MECD 2
Data/parameter ID	MECD 1																				
Data/parameter	$P_{b,i,j}$																				
Unit	tonnes/person/year																				
Description	Amount of baseline fuel i used in device j in the baseline																				
Source of data	Case 1: - Official government publications or statistics. Case 2: - See MECD 7 The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.																				
Value(s) applied	For Case 1: - Firewood Consumption – 0.377 tonnes/person/year - Charcoal Consumption – 0.081 tonnes/person/year - LPG Consumption – 0.003 tonnes/person/year The validation team has checked the value from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ and found Ok. This is a government data and hence accepted by the Validation team. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.																				
Choice of data or Measurement methods and procedures	For Case 1: Official government publications Source of data: Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)³²																				
Purpose of data	- Calculation of Baseline Emissions Factor - Estimation of Baseline Emissions																				
Additional comment	The baseline fuel consumption value will be fixed for the crediting period.																				
Data/parameter ID	MECD 2																				

³² <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

	Data/parameter	NCV _{b,i}
	Unit	Terrajoules (TJ)/tonne of fuel
	Description	The net calorific value of the baseline fuel type i
	Source of data	IPCC default data /05/ The data source is IPCC defaults /05/. The validation team confirmed the value from IPCC defaults /05/ and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	NCV _{b,j} (wood) – 0.0156 TJ/tonne NCV _{b,j} (charcoal) – 0.0295 TJ/tonne NCV _{b,j} (LPG) - 0.0473 TJ/tonne The data source is IPCC defaults /05/. The validation team confirmed the value from IPCC defaults /05/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	As per the applied methodology /01/. Table 1.2 Default Net Calorific Values (NCVs) And Lower and Upper Limits of the 95% Confidence Intervals, Chapter 1: Introduction, Volume 2: Energy, 2006 IPCC Guidelines for National Greenhouse Gas Inventories ³³ /05/ The data source is IPCC defaults /05/. The validation team confirmed the value from IPCC defaults /05/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Purpose of data	• Calculation of Baseline Emissions Factor • Estimation of Baseline Emissions
	Additional comment	-
	Data/parameter ID	MECD 3
	Data/parameter	EF _{b,i,CO2}
	Unit	tCO ₂ /TJ
	Description	CO ₂ emission factor arising from the use of fuels in the baseline scenario
	Source of data	Firewood: MECD Methodology default Charcoal: MECD Methodology default Other fuels (i.e. LPG): IPCC default values The data source is for firewood and charcoal is MECD methodology defaults /01/ and for LPG is IPCC defaults /05/. The validation team confirmed the value from IPCC defaults /05/ and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	EF _{b,i} (wood,CO ₂) – 112 tCO ₂ /TJ EF _{b,i} (charcoal,CO ₂) – 165.22 tCO ₂ /TJ EF _{b,i} (LPG,CO ₂) – 63.10 tCO ₂ /TJ The data source is for firewood and charcoal is MECD methodology defaults /01/ and for LPG is IPCC defaults

³³ https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_1_Ch1_Introduction.pdf

		/05/. The validation team confirmed the value from IPCC defaults /05/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	As per the applied methodology /01/. - For firewood and charcoal fuel: Methodology default /01/ - For LPG: Table 2.5 default emission factors for stationary combustion in the residential and agriculture/forestry/fishing/fishing farms categories (kg of greenhouse gas per TJ on a Net Calorific Basis), Chapter 2: Stationary Combustion, Volume 2: Energy, 2006 IPCC Guidelines for National Greenhouse Gas Inventories³⁴ /05/
	Purpose of data	- Calculation of Baseline Emissions Factor - Estimation of Baseline Emissions
	Additional comment	-
	Data/parameter ID	MECD 4
	Data/parameter	EF _{b,i,non-CO2}
	Unit	tCO ₂ /TJ
	Description	Non-CO ₂ emission factor arising from the use of fuels in the baseline scenario
	Source of data	Firewood: Methodology default Charcoal: Methodology default Other fuels (i.e. LPG): IPCC default values The data source is for firewood and charcoal is MECD methodology defaults /01/ and for LPG is IPCC defaults /05/ and GWP /05/. The validation team confirmed the value for firewood and charcoal from MECD methodology defaults /01/ and for LPG from IPCC defaults /05/ and GWP /05/ and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	EF _{b,i (wood,non-CO2)} – 9.46 tCO ₂ /TJ (AR5 GWP) EF _{b,i (charcoal,non-CO2)} – 44.83 tCO ₂ /TJ (AR5 GWP) (includes charcoal production emissions) EF _{b,i (LPG,non-CO2)} – 0.17 tCO ₂ /TJ (AR5 GWP) The data source is for firewood and charcoal is MECD methodology defaults /01/ and for LPG is IPCC defaults /05/ and GWP /05/. The validation team confirmed the value for firewood and charcoal from MECD methodology defaults /01/ and for LPG from IPCC defaults /05/ and GWP /05/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	As per the applied methodology. - For Firewood and Charcoal: MECD Methodology default /01/ - For LPG: Table 2.5 default emission factors for stationary combustion in the residential and agriculture/forestry/fishing/fishing farms categories (kg of greenhouse gas per TJ on a Net Calorific

³⁴ https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf

	Basis), Chapter 2: Stationary Combustion, Volume 2: Energy, 2006 IPCC Guidelines for National Greenhouse Gas Inventories ³⁵ /05/
Purpose of data	Calculation of Baseline Emissions Factor/Baseline Emissions.
Additional comment	-
Data/parameter ID	MECD 5
Data/parameter	$\eta_{b,i,j}$
Unit	Fraction
Description	Energy efficiency of baseline device j with fuel i
Source of data	Methodology defaults: - Three-stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system, that is without either a grate or a chimney - Other conventional systems using woody biomass - Improved cookstoves Credible published literature: - Fossil fuel combusting system The data source for Three-stone fire, Other conventional systems, and Improved cookstoves is MECD methodology defaults /01/ and for Fossil fuel combusting systems, the source is Lather, R.S. (2021), Performance Analysis of an LPG Cooking Stove for Improvements and Future Usability Perspective, in Gupta, A., Mongia, H., Chandna, P., Sachdeva, G. (eds), Advances in IC Engines and Combustion Technology, NCICEC 2019, Lecture Notes in Mechanical Engineering, Springer, Singapore /26/. The validation team confirmed that the values derived from MECD methodology defaults /01/ and the cited Lather (2021) study /26/ are acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	- Three-stone fire or a conventional system for woody biomass lacking improved combustion air supply mechanism and flue gas ventilation system, that is without either a grate or a chimney: 10%. - Other conventional systems using woody biomass including traditional charcoal stove: 20% - Improved cookstoves: 30% - LPG Stove: 60.7% The data source for Three-stone fire, Other conventional systems, and Improved cookstoves is MECD methodology defaults /01/ and for Fossil fuel combusting systems, the source is Lather, R.S. (2021), Performance Analysis of an LPG Cooking Stove for Improvements and Future Usability Perspective, in Gupta, A., Mongia, H., Chandna, P., Sachdeva, G. (eds), Advances in IC Engines and Combustion Technology, NCICEC 2019, Lecture Notes in Mechanical Engineering, Springer, Singapore /26/. The validation team confirmed that the values derived from MECD methodology defaults /01/ and the cited Lather (2021) study /26/ are acceptable.

³⁵ https://www.ipcc-nggip.iges.or.jp/public/2006gl/pdf/2_Volume2/V2_2_Ch2_Stationary_Combustion.pdf

		The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	As per the applied methodology. Default value from applied methodology – MECD v1.2 for firewood and charcoal stoves • for three stone fire, • other conventional system using woody biomass • improved cookstove including charcoal stoves³⁶ Credible published literature for LPG stoves • Lather, R.S. (2021). Performance Analysis of an LPG Cooking Stove for Improvements and Future Usability Perspective. In: Gupta, A., Mongia, H., Chandna, P., Sachdeva, G. (eds) Advances in IC Engines and Combustion Technology. NCICEC 2019. Lecture Notes in Mechanical Engineering. Springer, Singapore³⁷
	Purpose of data	• Calculation of Baseline Emissions Factor • Estimation of Baseline Emissions
	Additional comment	-
	Data/parameter ID	MECD 6
	Data/parameter	Percentage of fuel_i
	Unit	%
	Description	Percentage of fuel type i in the baseline situation
	Source of data	Official government publications or statistics. The data source for Percentage of fuel type i in the baseline situation is TABLE 18: NUMBER AND PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY SOURCES FOR COOKING AND PLACE OF RESIDENCE, 2023 HECS, page 80, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/. The validation team confirmed that the values derived from TABLE 18: NUMBER AND PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY SOURCES FOR COOKING AND PLACE OF RESIDENCE, 2023 HECS, page 80, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ are acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	• Percentage of households using firewood in three-stone fire: 65.50% • Percentage of households using charcoal in charcoal stove:44.00% • Percentage of households using LPG in LPG stove: 24.60% The data source for Percentage of fuel type i in the baseline situation is TABLE 18: NUMBER AND PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY

³⁶ To claim conservative emission reductions the efficiency of charcoal stove has been assumed to be similar to improved stove

³⁷ https://doi.org/10.1007/978-981-15-5996-9_50

		SOURCES FOR COOKING AND PLACE OF RESIDENCE, 2023 HECS, page 80, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/. The validation team confirmed that the values derived from TABLE 18: NUMBER AND PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY SOURCES FOR COOKING AND PLACE OF RESIDENCE, 2023 HECS, page 80, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ are acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	Official government publications or statistics: TABLE 18: NUMBER AND PERCENTAGE DISTRIBUTION OF HOUSEHOLDS BY SOURCES FOR COOKING AND PLACE OF RESIDENCE, 2023 HECS, page 80, Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)³⁸ /26/
	Purpose of data	• Calculation of Baseline Emissions Factor • Estimation of Baseline Emissions
	Additional comment	The combined percentage of fuel types used by households exceeds 100% because some households use more than one type of fuel.
	Data/parameter ID	MECD 7
	Data/parameter	SC _b
	Unit	MJ/person/event
	Description	Specific energy consumption used in the baseline scenario
	Source of data	Determined from a mixed methods approach, combining a Controlled Cooking Test (CCT Italy)³⁹ with qualitative data of the cooking characteristics of the target population where the cooking device is used. The CCT performed in the baseline scenario shall consider only cooking task(s) that can be replaced by the project device (such as Electric Pressure Cooker), so that the results are comparable with the CCT of the project device. The test shall be designed so that it captures a cooking pattern representative of a whole year using a reasonable number of dishes expected to be most commonly cooked in the project device (such as EPC) over the course of the year. For example, this may involve carrying out multiple tests for different dishes or prescribing a representative cooking pattern during a single test. Sampling shall follow Section 4.4 “General requirements for sampling” of RECH V4.0 methodology.

³⁸ [https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-](https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf)

[2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf](https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf)

³⁹ The CCT protocol is available at <https://cleancooking.org/researchevidence-learning/standards-testing/protocols/>

	The following study may be used as a point of reference to compare the results of the CCT: Scott, N. & Leach, M. (2022). Comparing energy consumption and costs – from cooking across the MECS programme. MECS working paper⁴⁰. The following default values may be applied to projects with emission reductions less than 10,000 tCO₂/year per project or VPA: <table><tr><th colspan="2">Africa (MJ/person/event)</th><th colspan="2">Asia (MJ/person/event)</th></tr><tr><td>Charcoal</td><td>3.92</td><td>Firewood</td><td>2.83</td></tr><tr><td>LPG</td><td>0.96</td><td>Charcoal</td><td>2.02</td></tr><tr><td></td><td></td><td>LPG</td><td>0.69</td></tr></table> Note: Other values published by third-parties may be used as long as they are validated. Source of data for Charcoal & LPG: • Other values published by third parties - Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024⁴¹. Source of data for firewood: • Official government publications: Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS)⁴². The data source for specific energy consumption in the baseline scenario is Table 9, Median Energy Consumption for Traditional Fuels and Electric Devices by Continent (Single Dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions, Energies 2024 /26/ for LPG and charcoal. For firewood, the source is Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/. The validation team has confirmed that the values from these sources are acceptable. The validation team confirmed the value for LPG and charcoal from Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024 /26/ and for firewood from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.				Africa (MJ/person/event)		Asia (MJ/person/event)		Charcoal	3.92	Firewood	2.83	LPG	0.96	Charcoal	2.02			LPG	0.69
Africa (MJ/person/event)		Asia (MJ/person/event)																		
Charcoal	3.92	Firewood	2.83																	
LPG	0.96	Charcoal	2.02																	
		LPG	0.69																	
Value(s) applied	For Africa Region: Firewood: 4.03 MJ/person/cooking event																			

⁴⁰ <https://mecs.org.uk/wp-content/uploads/2023/03/Comparing-energy-consumption-and-costs-from-cooking-across-the-MECS-programme.pdf>

⁴¹ Scott, N.; Leach, M.; Clements, W. Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024, 17, 3318 (Link)

⁴² <https://www.nbs.go.tz/uploads/statistics/documents/en-1762972701-2023%20Household%20Energy%20Consumption%20Survey%20Report%20%20Mainland%20Tanzania.pdf>

		Charcoal: 3.83 MJ/person/cooking event LPG: 0.94 MJ/person/cooking event The data source for specific energy consumption in the baseline scenario is Table 9, Median Energy Consumption for Traditional Fuels and Electric Devices by Continent (Single Dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions, Energies 2024 /26/ for LPG and charcoal. For firewood, the source is Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/. The validation team has confirmed that the values from these sources are acceptable. The validation team confirmed the value for LPG and charcoal from Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024 /26/ and for firewood from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	Other values published by third-parties as suggested by the applied methodology /01/. The data source for specific energy consumption in the baseline scenario is Table 9, Median Energy Consumption for Traditional Fuels and Electric Devices by Continent (Single Dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions, Energies 2024 /26/ for LPG and charcoal. For firewood, the source is Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/. The validation team has confirmed that the values from these sources are acceptable. The validation team confirmed the value for LPG and charcoal from Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024 /26/ and for firewood from Table 4.1 (p.18) and Table 22 Appendix (p.83), Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania, September 2025, Tanzania National Bureau of Statistics (NBS) /26/ and found it acceptable.
	Purpose of data	• Calculation of Baseline Emissions Factor • Baseline Emissions
	Additional comment	The parameter is used to determine the energy ratio when the project device is an EPC. (Case 2).
	Data/parameter ID	MECD 8
	Data/parameter	SC _p
	Unit	MJ/person/event

	Description	Specific energy consumption used in the project scenario								
	Source of data	Determined from a mixed methods approach, combining a Controlled Cooking Test (CCT Italy)³ with qualitative data that takes account the cooking characteristics of the target population where the cooking device will be used. The test shall be designed so that it captures a cooking pattern representative of a whole year using a reasonable number of dishes expected to be most commonly cooked in the project device (such as EPC) over the course of the year. For example, this may involve carrying out multiple tests for different dishes, or prescribing a representative cooking pattern during a single test. Data logger measuring the electricity consumption of the project device (such as EPC) shall be in conformity with industry standards and manufacturer calibrated. Sampling shall follow Section 4.4 “General requirements for sampling” of RECH V4.0 methodology. The following study may be used as a point of reference to compare the results of the CCT: <u>Scott, N. & Leach, M. (2022). Comparing energy consumption and costs – from cooking across the MECS programme. MECS working paper.</u> The following default values may be applied to projects with emission reductions less than 10,000 tCO₂/year per project or VPA where the project device is an EPC: <table><tr><th colspan="2">Africa (MJ/person/event)</th><th colspan="2">Asia (MJ/person/event)</th></tr><tr><td>EPC</td><td>0.258</td><td>EPC</td><td>0.162</td></tr></table> Note: Other values published by third-parties may be used as long as they are validated. Source of data: Other values published by third parties - Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), for EPC in Africa, Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024⁴³ /26/. The data source for Specific energy consumption used in the project scenario is Table 9, Median Energy Consumption for Traditional Fuels and Electric Devices by Continent (Single Dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions, Energies 2024 /26/ for EPC. The validation team has confirmed that the values from these sources are acceptable. The validation team confirmed the value for EPC from Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024 /26/ and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.		Africa (MJ/person/event)		Asia (MJ/person/event)		EPC	0.258	EPC
Africa (MJ/person/event)		Asia (MJ/person/event)								
EPC	0.258	EPC	0.162							
	Value(s) applied	EPC: 0.26 (for Africa) The data source for Specific energy consumption used in the project scenario is Table 9, Median Energy Consumption for Traditional Fuels and Electric Devices by Continent (Single Dishes), Energy-Efficient Electric								

⁴³ Scott, N.; Leach, M.; Clements, W. Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024, 17, 3318 ([Link](#))

		Cooking and Sustainable Energy Transitions, Energies 2024 /26/ for EPC. The validation team has confirmed that the values from these sources are acceptable. The validation team confirmed the value for EPC from Table 9: Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions, Energies 2024 /26/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	Other values published by third parties as suggested by the applied methodology. The data source for Specific energy consumption used in the project scenario is Table 9, Median Energy Consumption for Traditional Fuels and Electric Devices by Continent (Single Dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions, Energies 2024 /26/ for EPC. The validation team has confirmed that the values from these sources are acceptable.
	Purpose of data	• Calculation of Baseline Emissions Factor • Baseline Emissions
	Additional comment	The parameter is used to determine the energy ratio when the project device corresponds to Case 2.
	Data/parameter ID	MECD 9
	Data / Parameter	$\eta_{p,d,y}$
	Unit	Percentage
	Description	Thermal efficiency of the project device
	Source of data	• Manufacturer specifications The data source for Thermal efficiency of the project devices is Efficiency certificates /20/ provided by the PD. The validation team confirmed the value for Thermal efficiency of the project devices from Efficiency certificates /20/ provided by the PD and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	• Single Fire:84.58% • Double Fire: 84.69% • Four Fire: 85.41% Refer additional comment section for details. The data source for Thermal efficiency of the project devices is Efficiency certificates /20/ provided by the PD. The validation team confirmed the value for Thermal efficiency of the project devices from Efficiency certificates /20/ provided by the PD and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of Data and Measurement methods	As per the applied methodology: • Manufacturer specification
	Purpose of data	• Calculation of Useful Energy • Baseline Emissions

	Additional comment	The thermal efficiency of the project device (i.e., induction stove) is fixed for the lifespan of the project device. As an induction stove is a modern electric cooking device, thermal efficiency is expected to be consistent over the technical life span of the product. Hence, an annual decrease of 0% is assumed for the determination of useful energy across the product life span. Induction stove technology operates on the principle of electromagnetic energy transfer directly to the cooking vessel, resulting in thermal efficiency that is inherently independent of the number of burners or pots used simultaneously. Accordingly, the thermal efficiency of an induction stove is a function of the technology itself rather than the configuration (single-pot, double-pot, or multi-pot). Minor variations observed in Water Boiling Test (WBT) results are attributable to external factors such as water temperature and ambient conditions, and do not reflect differences in underlying stove efficiency. Therefore, for the purpose of this Project Design Document and as a conservative and technology-consistent assumption, a uniform thermal efficiency value of 84.58% (lowest of all three) is applied across all induction stove configurations.
	Data/parameter ID	MECD 11
	Data/parameter	$EF_{el,y}$
	Unit	tCO _{2e} /MWh
	Description	The emissions factor of the project electricity system in year y
	Source of data	Latest harmonised grid emission factor dataset provided by UNFCCC: Harmonized IFI Default Grid Factors 2021 v3.2⁴⁴ The data source for emissions factor of the project electricity system is Harmonized IFI Default Grid Factors 2021 /02/. The validation team confirmed the value for emissions factor of the project electricity system from Harmonized IFI Default Grid Factors 2021 /02/ and found it acceptable. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	0.336 The data source for emissions factor of the project electricity system is Harmonized IFI Default Grid Factors 2021 /02/. The validation team confirmed the value for emissions factor of the project electricity system from Harmonized IFI Default Grid Factors 2021 /02/ and found it acceptable. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.

⁴⁴ <https://unfccc.int/climate-action/sectoral-engagement/ifi-harmonization-of-standards-for-ghg-accounting/ifi-twq-list-of-methodologies>

	Choice of data or Measurement methods and procedures	As per the applied methodology. /01/ Combined Margin Grid Emission Factor, gCO ₂ /kWh for Electricity Consumption from Harmonized IFI Default Grid Factors 2021 v3.2 from UNFCCC /02/ The emission factor value is fixed ex-ante for the crediting period, as the households are connected to the national grid and consuming electricity provided by the national interconnected system. The same was confirmed during site visit interview with PD, end user and stakeholders.
	Purpose of data	Calculation of Project Emissions Factor
	Additional comment	-
	Data/parameter ID	MECD 13
	Data/parameter	f _{NRB,i,y}
	Unit	Fraction of non-renewability
	Description	Non-renewability status of woody biomass fuel i during year y
	Source of data	Default value for Tanzania from CDM TOOL33: Default values for common parameters version 03.0 Link: https://cdm.unfccc.int/sunsetcms/storage/contents/stored-file-20250508183739485/MP97_EA01_TOOL33_v03.0.pdf f The data source is TOOL 33 /02/. The validation team checked the fNRB default values from the latest version of TOOL 33 /02/ and found them in accordance with the applied methodology /01/ and Rule Update: fNRB Application for GS4GG Certification, v.1.0 /01/. The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	0.51 The data source is TOOL 33 /02/. The validation team checked the fNRB default values from the latest version of TOOL 33 /02/ and found them in accordance with the applied methodology /01/ and Rule Update: fNRB Application for GS4GG Certification, v.1.0 /01/. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of Data Measurement Methods and Procedures	The default value of the fraction of non-renewable biomass for Tanzania (national level) is estimated using MoFUSS (modeling fuelwood saving scenario).
	Purpose of data	• Calculation of baseline emissions • Calculation of baseline emission factor
	Additional comment	Determined ex-ante and fixed for a given crediting period (as it is fixed ex-ante, then included fNRB _{b,y} in the “data and parameters fixed ex ante” section of the PDD).
	Data/parameter ID	MECD 15

	Data / Parameter	LE _y
	Unit	tCO _{2e} per year
	Description	Leakage in the project scenario in year y
	Source of data	Option 1: Apply a discount value of 0.95 to the emission reductions to approximate leakage emissions The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	Adjustment Factor - 0.95 The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of Data and Measurement Method	As per applied methodology /01/. Default discount factor applied.
	Purpose of data	Calculation of Leakage Emissions.
	Additional comment	-
	SDG - 1: No Poverty	
	Data/parameter	Proportion of population living in households with access to basic services
	Unit	Percentage
	Description	This indicator focuses on 'access to basic services' in the context of poverty eradication. Basic Services refer to public service provision systems that meet human basic needs, including drinking water, sanitation and hygiene, energy, mobility, waste collection, health care, education, and information technologies. Access to basic services implies that sufficient and affordable services are reliably available with adequate quality.
	Source of data	Distribution Database and/or Monitoring Survey The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	0 The value of the ex-ante parameter shall be collected from sample households either at the time of stove distribution or during monitoring surveys. This relates to access to basic services, such as any existing operational electric stove in the baseline scenario, as confirmed during the site-visit interview with the PD. The validation team has accepted this approach. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	The data will be collected from sample households either at the time of distribution of stoves or during monitoring surveys regarding they have access to basic service such as any existing operational electric stove in the baseline scenario.
	Purpose of data	SDG 1 Calculation
	Additional Comment	In the baseline scenario, no beneficiary household has access to an electric stove.
	SDG 3: Good Health and Well Being	

Data/parameter	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions
Unit	Percentage
Description	Indoor Air Quality in the households in the baseline scenario during a cooking event (Particulate Matter-PM2.5 and Carbon monoxide - CO)
Source of data	Distribution database and / or Monitoring survey The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	0 The value of the ex-ante parameter shall be collected from sample households either at the time of stove distribution or during monitoring surveys. This relates to any reduction in indoor air quality (PM2.5 & carbon monoxide (CO) concentration) in baseline scenario, as confirmed during the site-visit interview with the PD. The validation team has accepted this approach. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Choice of data or Measurement methods and procedures	The data will be collected from sample household either at the time of distribution of stoves or during monitoring survey regarding any reduction in indoor air quality (PM2.5 & carbon monoxide (CO) concentration) in baseline scenario
Purpose of data	SDG 3 Calculation
Additional Comment	Transparent data analysis and reporting. In the baseline scenario, no households observe any reductions in PM2.5 or carbon monoxide (CO) concentrations due to the absence of electric stoves.
SDG - 4: Quality Education	
Data/parameter	Number of employees provided skill development training
Unit	Number
Description	Refers to the number of employees (full-time, part-time, or temporary), by gender, who received training services of any type via a project during the reporting period.
Source of data	Training Records The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	0 The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Choice of data or Measurement methods and procedures	-
Purpose of data	To estimate SDG 4 impact
Additional Comment	No employees received relevant skill development training in the baseline scenario i.e. before the implementation of the project activity.

SDG - 5: Gender Equality

Data/parameter	Average time saving associated with cooking time and fuel collection
Unit	Hours saved per household per year
Description	<i>"This indicator is defined as the time spent in a day or week on unpaid domestic and care work by men and women. Unpaid domestic and care work refers to activities related to the provision of services for own final use by household members, or by family members living in other households. These activities are listed in ICATUS 2016 under the major divisions "3. Unpaid domestic services for household and family members" and "4. Unpaid caregiving services for household and family members".</i> Unpaid domestic and care work refers to activities including food preparation, dishwashing, cleaning and upkeep of the dwelling, laundry, ironing, gardening, caring for pets, shopping, installation, servicing, and repair of personal and household goods, childcare, and care of the sick, elderly or disabled household and family members, among others."
Source of data	Distribution database and / or Monitoring survey The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	0 The value of the ex-ante parameter shall be collected from sample households either at the time of stove distribution or during monitoring surveys. This relates to average time saved on travelling, collecting, and preparing firewood for cooking in baseline scenario, as confirmed during the site-visit interview with the PD. The validation team has accepted this approach. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Choice of data or Measurement methods and procedures	The data will be collected from sample household either at the time of distribution of stoves or during monitoring surveys regarding average time saved on travelling, collecting, and preparing firewood for cooking in baseline scenario. "Data presented for this indicator are expressed as a time spent in a year. The distribution database and / or monitoring survey will collect the amount of time spent travelling to the forest, wood collection, and preparation per week.
Purpose of data	To estimate SDG 5 impact
Additional comment	As this firewood collection is a regular task, household spent 0.9 hours (~55 minutes) per day in firewood collection ⁴⁵ in Tanzania /26/. There is no time saving on travelling, collecting, and preparing woody biomass for cooking. We have not accounted for time spent on cooking in baseline scenario.

SDG - 7: Affordable and Clean Energy

⁴⁵ Clean and Improved Cooking in Sub-Saharan Africa, World bank Group([Link](#))

Data / Parameter	Number of beneficiaries: Households
Unit	Number
Description	Refers to the number of unique households that were provided access to clean fuels and technologies for domestic cooking, heating, and lighting they were unable to access before project activity. For example, the total number of households' project provided access to Safe water, biogas digesters, solar home systems, etc.
Source of data	Distribution database The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	0 The value of the ex-ante parameter shall be collected at the time of stove distribution or during monitoring surveys. This relates to the beneficiary household does not have any existing operational electric stove (induction stove or electric pressure cooker) in baseline scenario, as confirmed during the site-visit interview with the PD. The validation team has accepted this approach. The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Choice of data Measurement methods and procedures	At the time of project stove distribution, it will be confirmed that the beneficiary household does not have any existing operational electric stove (induction stove or electric pressure cooker).
Purpose of data	To estimate SDG 7 impact
Additional comment	In the baseline scenario, no households have access to electric cooking.

SDG - 8: Decent Work and Economic Growth

Data/parameter	Total number of jobs
Unit	Number
Description	Refers to the total jobs generated before the implementation of the project
Source of data	Baseline activity The source of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	0 The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Choice of data or Measurement methods and procedures	Measured through record-keeping and contracts between the employee and employer.
Purpose of data	To estimate the SDG 8 impact
Additional comment	In the baseline scenario, no jobs are created in the absence of project activity.

SDG - 15: Life on Land

	Data/parameter	Total non-renewable wood fuel saved
	Unit	Tonnes/year
	Description	Refers to the total amount of non-renewable fuel consumed in the baseline scenario
	Source of data	MECD Methodology (default wood consumption per capita per year) Distribution database (average household size) CDM Tool 33 (fraction of non-renewable biomass) Number of beneficiary households The value of ex-ante parameter is in compliance with the applied methodology /01/ and gs4gg requirement /01/ hence accepted to the validation team.
	Value(s) applied	0 The value of ex-ante parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Choice of data or Measurement methods and procedures	In line with the selected SDG parameter
	Purpose of data	SDG 15 impact calculation
	Additional Comment	No non-renewable wood fuel savings occur in the baseline scenario without the electric cooking project activity.
	Parameters that will be monitored (ex-post) are:	
	Data/parameter ID	MECD 10
	Data / Parameter	$EG_{p,d,y}$
	Unit	MWh
	Description	The amount of energy used in the project scenario by device d in year y (MWh)
	Source of data	Direct, continuous measurement. Remote monitoring methods may be applied. The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	Induction Stove: 0.64 kWh/person/day Electric Pressure Cooker: 0.26 MJ/person/cooking event or 0.072 kWh/person/cooking event (0.29kWh/person/day) These values are an estimated and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Measurement methods and procedures	Energy consumption will be directly measured using an inbuilt energy meter in each distributed electric stove (induction stove & electric pressure cooker). The data captured by the energy meter will be transmitted to the cloud via a GSM-enabled IoT device /23/. The validation team has checked the IoT-based monitoring system /23/ and found in line with applied methodology /01/ and GS4GG requirements /01/.
	Monitoring frequency	Continuous, aggregated monthly or so

		The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.															
	QA/QC procedures	IoT devices is in-built in each electric stove (induction stove & electric pressure cooker) to measure the electricity consumption of the electric cooking appliance(s). The IoT device will be in conformity with industry standard. The validation team has checked the IoT-based monitoring system /23/ and found in line with applied methodology /01/ and GS4GG requirements /01/. Calibration Requirement: Manufacturing Process: PCB fabrication, component loading, and soldering are performed by a leading international manufacturer utilizing advanced, state-of-the-art automated equipment. After production, each individual board undergoes automated optical inspection (AOI), guaranteeing full compliance across the entire batch. This manufacturing process ensures the long-term stability and performance repeatability of the final product. Consequently, factory-level calibration is not required. Field Operation: The instrument performs no analog signal processing, such as amplification or filtering. Input values are immediately digitized and processed exclusively as numerical data. The sensing section consists of highly stable solid-state components that are not subject to drift due to aging or environmental factors. The subsequent measurement stage (the Analog-to-Digital Converter) utilizes a highly stable, high-precision internal voltage reference generated within the microcontroller. Beyond this stage, all processing is entirely digital. Consequently, no periodic calibration is required throughout the lifetime of the instrument. <table><tr><th>Stove Technology</th><th>Reference Value</th><th>Ex-ante value applied</th><th>Comparison</th></tr><tr><td>Induction Stove</td><td>1 kWh per person per day</td><td>0.64 kWh/person/day</td><td>Less than reference value</td></tr><tr><td>Electric Pressure Cooker</td><td>1 kWh per person per day</td><td>0.29 kWh/person/day</td><td>Less than reference value</td></tr></table> Refer "Energy Requirements for Cooking" tab in ER Sheet for calculation. The validation team has checked the IoT-based monitoring system Declaration of stove meter calibration /22/ and found in line with applied methodology /01/ and GS4GG requirements /01/. The declaration /22/ is accepted considering the declaration is provided from the manufacturer Clean Cooking Technologies S.R.L. (CCT Italy).				Stove Technology	Reference Value	Ex-ante value applied	Comparison	Induction Stove	1 kWh per person per day	0.64 kWh/person/day	Less than reference value	Electric Pressure Cooker	1 kWh per person per day	0.29 kWh/person/day	Less than reference value
Stove Technology	Reference Value	Ex-ante value applied	Comparison														
Induction Stove	1 kWh per person per day	0.64 kWh/person/day	Less than reference value														
Electric Pressure Cooker	1 kWh per person per day	0.29 kWh/person/day	Less than reference value														
	Purpose of data	• Calculation of Useful Energy • Calculation of Baseline Emissions • Calculation of Project Emissions															
	Additional comment	-															

	Data/parameter ID	MECD 12
	Data/parameter	$TDL_{j,y}$
	Unit	Fraction
	Description	Average technical transmission and distribution losses for providing electricity to source j in year y
	Source of data	Determined as per the CDM tool TOOL05, paragraph 7.2 (Data/parameters monitored, table 3) The data source for Average technical transmission and distribution losses for providing electricity to source is world bank data /26/. The validation team confirmed that the value is determined as per the world bank data /26/ are acceptable. The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	0.17 The data source for Average technical transmission and distribution losses for providing electricity to source is world bank data /26/. The validation team confirmed that the value is determined as per the world bank data /26/ are acceptable. The value of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Measurement methods and procedures	The average technical transmission and distribution losses for providing electricity to households has been taken from the World Bank electric power transmission and distribution losses (% of output) most recent data available for Tanzania (2023) ⁴⁶ .
	Monitoring frequency	Once per monitoring period The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
	QA/QC procedures	Using credible data for the electricity system. The value represents annual average value based on the most recent data available within Tanzania.
	Purpose of data	Calculation of Project Emissions
	Additional comment	As the households are connected to the national grid and consuming electricity supplied by the national interconnected system.
	SDG 1: No Poverty	
	Data / Parameter	Proportion of population living in households with access to basic services
	Unit	Percentage
	Description	This indicator focuses on 'access to basic services' in the context of poverty eradication. Basic Services refer to public service provision systems that meet human basic needs, including drinking water, sanitation and hygiene, energy, mobility, waste collection, health care, education, and information

⁴⁶ <https://data.worldbank.org/indicator/EG.ELC.LOSS.ZS>

		technologies. Access to basic services implies that sufficient and affordable services are reliably available with adequate quality.
	Source of data	• Distribution database /24/ • IoT /23/ and • Monitoring Survey The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	95 The value is estimate one and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Measurement methods and procedures	Continuous monitoring using IoT device. The usage of distributed electric stoves (induction stove & electric pressure cooker) will be monitored using IoT-enabled devices installed in each stove. These devices will track stove operation and usage frequency to estimate the proportion of households effectively accessing clean cooking services under the project. The usage data collected by the IoT device will be verified through physical usage surveys. Usage surveys will be part of monitoring surveys. The validation team has checked the IoT-based monitoring system /23/ and found in line with applied methodology /01/ and GS4GG requirements /01/.
	Monitoring frequency	Annual The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
	QA/QC procedures	Transparent data collection, analysis and reporting
	Purpose of data	• Calculation of emissions reductions • SDG 1 Calculation
	Additional comment	-
	SDG 3: Good Health and Well-being	
	Data / Parameter	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions
	Unit	Percentage
	Description	Indoor Air Quality in the households in the baseline scenario during a cooking event (Particulate Matter-PM2.5 and Carbon monoxide - CO)
	Source of data	Monitoring Survey The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	100 These values are an estimate based and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Measurement methods and procedures	As per the Guidance, calculation method specified in the SDG Tool:

		<i>“For Tier 3 or higher tier project stoves, this indicator could also be monitored along with the monitoring survey prescribed by the methodology. This means amongst a random sample meeting the CDM guidelines for surveys and sampling. The information can be obtained from end users asking questions for example - do you perceive less incidence of eye problems and or respiratory illness after installation biodigester. The question should be asked to primary cook of the household.”</i> The project stove (induction stove & electric pressure cooker) is a Tier 3 or a higher tier stove. Hence the information will be collected from sample households through monitoring surveys. Relevant question like “do you perceive less incidence of eye problems and or respiratory illness after installation of electric stove” will be included in the monitoring survey and should be asked to primary cook only. The justification provided by the PD is acceptable to the validation team.
	Monitoring frequency	Annual The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
	QA/QC procedure	Transparent data collection, analysis and reporting
	Purpose of data	To estimate SDG 3 impact
	Additional comment	-
	SDG 4: Quality Education	
	Data / Parameter	Number of employees provided skill development training
	Unit	Number
	Description	Referring to the number of employees (full-time, part-time, or temporary), by gender, who received training services of any type via a project during the reporting period.
	Source of data	Project activity – Training Records The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	100 These values are an estimate based and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Measurement methods and procedures	Training count provided in the reporting period
	Monitoring frequency	Annual The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
	QA/QC procedures	Transparent data collection, analysis and reporting
	Purpose of data	To estimate SDG 4 impact
	Additional comment	-
	SDG 5: Gender Equality	

	Data / Parameter	Average time saving associated with cooking time and fuel collection
	Unit	Hours saved / household / year
	Description	<i>"This indicator is defined as the time spent in a day or week on unpaid domestic and care work by men and women. Unpaid domestic and care work refers to activities related to the provision of services for own final use by household members, or by family members living in other households. These activities are listed in ICATUS 2016 under the major divisions "3. Unpaid domestic services for household and family members" and "4. Unpaid caregiving services for household and family members".</i> Unpaid domestic and care work refers to activities including food preparation, dishwashing, cleaning and upkeep of the dwelling, laundry, ironing, gardening, caring for pets, shopping, installation, servicing, and repair of personal and household goods, childcare, and care of the sick, elderly or disabled household and family members, among others."
	Source of data	Monitoring Survey The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Value(s) applied	329 These values are an estimate based and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
	Measurement methods and procedures	The Distribution database and / or Monitoring Survey will gather information on the time spent per week in hours on unpaid domestic work activities such as traveling to the forest (round trip), firewood collection, and preparation for cooking, both in the baseline and in the project scenario. Please note that this time does not include time spent on cooking per day. Subsequently, the time saved in the project scenario will be estimated by comparing the time spent in the baseline scenario with that in the project scenario. In Tanzania, households spend an average of 0.9 hours per day collecting firewood, a task primarily carried out by women and children⁴⁷. The time saved per day is multiplied by no. of days i.e., 365 to estimate time saved per household per year.
	Monitoring frequency	Annual The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
	QA/QC procedures	Transparent data collection, analysis and reporting
	Purpose of data	To estimate SDG 5 impact
	Additional comment	It is anticipated that the implementation of the project stove will result in a 100% reduction in this time spent on traveling, firewood collection, and preparation for cooking. Please note that this time does not include time spent on cooking per day.

⁴⁷ Clean and Improved Cooking in Sub-Saharan Africa, World bank Group([Link](#))

SDG 7: Affordable and Clean Energy

Data / Parameter	Number of beneficiaries: Households
Unit	Number
Description	Refers to the number of unique households that were provided with access to clean fuels and technologies for domestic cooking, heating, and lighting they were unable to access prior to project activity. For example, total number of household's project provided access to Safe water, biogas digesters, solar home systems, etc.
Source of data	Project activity - Distribution database to determine the total number of project beneficiaries - households. The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	150,000/- These values are an estimate based and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Measurement methods and procedures	During the distribution of stoves to each beneficiary household, details such as beneficiary name, address, GPS coordinates, telephone number, etc., will be recorded in the distribution database. The number of unique entries in the distribution database will represent the number of project beneficiaries, i.e., households.
Monitoring frequency	Continuous The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
QA/QC procedures	Transparent data collection, analysis and reporting
Purpose of data	To estimate SDG 1 &7 impact
Additional comment	-

SDG 8: Decent Work and Economic Growth

Data / Parameter	Total number of jobs
Unit	Number
Description	Refers to the total jobs generated because of the project
Source of data	Project activity: Contract Agreements / Employment Records The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	100 These values are an estimate based and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Measurement methods and procedures	Each headcount will be monitored through record-keeping and contractual agreements between the employee and employer. It's worth noting that employment opportunities can emerge at office, factory,

	and field levels through the Project Developer, Local Partner as part of the carbon project.
Monitoring frequency	Annual The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
QA/QC procedures	Transparent data collection, analysis and reporting
Purpose of data	To estimate SDG 8 impact
Additional comment	-
SDG 15: Life on Land	
Data/parameter	Total non-renewable wood fuel saved
Unit	Tonnes/year
Description	Refers to the total amount of non-renewable fuel savings due to displacement or energy efficiency improvements of baseline technology
Source of data	Monitoring surveys The source of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Value(s) applied	129,801 These values are an estimate based and will be verified during verification. The value estimate of ex-post parameter is in compliance with the applied methodology /01/ and GS4GG requirement /01/ hence accepted to the validation team.
Measurement methods and procedures	Calculated based on the firewood save per household and number of households received electric cookstove
Monitoring frequency	Annual The Monitoring frequency is as per the applied methodology /01/. Hence acceptable.
QA/QC procedures	Transparent data collection, analysis and reporting
Purpose of data	To estimate SDG 15 impact
Additional Comment	-
It can be concluded that the monitoring plan has provisions for the real measurement of the parameter to reach to the achieved emission reductions. Leakage: From the two options given in section 3.11 of RECH V4.0 /01/, the project applies option 1 and uses a default adjustment factor of 0.95. The Validation Team confirms that the applied leakage is consistent with Section 3.11 of RECH V4.0 /01/. The project applies Option 1 and uses the default adjustment factor of 0.95. <u>Sampling Plan:</u> The sampling plan for the monitored parameters follows the Standard for - Sampling and surveys for CDM projects activities and programme of activities" ver 09.0 /02/. Guideline & Standard: The sampling will use the following guidelines and standards along with the applied methodology requirements: • Guideline for Sampling and surveys for CDM project activities and programmes of activities, version 04.0 /02/ • Standard for Sampling and surveys for CDM project activities and programmes of activities, version 09.0 /02/	

Objectives and reliability requirements

The objective of monitoring is to determine a reliable estimated value of the mean parameters needed to calculate emission reductions, mentioned in the monitoring parameter section: usage rate ($U_{p,y}$).

For usage rate ($U_{p,y}$) PD will ensure that 95% confidence interval and a +/-10% margin of error requirement shall be achieved for the sampled parameters (surveys)

The Usage Survey will be part of the monitoring survey that will cover questions related to stove usage along with other questions that will help in estimating SDGs achieved by the project.

Validation team has checked the monitoring arrangement and found in-compliance with the applied methodology /01/.

Target Population Representativeness

The target population will be the beneficiary households that receive the project stoves. The beneficiary's information will be recorded in the distribution database and will be used for the purpose of sampling.

Sampling methodSampling for Usage rate ($U_{p,y}$):

The usage of distributed electric stoves (induction stove & electric pressure cooker) will be monitored using IoT-enabled devices installed in each stove. These devices will track stove operation and usage frequency to estimate the proportion of households effectively accessing clean cooking services under the project. The usage data collected by the IoT device will be further verified through physical usage surveys in sample households. Usage surveys will be part of monitoring surveys.

The objective of conducting a usage survey is to estimate the weighted average usage rate of stoves distributed in different years.

Project Developer, in collaboration with the Local Partner, will do the sampling for the usage survey. Project Developer will also prepare the questionnaire for the usage survey, which will be administered by the Local Partner. Project Developer, along with the Local Partner, will conduct a training session for all the enumerators, if required, so they have sufficient knowledge before conducting the usage survey.

The usage survey will be conducted using a digital tool preferably. Local Partner will ensure that all participating enumerators possess smartphones/tablets and have a comprehensive understanding of the digital tool. If enumerators lack familiarity with the digital tool, the Project Developer, along with the Local Partner, must conduct a training session to ensure proficiency of the enumerator with the digital tool.

Regarding the sampling exercise for the usage survey, the distribution database will be used for selecting a random sample of households for the usage survey. All the distributed stoves will be grouped by their age in the distribution database. The age of each stove, meaning the number of years it has been used from the date of its distribution under project.

Once the stoves have been stratified based on age categories, required random samples will be selected from each age category either using the random function in Microsoft Excel or using any other online random number generator.

Sample size for Usage Rate:

According to the TPDDTEC version 4.0 methodology /01/, each year the minimum total sample size is 100 for group sizes larger than 1,000, with at least 30 samples for the stoves of each age being credited. The sample size will satisfy the 95% confidence interval and a +/-10% margin of error requirement.

Also, as per the Cookstove Usage Rate Guideline /01/, min 30 samples will be selected from each age category for the usage survey. For example, when the usage survey for project stoves is credited from year 1 to 5 must include 30

representative samples from each age category, which means a total of 150 samples (5 years x 30 minimum samples).

Once the usage surveys are completed, the Local Partner will be responsible for compiling and reviewing the data and deriving the results. Upon receipt of the usage survey data, the Project Developer will review it, coordinate with the Local Partner for any clarifications, conduct a statistical analysis, finalize the results, and present them to other project team members for feedback and comments, and later submit to the VVB and GS for verification.

The usage survey will follow the applied methodology and “Good Practice Approach of Gold Standard Usage Rate Guidelines (ver 2.0)”.

Validation team has checked the Sampling method and found in-compliance with the applied methodology /01/.

Project Fuel Consumption

To calculate project emissions, the PD shall measure $EG_{p,d,y}$ (The amount of energy used in the project scenario by device d in year y (MWh)).

The project fuel (electricity) consumption shall be determined through direct measurement for all end-users. The electric stove (induction stove & electric pressure cooker) are IoT equipped, which allows for real-time measurement of electricity consumed by each device. The validation team has checked the IoT-based monitoring system /23/ and found in line with applied methodology /01/ and GS4GG requirements /01/.

Management Plan, Operational Framework, Role, Responsibilities, and Institutional Arrangements:

The project will be implemented according to the following plan for measuring, recording/collecting, data storage /archiving, and reporting on monitored data and parameters. Roles and Responsibilities of entity's involved in the project and institutional arrangements are discussed in table below:

Entity	Roles and responsibilities
Project Proponent / Project Developer / Stove manufacturer – CCT Italy	1) The PP is responsible for overall management of the project, including appointing all personnel / groups of personnel involved in the project development and implementation. 2) Providing guidance for all field activities related to carbon, including the planning and management of surveys and field tests. 3) Coordinating with the VVB, Gold Standard, and other third-party rating agencies. 4) Coordinating with project funders and offtake buyers. 5) The information collected will be stored in the distribution database and will serve as the project database for ex-post project sampling and monitoring purposes. Also, this shall serve to avoid any double counting and duplicity of data. 6) Design, manufacturing and supply stove units according to specified standards and project plans. 7) Confirm / Certify technical parameters and efficiency information at the time of supply. 8) Determine the sample size as per sampling plan and identify the samples to be monitored. 9) Use the data collected/archived for emissions reduction calculations. 10) Any other roles and responsibilities as required by the evolving needs of the project 11) Ownership and management of the carbon project and carbon credits
Local Project Operator – CCT Tanzania	1) In country implementation and regulatory compliance 2) Coordination with national and local authorities

		3) Oversight of stove distribution, monitoring, and after sales support 4) Interface between CCT Italy and local partners
	Local Implementation Partners/ Distribution Partners – CEFA & other local partners	1) Community engagement and beneficiary identification 2) The distribution of the stoves will be managed by local partners. 3) The local partner will communicate to the project beneficiaries during distribution that PP retains exclusive and unconditional rights to the carbon credit generated by use of project stove. 4) The local partner will maintain and update the stove distribution database continuously. 5) The PP will coordinate ex-post monitoring activities as follows: a) Implement the monitoring plan and QA/QC measures, as applicable. b) Ex-post monitoring - the usage data will be collected using survey questionnaires designed by experts. The surveys will be carried out by local partner teams experienced / trained to conduct such surveys. c) KPTs & CCT, if required, shall be conducted using calibrated/new equipment as available, by experienced/trained personnel. d) Ensuring that staff responsible for monitoring and reporting have received adequate training, as applicable. e) The monitoring results and statistical robustness will be reviewed internally and approved by competent staff. 6) Provide support and assistance to the PP in order to accomplish the project's objectives. 7) Execute agreements with beneficiary households, including the transfer of rights of carbon credit generated from using project stove, to the PP. 8) Maintain organized record-keeping systems for compiling, calculating, and storing distribution data, following PP directives. 9) Provide post-sales maintenance services to beneficiaries based on agreed terms and conditions. 10) Perform any other responsibilities assigned by the Project Proponent 11) Any other roles and responsibilities as required by the evolving needs of the project
The aforesaid plan shall ensure that the project is managed and operated in a standard manner. The same was confirmed during site visit interview with PD. Beneficiary Agreement Project Developer along with Local Partner will draft a beneficiary agreement (digital format) containing the following details: • Type of stove used in baseline • Type of fuel used in baseline • Beneficiary information (Name, address, GPS coordinates, phone number, etc.) • Induction stove & electric pressure cooker particulars (unique serial number of stoves, date of distribution, etc.) • Name and phone number of distribution staff • Information regarding the transfer of carbon credit ownership • Signatures of the beneficiary and distribution staff The same has been checked from sample beneficiary agreement /08/ and found Ok. Distribution Database		

	The household data from the beneficiary agreements will be transferred into one centralized customer database ("The Distribution database") containing all the necessary information collected through the beneficiary agreement and required for sampling. Data Archiving All the project data will be archived in electronic format, and, where possible, in hard copies for at least 2 years after the end date of the crediting period of the project. Validation team has checked the sampling plan and found OK.
Findings	CAR-09 and CAR-15 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
Conclusion	The assessment team confirms that the monitoring plan: a) Is in compliance with the requirements stated in the applied approved monitoring methodology /01/. b) It is feasible and can be implemented in the case of the project activity. c) Can be implemented by the project participant.

D.4. Start date, crediting period type and duration

Means of validation	The start date of the project is 10/03/2026 i.e. when the first stove was distributed and first End user agreement was signed /08/. Validation team has found the mentioned start date correct based on the PD interviews and End user agreement /08/. PD has chosen a renewable crediting period of 5 years which is renewable two times. The crediting period start date of the project activity 10/03/2026 (i.e. when the first stove was distributed and first End user agreement was signed /08/) which is found acceptable.
Findings	No finding raised.
Conclusion	Validation team confirm that start date and crediting period start date have been chosen correctly according to the GS4GG requirements /01/. Also, the chosen crediting period is as per the GS4GG requirements /01/.

D.5. Local stakeholder consultation

Means of validation	Stakeholder consultation meeting was conducted on 09/01/2026 in Azura Event Hall, Mlalakuwa, Kawe, Dar es Salaam, Tanzania. All the relevant stakeholders were invited. They were from different local and regional organizations, NGOs, local community/beneficiaries, policymakers, and universities. Different methods were chosen for invitation. The method for invitations was Email invite, physical invitation, phone calls, public notice etc. The invitations were sent to all stakeholders regardless of gender. The validation team confirms that the PD invited all relevant groups, including women and indigenous peoples, in line with GS4GG Stakeholder Consultation and Engagement Requirements /01/. This has been verified from the LSC report /16/, invitations /16/, LSC invitation tracking sheet /16/, and LSC participants list /16/ and further confirmed during site visit interviews with the PD and stakeholders. The stakeholder consultation meeting initially set for 11/12/2025 was postponed due to instability in Tanzania following the 29/10/2025 national elections. The post-election period saw curfews, service disruptions, and restricted mobility, creating an unpredictable security environment. With anticipated unrest around 09/12/2025, CEFA determined that programmatic activities could not be safely conducted and rescheduled the meeting to 09/01/2026, notifying stakeholders accordingly. Validation team confirm that invitation was given 30 days before LSC meeting (dated 07/11/2025 for old meeting and 01/12/2025 for new meeting), hence sufficient time was given to stakeholders. The meeting was open for everyone concerning about the project activity. The meeting was attended by both males and females. Stakeholders were provided an alternative of providing their feedback and comments via email. A designated email addressed, and phone number was shared with the stakeholder. There were no negative comments received for the project activity during the local stakeholder consultation process.
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	Validation team has checked the supportive document i.e. Minutes of LSC meeting, invitations supportive, Attendance sheet, Evaluation forms, photos etc. /16/ to confirm the LSC and found OK. Project is regular and has done 2 consultations i.e. LSC physical meeting along with physical meeting for SFR. Stakeholder Feedback Round (SFR) was conducted from 10/01/2026 to 09/02/2026 As discussed with PD, no comments have been received during SFR. Validation team has verified the LSC and SFR process from the interviews/site visit, LSC documents /16/, SCR /16/, SFR supportive /17/ and found in compliance with GS requirements.
Findings	CAR-16 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
Conclusion	The interview with the stakeholder was undertaken and it can be confirmed that the project proponent takes into account the feedback of local people and no negative comments were received for the project activity.

D.6. Safeguarding Principles Assessment

PD has done the safeguarding principles assessment analysis and presented assessment in the GS PDD /10/. The assessment has been performed in accordance to requirements prescribed in the section 3.2 of GS4GG Principles & Requirements, Version 2.1 /01/ & Safeguarding Principles & Requirements, Version 2.1 /01/.

Validation team has carried out the project site audit to cross check the safeguarding principle assessment conducted by the PP. VVB has also reviewed the initial GS local stakeholder consultation report and GS4GG PDD /10/ and found that PD has assessed all the required critical safeguarding principle of United Nations in project activity. It has been found that the project activity fulfils all the principles like Human Rights, Labour standards, environment protection, and anti-corruption.

Validation team has checked each principle under Appendix 1 of the GS-PDD /10/ and found the assessment correct and acceptable. The same is presented below:

ASSESSMENT QUESTIONS		
1. Has the project developer fully evaluated each of the safeguarding principles both in Appendix 1 of the PDD and in the summary table for the parameters which are a part of the monitoring plan?		☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	Sectoral expertise and interviews	
Justification of the MOV	The justification provided by PD was found adequate based on the sectoral expertise of the validation team. Further PD representatives/Employees related to maintenance, sales, training, and customer relationship/Stakeholders were interviewed to confirm the same. The project developer has assessed each of the safeguarding principles delineated in Appendix 1 of the PDD /10/, as well as in the summary table corresponding to the parameters integral to the monitoring plan. This comprehensive evaluation, meticulously substantiated by VVB through interviews with the project developer and other personnel, was further corroborated by thorough cross-checking of GS4GG documents /01/.	
2. Does the project comply with the requirements of <u>Safeguarding principles and requirements</u> ?		☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	Sectoral expertise and interviews	
Justification of the MOV	The justification provided by PP was found adequate based on the sectoral expertise of the validation team. Further PD representatives/Employees related to maintenance, sales, training, and customer relationship/Stakeholders were interviewed to confirm the same.	
3. Does the project demonstrate fulfilment of requirements under Principle 1: Human Rights?		☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	Stakeholder interviews, Employee interviews and supportive documents i.e. employment details /27/, training records /28/,	

Justification of the MOV Justify how the used MoV was appropriate for the aspect validated	The Clean Cooking (eCooking) Project in Tanzania incorporates a human rights-based approach by integrating international human rights principles into its design, implementation, and monitoring, with a particular focus on health, gender equality, nondiscrimination, participation, and inclusion. Human rights analysis and alignment with international human rights standards The project design is informed by well-established human rights concerns recognized by international human rights mechanisms, particularly the impacts of household air pollution on the right to health, and the disproportionate burden of traditional cooking practices on women and children. These issues are consistently highlighted in UN human rights treaty body recommendations, Universal Periodic Review outcomes, and Special Procedures related to health, women's rights, and environmental health. By directly addressing household air pollution through clean electric cooking solutions, the project responds to these recognized human rights risks and contributes to their mitigation in practice. Supporting the State's obligation to respect, protect, and fulfil human rights The project supports the Government of Tanzania in fulfilling its obligations under international human rights law and national policy frameworks by improving access to clean, safe, and modern energy for cooking. By reducing reliance on biomass fuels, the project advances the realization of the rights to health, a clean environment, gender equality, and an adequate standard of living. Project activities are implemented in compliance with applicable national laws and standards, and where international human rights standards provide a higher level of protection, the project design is consistent with those standards. In doing so, the project complements national efforts to reduce health burdens, environmental degradation, and gender inequality associated with traditional cooking practices. Nondiscrimination, inclusion, and participation of marginalized groups The project enhances the availability, accessibility, and quality of clean cooking services for households that have access to electricity but continue to rely on polluting fuels, a group that includes many low income and potentially marginalized urban and peri urban households. Beneficiary selection is based on transparent eligibility criteria and does not discriminate on the basis of gender, ethnicity, religion, or socio-economic status. Meaningful stakeholder consultations are conducted to ensure that beneficiaries are informed, can participate voluntarily, and have opportunities to provide feedback. These measures strengthen inclusion and participation in decision making processes that directly affect project beneficiaries, consistent with the human rights principles of equality and nondiscrimination. Accessibility and reasonable accommodation for persons with disabilities The project promotes accessibility by delivering clean cooking solutions directly at the household level, reducing physical burdens associated with fuel collection and traditional cooking. Information about the project and its benefits is communicated in accessible formats and local language to support understanding by all users. While the project does not target persons with disabilities as a separate beneficiary group, its design inherently reduces physical strain and health risks associated with cooking, thereby improving accessibility and inclusivity of benefits for persons with disabilities within participating households. The project respects internationally proclaimed human rights including dignity and cultural property. The project is not complicit in human rights abuse, as the project does not force people to change cultural habits, where companies follow the labour laws and do not interfere with worship operations. No indigenous people would be negatively affected by the project activity. None of any cultural property is close to the project activity.
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	The PD shall provide a safe working environment for its workers in respect to the ratification and confirmed during the employee/stakeholder interview and supportive documents i.e. employment details /27/, training records /28/. The project is implemented respecting internationally proclaimed human rights and is not complicit in violence or human rights abuses of any kind as defined in the Universal Declaration of Human Rights. The project doesn't discriminate either with regards to participation and inclusion as the efficient project stoves are free and are distributed for the families selected in collaboration with the representatives of the local communities Hence, no relevance was found applicable.
4. Does the project demonstrate fulfilment of requirements under Principle 2: Gender Equality and Women's Empowerment?	☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	Stakeholder/Employee interviews and end users' agreement
Justification of the MOV	The project addresses identified risks to gender equality and women's empowerment by directly reducing the disproportionate burden placed on women and girls from traditional cooking practices. By replacing firewood and charcoal stoves with electric cooking technologies, the project significantly reduces time spent on fuel collection, cooking preparation, and exposure to household air pollution—activities primarily undertaken by women. Gender considerations are integrated through inclusive stakeholder consultations, free prior and informed consent (FPIC), and gender sensitive monitoring surveys. The project ensures nondiscriminatory access to clean cooking technologies, provides information in local language, and creates local employment and training opportunities that are accessible to women. These measures mitigate gender related risks and actively support women's health, time savings, economic participation, and empowerment. The justification provided by the PP is found acceptable, which was also checked during the Stakeholder/Employee interview. The project will reduce the burden of women. It will reduce the time spend for collection of firewood and give time for women to use the saved time for other purpose. It will reduce exposure to fire hazards and time of cooking. It will create job opportunity for women who will engage on stove production and installation. The project will reduce deforestation in the area and improve natural resource conservation in the area. Hence, no relevance was found applicable.
5. Does the project demonstrate fulfilment of requirements under Principle 3: Community Health and Safety?	☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	Stakeholder interviews and IoT-based metering system /23/
Justification of the MOV	The project addresses community health and safety risks by replacing traditional biomass-based cooking practices with electric cooking technologies, thereby eliminating exposure to household air pollution from firewood and charcoal combustion. This significantly reduces risks of respiratory illnesses, eye problems, burns, and accidental injuries associated with open fires and traditional stoves. To address safety risks linked to the use of electric appliances, the project distributes certified electric stoves that comply with international safety standards and provides user training and clear instructions in local language on safe operation and maintenance. Stove usage is continuously monitored through IoT systems, enabling early identification of misuse or technical issues, while local partners provide maintenance, repair, and replacement support. These measures collectively ensure that community health and safety risks are effectively mitigated throughout project implementation. The project has no identified health risks, rather it will improve eye and respiratory system health risks from the use of firewood in traditional stove. The project activity

	will not cause community exposure to increased health risks and shall not adversely affect the health of the community. The justification provided by the PD is found acceptable, which was also checked during the stakeholder interview and IoT-based metering system /23/. Hence, no relevance was found applicable.
6. Does the project demonstrate fulfilment of requirements under Principle 4: Cultural Heritage, Indigenous Peoples, Displacement and Resettlement?	☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	PD representative/stakeholder interviews
Justification of the MOV	• Nature of Activities • The project consists exclusively of household level distribution and indoor use of electric cooking devices (induction stoves or electric pressure cookers). • No construction, excavation, demolition, earth movement, flooding, or land use change is involved. • Activities occur within existing residential dwellings in urban and peri urban areas. • Location and Physical Footprint • The project does not operate within or adjacent to designated cultural heritage sites, monuments, sacred areas, or landscapes with cultural or spiritual significance. • There is no alteration of landscapes or natural features. • Cultural Assets (Tangible and Intangible) • The project does not affect sites, structures, artefacts, or objects with historical, archaeological, artistic, traditional, or religious value. • The project does not document, appropriate, modify, or commercialise intangible cultural heritage (e.g., traditional knowledge, rituals, practices). Households may continue customary cooking practices using cleaner technology at their discretion. • Commercialisation of Cultural Heritage • No tangible or intangible cultural heritage is utilised for commercial or other purposes. • Carbon revenues are generated from emission reductions, not from cultural knowledge or practices. • Community Rights and Awareness • Although no Cultural Heritage impacts are identified, communities are informed about: ○ Project scope and technology ○ Voluntary participation ○ Carbon rights and benefit arrangements • This is achieved through Local Stakeholder Consultation (LSC) and beneficiary agreements (including consent provisions). • Expert Stakeholder Consultation • As no Cultural Heritage risks are identified, expert cultural heritage consultation is not required under Gold Standard safeguards. The project has no or any relation with and risk on cultural heritages. The project doesn't undergo any activity adjacent to cultural heritages. It doesn't undergo any excavations, demolitions, movement of earth, flooding or other environmental changes. It doesn't utilize cultural heritage including knowledge. To receive grievance, the pp has discussed with stake holders and agreed to place a grievance book in a place closer to them and the contact person addresses, and phone number was communicated/given for stakeholders. The project involves only the voluntary distribution and indoor use of portable electric cooking devices in existing households, without any interaction with land, territories, or natural resources. It does not require land acquisition, access restrictions, or legal changes, and therefore has no impact on land tenure, property rights, or customary arrangements. Beneficiaries continue to use their residences and resources as before, with transparency ensured through stakeholder

	consultations and agreements. As no land-related risks or conflicts arise, expert input on land tenure is not required. The project is limited to distributing portable electric cooking devices for household use in urban and peri-urban Tanzania, with no land acquisition, construction, or territorial expansion. It does not affect indigenous peoples' lands, rights, resources, or livelihoods, nor does it involve forced removal or resource exploitation. Benefits are confined to reduced fuel costs and time savings at the household level. As no indigenous impacts arise, an Indigenous Peoples Plan is not required, though transparency is ensured through stakeholder consultations, beneficiary agreements, and a grievance redress mechanism accessible to all. Justification has been provided by the PD and found OK. Validation team has also confirmed the same from PD representative/stakeholder interviews. The validation team confirms that there was no force eviction or displacement under the project activity.
7. Does the project demonstrate fulfilment of requirements under Principle 5: Corruption?	☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	PD representative interviews
Justification of the MOV	Project does not involve and is not complicit in corruption and is not prone to entrusted power abuse nor corruption. Also, the PD will follow the convention as verified from PD representative interview. Hence, no relevance was found applicable.
8. Does the project demonstrate fulfilment of requirements under Principle 6: Economic Impacts?	☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	Employee details /27/, PD/Employee/stakeholder interviews
Justification of the MOV	The project ensures all employment is voluntary, contract-based, and compliant with Tanzanian labour laws and ILO principles. No forced, bonded, trafficked, or child labour is involved, and recruitment follows non-discrimination and equal opportunity standards. Health and safety measures are in place for stove distribution and maintenance, with safeguards for vulnerable workers and a respectful, inclusive environment. A grievance redress mechanism is available throughout the project lifecycle, ensuring transparency, accountability, and continuous improvement in labour practices. Activities are low-risk (distribution, monitoring, training, administration) with clear agreements, fair wages, and safe working conditions. Workers retain freedom of association, collective bargaining, and equal treatment, with no child labour, discrimination, or reliance on migrant labour. Health and safety training, safeguards for vulnerable groups, and anti-harassment measures are in place. A grievance redress mechanism and contractor due diligence procedures ensure transparency, accountability, and continuous compliance throughout the project lifecycle. The project does not negatively affect local economies, markets, or livelihoods, as activities are limited to household-level stove distribution and maintenance. Instead, it generates positive impacts by reducing household fuel costs, increasing disposable income, and creating local employment opportunities. Women benefit from time savings that can be redirected to productive activities, further strengthening household and community resilience. Overall, the project supports local value chains and enhances economic well-being without introducing risks or burdens for vulnerable groups. The justification provided by PD is found acceptable. Also, no child labour is involved as confirmed from the interview of PD/Employee/stakeholders. Also, they did not expect any direct economic impact or potential risks to the local economy.

	Hence, no relevance was found applicable.	
9. Does the project demonstrate fulfilment of requirements under Principle 7: Climate and Energy?		☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	PD representative interviews	
Justification of the MOV	The project replaces traditional biomass cooking with efficient electric stoves, reducing CO₂, CH₄, and N₂O emissions compared to the baseline. Using Gold Standard methodology, grid electricity emissions—including transmission losses—are conservatively accounted for, ensuring net reductions. The activity is both a fuel switch and a technology efficiency improvement, achieving verified emission reductions without ever exceeding baseline emissions. The project does not negatively impact energy supply, as it targets households already connected to the grid and introduces efficient electric cooking devices without requiring new connections or infrastructure upgrades. Electricity use is metered and managed, ensuring no excessive loads or preferential access. Implementation is gradual and demand-responsive, supporting national clean cooking and efficiency goals. Overall, the project promotes sustainable energy use while maintaining reliability and availability for all grid users. The stoves will reduce the amount of fuel consumed for cooking thereby reducing GHG emissions, and forest degradation, and improving the health condition of the local community. The justification provided by PD is acceptable. Hence, no relevance was found applicable.	
10. Does the project demonstrate fulfilment of requirements under Principle 8: Water?		☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	PD representative interviews	
Justification of the MOV	The project has no impact on water resources or wastewater systems, as activities are limited to household-level use of electric cooking devices. It does not involve water abstraction, diversion, or infrastructure development, nor does it generate industrial or process wastewater. Household sanitation practices remain unchanged, and no risks to water quality, groundwater, or watershed integrity arise. Consequently, expert consultation on water issues is not required, and the project poses no threats to water availability or wastewater management. The project has no negative impacts on catchment areas, as activities are confined to household-level use of electric cooking devices without land interventions, construction, or terrain modification. There is no soil disturbance, erosion risk, or alteration of runoff patterns, meaning catchment integrity, downstream water quality, and watershed functioning remain unaffected. Since no impacts arise, consultation with erosion or catchment management experts was not required. The justification provided by PD is found OK. The same is confirmed during the interview with the PD representative.	
11. Does the project demonstrate fulfilment of requirements under Principle 9: Environment, Ecology and Land Use		☒ Yes ☐ No ☐ N/A
Means of validation (MOV)	PD representative interviews and GS PDD review	
Justification of the MOV	The project activity is a cookstove distribution project. It does not involve the use of land and soil for the production of crops or other products. Project does not involve the application of pesticides and/or fertilizers. The project does not involve harvesting forests. Project does not modify the quantity or nutritional quality of food available such as through crop regime alteration or export or economic incentives. Project does not involve animal husbandry.	

The justification provided by the PD is found OK. Hence, no relevance was found applicable.	
12. Is there any exception approved to safeguarding principles and requirements for the project? Is yes, is it followed appropriately?	☐ Yes ☒ No ☐ N/A
Means of validation (MOV)	N/A
Justification of the MOV	N/A
Findings	
☐ CL	No CL raised in this regard.
☒ CAR	CAR-14 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
☐ FAR	No FAR raised in this regard.
Assertion statement	
The validation approach didn't reveal any situation that could lead to the violation of safeguarding principles and VVB has confirmed that the project activity fulfils all the safeguarding principles given by United Nations.	

D.7 Stakeholder Inputs & Grievance Mechanism

Means of validation	Discussion of continuous input /grievance mechanism:	
	The continuous input and grievance mechanism was discussed during the LSC meeting as confirmed during the PD representatives/Stakeholder interview. The participants were informed that CI/GM is a continuous process where they can express any concerns they have during the lifetime of the project. The methods used for this were explicitly explained and the members were given the liberty to select the most appropriate methods. The options included a Logbook placed at strategic locations, phone number and email. Continuous input and grievance expression book was placed in CEFA (local partner): CEFA Hostel, Mwai Kibaki Road, Mikocheni B, Dar es Salaam, P.O. Box 8055 CCT Tanzania: 368 Msasani Road, Oysterbay Mikumi House, 2nd Floor P.O. Box 10206 Dar es Salaam, Tanzania. The place for the grievance book is at approachable places and is well known to the beneficiaries. Stakeholders were provided below details to register their issues:	
	METHOD	INCLUDE ALL DETAILS OF CHOSEN METHOD (S) SO THAT THEY MAY BE UNDERSTOOD AND, WHERE RELEVANT, USED BY READERS.
	Continuous Input / Grievance Expression Process Book (mandatory)	The continuous input and grievance expression book available at our local partner office at the given address: Addresses: CEFA (local partner): CEFA Hostel, Mwai Kibaki Road, Mikocheni B, Dar es Salaam, P.O. Box 8055 CCT Tanzania: 368 Msasani Road, Oysterbay Mikumi House, 2nd Floor P.O. Box 10206 Dar es Salaam, Tanzania The grievance book will also be available at the offices of all new project implementation partners.
	GS Contact (mandatory)	help@goldstandard.org
Other	Email Address: parigi@clean.cooking (Fabio Parigi, Founder & CEO, CCT)	
Valid and adequate mode of communication were adopted and verified during the interviews by the validation team.		

Findings	CAR-13 have been raised in this regard and successfully closed. Refer Appendix-4 of this report for more details.
Conclusion	Validation team has checked the corresponding document /25/ and found OK. The validation team confirms that the project activity meets the Gold Standard requirements for stakeholder feedback/ grievance mechanism.

SECTION E. Internal quality control

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The validation report prepared by team leader is reviewed by an independent technical reviewer (having competence of relevant technical area himself/herself or through an independent technical area expert) to confirm the internal procedures established by 4KES are duly followed and the validation report/opinion is reached in an objective manner and complies with the applicable GS requirements.

The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the validation team. The independent technical reviewer(s) may approve or reject the draft validation report. The findings may be identified even at this stage, which needs to be satisfactorily resolved, before submitting final report to GS. The final approval decision is taken by the Head of the VVB/Director.

The final decision is authorized by the Director, 4KES, once the report is finalized by the Head of the VVB/VVB Manager.

SECTION F. Validation opinion

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4K Earth Science Private Limited has been contracted by 'Clean Cooking Technologies S.R.L. (CCT Italy)' to perform a validation of the GS project 'CCT Clean Cooking Project, Tanzania' (GS Ref. No. 23462) in Tanzania.

The validation was performed in accordance with the GS4GG in conjunction with UNFCCC criteria for the Clean Development Mechanism, latest version of Validation and Verification Standard for Project Activities and related Standards/Guidance and host country criteria, as well as criteria given to provide for consistent project operations, monitoring and reporting.

The project activity will result in reductions of greenhouse gas (GHG) emissions that are real, measurable and give long-term benefits to the mitigation of climate change. In our opinion, the project meets all relevant GS criteria and all relevant host country criteria.

The review of the project design documentation and the subsequent follow-up interviews have provided validation team with sufficient evidence to validate the project. The project design document (Version 3, dated 07/05/2026) /10/ correctly applies Gold Standard methodology "GS4GG Methodology for Metered & Measured Energy Cooking Devices Version 1.2" /01/. It is demonstrated that the project is not a likely baseline scenario. The emission reductions attributable to the project are hence additional to any that would occur in the absence of the project activity.

Based on the information seen and evaluated, 4KES confirms that the implementation of the project will result positive contribution to sustainable development as follows:

SUSTAINABLE DEVELOPMENT TARGETED	SDG GOALS	IMPACT (DEFINED IN B.6 of GS PDD /10/)	ESTIMATED ANNUAL AVERAGE	UNITS OR PRODUCTS
SDG 13 - Climate Action (mandatory)	Amount of GHGs avoided or sequestered	emissions	172,335 ⁴⁸	tCO _{2e}

⁴⁸ Currently, emission reductions have been estimated based on the distribution of 150,000 induction stoves. However, since the project may also include the distribution of electric pressure cookers (EPCs), the actual emission reductions achieved will be recalculated ex-post accordingly to reflect the final mix of technologies deployed.

SDG 1 - No Poverty	Proportion of population living in 95 households with access to basic services	Percentage
SDG 3 - Good Health and Well Being	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions 100	Percentage
SDG 4 – Quality Education	Number of employees provided skill development training 100	Number
SDG 5 - Gender Equality	Average time saving associated with cooking time and fuel collection 329	Hours saved / household / year
SDG 7 - Affordable and Clean Energy	Number of beneficiaries: 150,000 Households	Number of households
SDG 8 - Decent work and Economic Growth	Total number of jobs 100	Number
SDG 15- Life on Land	Total non-renewable wood fuel saved 129,801	Tonnes / year

The above stated outcomes have been checked, and it is deemed likely that the stated amount is achievable given the underlying assumptions do not change.

The monitoring plan provides for the monitoring of the SDG impact. The monitoring arrangements described in the monitoring plan are feasible within the project design, and it is validation team's opinion that the project participant is able to implement the monitoring plan.

In summary, it is validation team's opinion that the project activity "CCT Clean Cooking Project, Tanzania" in Tanzania meets all relevant GS & UNFCCC requirements. Hence, 4KES requests for the registration of the project activity under GS4GG.

Appendix 1. Abbreviations

Abbreviations	Full texts
4KES	4K Earth Science PVT. LTD.
BE	Baseline Emission
CAR	Corrective Action Request
CCT	Clean Cooking Technologies
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction(s)
CL	Clarification request
CSA	Community Services Activity
CO2	Carbon dioxide
tCO2e	Carbon dioxide equivalent
CP	Commitment Period
EB	Executive Board
EF	Emission factor
EPC	Electric Pressure Cookers
ER	Emission Reduction
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS4GG	Gold standard for global goals
IEA	International Energy Agency
IoT	Internet of things
MP	Monitoring Plan
NBS	National Bureau of Statistics
NGO	Non-government organization
OCGS	Office of the Chief Government Statistician
PD	Project Developer
PDD	Project Design Document
SDG	Sustainable development goal
UNFCCC	United Nations Framework Convention on Climate Change
VVB	Validation Verification Body

Appendix 2. Competence of team members and technical reviewers

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Chetan Swaroop Sharma					
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of A6.4/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
Appointed	Yes	Yes	No	Yes	Yes	No	Yes
Appointed Date	23-06-2025						
Authorized to work as Technical Expert for:							
Authorized Technical Area	Sectoral Scope		TA Code		Technical Area within the scope		
	Energy industries (renewable - / non-renewable sources)		1.1		Thermal energy generation		
	Energy industries (renewable - / non-renewable sources)		1.2		Renewables		
	Energy distribution		2.1		Energy distribution		
	Energy demand		3.1		Energy demand		
	Waste handling and disposal		13.1		Solid waste and wastewater		
	Waste handling and disposal		13.2		Manure		
Authorized to work as Local Expert for:							
Country/Countries	India, Mauritius, Vietnam, Senegal and Thailand						
Compliance check by:				Swati S Acharya			

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Atupele Burton Kilindu					
Qualification Procedure	Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of A6.4/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
Appointed	No	No	No	Yes	No	No	No
Appointed Date	03-03-2026						
Authorized to work as Technical Expert for:							
Authorized Technical Area	Sectoral Scope		TA Code		Technical Area within the scope		
	Energy demand		3.1		Energy demand		
Authorized to work as Local Expert for:							
Country/Countries	Tanzania						

<u>Compliance check by:</u>	Swati S Acharya
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<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Darshan Kumar Sharma					
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of A6.4/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
<i>Appointed</i>	Yes	No	No	No	No	No	No
<i>Appointed Date</i>	11-12-2025						
Authorized to work as Technical Expert for:							
<i>Authorized Technical Area</i>	Sectoral Scope		TA Code		Technical Area within the scope		
	-		-		-		
Authorized to work as Local Expert for:							
<i>Country/Countries</i>	-						
<u>Compliance check by:</u>							
Swati S Acharya							

<u>Certificate of Competence</u>							
Name	☒ Mr. ☐ Ms.	Vikas Pandey					
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of A6.4/VCS/GS/GCC/GHG Projects.						
Appointed to work as:							
	Validator/ Verifier	Team Leader	Trainee	Technical Expert	Technical Reviewer	Financial Expert	Approver
<i>Appointed</i>	Yes	No	No	No	No	No	No
<i>Appointed Date</i>	16-02-2026						
Authorized to work as Technical Expert for:							
<i>Authorized Technical Area</i>	Sectoral Scope		TA Code		Technical Area within the scope		
	-		-		-		
Authorized to work as Local Expert for:							
<i>Country/Countries</i>	-						
<u>Compliance check by:</u>							
Swati S Acharya							

Certificate of Competence

Name	☒ Mr. ☐ Ms.	Rohit Badaya
Qualification Procedure	Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of A6.4/VCS/GS/GCC/GHG Projects.	
Appointed to work as:		
	Validator/ Verifier	Team Leader
<i>Appointed</i>	Yes	Yes
<i>Appointed Date</i>	23-06-2025	
Authorized to work as Technical Expert for:		
<i>Authorized Technical Area</i>	Sectoral Scope	TA Code
	Energy industries (renewable - / non-renewable sources)	1.1
	Energy industries (renewable - / non-renewable sources)	1.2
	Energy Distribution	2.1
	Energy demand	3.1
	Waste handling and disposal	13.1
	Waste handling and disposal	13.2
Authorized to work as Local Expert for:		
<i>Country/Countries</i>	India, Kenya and Uganda	
Compliance check by:		
		Swati S Acharya

Appendix 3. Documents reviewed or referenced

S. NO.	AUTHOR	TITLE	REFERENCE TO THE DOCUMENT	PROVIDER
1.	Gold Standard	GS4GG Principles and Requirements	Dated: 31/01/2025 Version 2.1	Publicly available
		GS4GG Stakeholder Consultation and Engagement Requirements	Dated: 14/06/2022 Version 2.1	Publicly available
		GS4GG Stakeholder Consultation and Engagement Guidelines	Dated: 04/05/2022 Version 2.0	Publicly available
		GS4GG Safeguarding principles & requirements	Dated: 29/06/2023 Version 2.1	Publicly available
		GS4GG GHG Emissions Reduction & Sequestration Product Requirements	Dated: 12/12/2025 Version 3.2	Publicly available
		GS4GG Validation and verification standard	Dated: 12/11/2024 Version 2.0	Publicly available
		GS4GG Site visit and remote audit requirements and procedures	Dated: 30/05/2023 Version 2.0	Publicly available
		GS4GG Validation & verification body requirements	Dated: 12/11/2024 Version 3.0	Publicly available
		GS4GG Community services activity requirements	Dated: 24/10/2019 Version 1.2	Publicly available
		GS4GG Gold standard eligible impact quantification methodologies	Dated: 15/10/2024 Version 2.11	Publicly available
		GS4GG Digital SDG Impact Tool	Dated: 31/10/2023 Link	Publicly available
		Cookstove Usage Rate Guidelines ver 2.0, published on 27/10/2020	Dated: 27/10/2020 Version 2.0	Publicly available
		Current applied methodology: GS4GG Methodology for Metered & Measured Energy Cooking Devices	Dated: 13/12/2022 Version 1.2	Publicly available
		Rule Update: fNRB Application for GS4GG Certification, v.1.0	Dated: 24/04/2025 Version 1.0	Publicly available
		Template: Key Project Information & Project Design Document (PDD)	Dated: 29/06/2023 Version 1.5	Publicly available
		Guideline: Key Project Information & Project Design Document (PDD)	Dated: 29/06/2023 Version 1.5	Publicly available
		Template: Cover Letter	Dated: 04/12/2024 Version 2.0	Publicly Available
		Template: Preliminary Review Submission	Dated: 24/04/2025 Version 4.0	Publicly Available
		Template: Terms and Conditions	Dated: 04/12/2024 Version 2.0	Publicly Available
		Template: Stakeholder Consultation Report	Dated: 05/05/2022 Version 2.0	Publicly Available

		Guideline: Stakeholder Consultation Report	Dated: 05/05/2022 <u>Version 2.0</u>	Publicly Available
2.	UNFCCC	CDM project standard for project activities	Dated: 07/10/2021 <u>Version 03.0</u>	Publicly Available
		CDM Validation and verification standard for Project activities	Dated: 07/10/2021 <u>Version 03</u>	Publicly Available
		CDM project cycle procedure for project activities	Dated: 07/10/2011 <u>Version 03.0</u>	Publicly Available
		CDM Accreditation Standard	Dated: 01/03/2018 <u>Version 07.0</u>	Publicly Available
		<u>CDM Modalities and Procedures</u>	-	Publicly Available
		CDM tool TOOL05	<u>Version 03.0</u>	Publicly Available
		CDM Tool 33 Default values for common parameters	Dated: 12/06/2025 <u>Version 03.0</u>	Publicly Available
		Harmonized IFI Default Grid Factors 2021	<u>Version 3.2</u>	
		Standard: Sampling and surveys for CDM project activities and programmes of activities	Dated: 27/05/2021 <u>Version 09.0</u>	Publicly Available
		Guideline: Sampling and surveys for CDM project activities and programmes of activities	Dated: 16/08/2015 <u>Version 04.0</u>	Publicly Available
3.	United Nations	<u>Kyoto Protocol</u>	-	Publicly Available
4.	Google	<u>Google Earth</u>	-	Publicly Available
5.	IPCC	<u>IPCC defaults; Volume 2: 2006 IPCC Guidelines for National Greenhouse Gas Inventories, Chapter 2</u>	-	Publicly Available
		<u>Default emissions factor</u>		
		<u>GHG protocol</u>		
		<u>Global Warming Potential</u>		
		<u>AR5 GWP</u>		
6.	PD	Preliminary Review form	Date of the first submission: 14/01/2026 Date of decision/listing: 27/01/2026	PD
7.	PD	Supportive document for first submission	Date of the first submission: 14/01/2026	PD
8.	PD	Start date supportive: First end user agreement	Dated: 10/03/2026	PD
		Sample end users' agreement (English and Kiswahili)		
		Incentive mechanism demonstration		
9.	PD	Official confirmation of successful registration from NCMC	<u>Link</u>	Publicly Available

		Tanzania's National Carbon Monitoring Center (NCCM) rules and requirements	Link	
		Documents submitted to NCCM for project registration	-	
		1. Memorandum and Articles of Association - CCT	-	
		2. Certificate of Compliance CCT Tanzania	Dated: 04/02/2026	
		3. Tax Identification Number Certificate	Dated: 04/02/2026	
		4. Current Annual Return filed BRELA CCT Tanzania	-	
		5. Clean Cooking Technologies S.R.L - Tax Clearance Certificate	-	
		6. Declaration Organization Details CCT Tanzania signed	Dated: 09/03/2026	
		7. Application Form	Dated: 13/03/2026	
		8. CCT S.R.L. Business License from BRELA	Dated: 24/03/2026	
		9. Tanzania – Carbon Project Application Form	Dated: 13/03/2026	
10.	PD	Initial PDD	Version 1, dated 30/01/2026	PD
		Final VPA DD	Version 3, dated 07/05/2026	
11.	PD	Initial Ex ante ER spreadsheet	Corresponding to Initial PDD	PD
		Ex ante ER spreadsheet	Corresponding to final PDD	
12.	PD	Digital SDG Tool Assessment	Corresponding to final PDD	PD
		Digital Safeguarding Assessment	Corresponding to final PDD	
13.	PD	Company registration, certificates and agreements		PD
		Clean Cooking Technologies S.R.L. (CCT Italy)	Registration Date: 16/05/2023	
			Business Starting date: 26/04/2023	
		Clean Cooking Technologies, (CCT Tanzania)	Dated: 02/02/2026	
		CEFA registration certificate	Dated: 16/06/2005	
		CEFA contract agreement with PD	Dated: 25/11/2025	
		The contractual agreement between project implementor and private investors i.e., EDP Group	Dated: 01/08/2025	
14.	PD	GS4GG Declaration confirming that there is no diversion of ODA	Dated: 14/01/2026	PD
		Program-double counting declaration for the GS_23462	Dated: 02/02/2026	
		Terms of Use	Dated: 05/08/2025	
		GS4GG Terms & Conditions	Dated: 05/08/2025	
		GS4GG Signed Cover Letter	Dated: 10/01/2026	

15.	PD	Organization structure with responsibilities	CCT Roles and Responsibilities and	PD
			CCT Organizational Structure	
16.	PD	Stakeholder Consultation Report GS_23462	Dated: 07/05/2026 Version 1.2 (public (redacted) version and confidential (complete) version)	PD
		Date of Meeting: 09/01/2026		
		Stakeholder Consultation Meeting Agenda		
		Minutes of Meeting		
		Email invitation “for date of Meeting: 11/12/2025” send on 07/11/2025		
		Email Invitation “for date of Meeting: 09/01/2026” sent on 01/12/2025		
		Reminder Email “for date of Meeting: 09/01/2026” sent on 05/01/2026		
		Public Invitation		
		Feedback forms		
		LSC Invitation tracking sheet		
		LSC Participants List		
		Non-Technical Summary		
		Pictures of LSC meeting		
		Invitation letter		
17.	PD	SFR emails (conducted between: 10/01/2026 to 09/02/2026)	Dated: 20/01/2024	PD
		No feedback was received		
18.	PD/VVB	Photographs of project technology/Baseline technology	-	PD/VVB
19.	PD	Technology specifications	-	PD
		CleKoo 2.0 Single: Single IoT Induction Stove		
		CleKoo 2.0 Double: Double IoT induction stove		
		CleKoo 2.0 Four: Four-burner IoT induction stove		
		CleKoo 2.0 IoT EPC 8 L: 8-liter IoT Electric Pressure Cooker		
		CleKoo 2.0 IoT EPC 10 L: 10-liter IoT Electric Pressure Cooker		
		CleKoo 2.0 IoT EPC 12 L: 12-liter IoT Electric Pressure Cooker		
		CleKoo 2.0 IoT EPC 12 L: 12-liter IoT Electric Pressure Cooker		
20.	PD	Efficiency certificate		PD
		CleKoo 2.0 Single: Single IoT Induction Stove	Single: Dated: 07/05/2025	
		CleKoo 2.0 Double: Double IoT induction stove	Double: Dated: 07/02/2025	

		CleKoo 2.0 Four: Four-burner IoT induction stove	Four: 16/05/2026	
21.	PD	Technical Life supportive/Lifetime guarantee certificate	Dated: 09/04/2026	PD
		CleKoo 2.0 Single: Single IoT Induction Stove		
		CleKoo 2.0 Double: Double IoT induction stove		
		CleKoo 2.0 Four: Four-burner IoT induction stove		
		CleKoo 2.0 IoT EPC 8 L: 8-liter IoT Electric Pressure Cooker		
		CleKoo 2.0 IoT EPC 10 L: 10-liter IoT Electric Pressure Cooker		
		CleKoo 2.0 IoT EPC 12 L: 12-liter IoT Electric Pressure Cooker		
		CleKoo 2.0 IoT EPC 12 L: 12-liter IoT Electric Pressure Cooker		
22.	PD	Declaration of stove meter calibration: Energy Measurement Method for CleKoo Stove	-	PD
23.	PD	IoT-based metering system details	-	PD
24.	PD	Sample Implementation status: distribution database	-	PD
25.	PD	Supportive for grievance mechanisms (including Logbook/Expression Book)	-	PD
26.	PD	Baseline study	-	PD/ Publicly Available
		Demographic and Health Survey and Malaria Indicator Survey (TDHS-MIS)	2022	
		Household Energy Consumption Survey Report 2023: Mainland Tanzania	September 2025	
		Tanzania Household Selection Checklist Updated 31 March - Clean	-	
		Biomass Consumption NBS2023		
		Tanzania Cooking Fuel Statistics		
		Energy-Efficient Electric Cooking and Sustainable Energy Transitions	Dated: 05/07/2024	
		Household air pollution impacts on mortality and disease burden in East Africa and Nile Basin African countries	Dated: 20/10/2023	
		IEA: Access to clean cooking	Link	
		WHO: Household air pollution	Link	
		Publication: Review of Urban Air Quality in Sub-Saharan Africa Region: Air Quality Profile of SSA Countries, The World bank Group	Link	
		Awoke Misganaw, Alemnesh Hailmariam, Tezera Moshago Berheto, Yihunie Lakew, Sisay Derso Mengesha, Mesfin Agachew, Ally Walker, Asrat Arja, Wendwosen Teklemariam, Ababi Zergaw, Fentabil Getnet, Ebba Abate, Michael Brauer, Mohsen Naghavi, & Lia Tadesse. (2023). Household air pollution impacts on mortality and disease burden in East Africa and Nile Basin African countries. Ethiopian Journal of Health Development, 37(2).	Link	

		Scott, N.; Leach, M.; Clements, W. Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024, 17, 3318	Link	
		Tanzania 2019 – Country Environmental Analysis, World Bank Group Report	Link	
		Primary Forest Loss in Tanzania, Global Forest Watch	Link	
		Clean and Improved Cooking in Sub-Saharan Africa, World bank Group	Link	
		Implications of Environmental Chores for Schooling: Children's Time Fetching Water and Firewood in Tanzania	Link	
		Median Energy consumption for traditional fuels and electric devices by continent (single dishes), Energy-Efficient Electric Cooking and Sustainable Energy Transitions. Energies 2024	Link	
		Electric power transmission and distribution losses (% of output)	Link	
		World bank group: Tanzania Economy	-	
27.	PD	Employment generation	-	PD
28.	PD	Training conducted	Dated: 19/03/2026	PD
			Dated: 20/03/2026	
29.	PD	Host Country's legal, environmental, ecological, and social regulations	-	Publicly Available
		The United Republic of Tanzania, Nationally Determined Contributions (July 2021)		
		Tanzania, National Clean Cooking Strategy (2024–2034)		
		National Carbon Trading Guidelines, Vice President's Office, The United Republic of Tanzania, October, 2022		
30.	UN Committee for development policies	List of Least Developed Countries: Tanzania is one of the Least Developed Countries https://www.un.org/development/desa/dpad/wp-content/uploads/sites/45/publication/ldc_list.pdf	As of 19/12/2024	Publicly Available
31.	Verra	Verra Registry	-	Publicly available
	UNFCCC	UNFCCC registry	-	Publicly available
	International REC Standard (I-REC)	International REC Standard (I-REC) registry	-	Publicly available
	GCC	GCC registry	-	Publicly available
32.	Integrity council	List ICVCM Approved methodologies	Link	Publicly available

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

Table 1: FARs from Preliminary review

CAR ID	01	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 1. The Project Developer shall register the project with Tanzania's National Carbon Monitoring Center (NCCM) and provide evidence of registration prior to design certification. This includes: - Submitting all required documentation to NCCM for project registration - Obtaining official confirmation of successful registration from NCCM, if applicable - Providing documentation showing compliance with all applicable NCCM requirements				
Project participant response				Date: 29/04/2026
- All required documents have already been submitted to the National Carbon Monitoring Centre (NCCM), and the project has now been successfully registered. - The project is officially registered and can be viewed on the NCCM registry website: https://nccm.go.tz/registry/registered-carbon-projects - The project has been designed and developed in accordance with the NCCM National Carbon Trading Guidelines (October 2022) and will be implemented, monitored, and reported in full compliance with these guidelines.				
Documentation provided by project participant				
1. All documents submitted to NCCM for project registration.				
VVB assessment				Date: 20/05/2026
- The clarification provided by the PD is acceptable to the validation team. The validation team confirms that the PD has submitted all required documents to the National Carbon Monitoring Centre (NCCM), as validated from the documents submitted for project registration /09/ provided by the PD. The project is successfully registered on the NCCM registry website, as verified from the official confirmation of successful registration issued by NCCM /09/. Hence, this part of the CAR is closed. - The clarification provided by the PD is acceptable to the validation team. The validation team confirms that the project is successfully registered on the NCCM registry website, as verified from the official confirmation of successful registration issued by NCCM /09/. Additionally, the validation team confirms that the project has progressed to the next stage of registration in line with the NCCM National Carbon Trading Guidelines (October 2022) /29/. Hence, this part of the CAR is closed. - The clarification provided by the PD is acceptable to the validation team. The validation team confirms that the project is designed and developed in accordance with the NCCM National Carbon Trading Guidelines (October 2022) /29/ as verified from Carbon Project Application Form /09/ and other documents /09/ provided by PD. Hence, this part of the CAR is closed.				

CAR ID	02	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 2. Stakeholder Consultation Documentation The project developer shall: - Obtain and document explicit consent from stakeholders regarding the sharing of their personal information in consultation reports - Submit two versions of the final stakeholder consultation report at design review: - A redacted version with all personal details and stakeholder names removed - A complete non-redacted version for review purposes				
Project participant response				Date: 29/04/2026

a. Personal information of stakeholders will not be included in the public version of the Stakeholder Consultation Report. The Project Proponent (PP) will remove all personal details, including names and other identifying information, from the public version of the LSC report.	
b. Two versions of the final Stakeholder Consultation Report will be submitted to Gold Standard at the design review stage:	
1. A redacted version, with all personal details and stakeholder names removed, for public disclosure	
2. A complete, non-redacted version, submitted for review purposes only	
Documentation provided by project participant	
public (redacted) version and a confidential (complete) version of the Stakeholder Consultation Report	
VVB assessment	Date: 20/05/2026
The clarification provided by the PD is acceptable to the validation team. The validation team confirms that the PD has submitted both a public (redacted) version and a confidential (complete) version of the Stakeholder Consultation Report /16/ in line with GS4GG requirements. Hence, this CAR is closed.	

CAR ID	03	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 3. National Project Registration: The VVB shall validate that the project has been properly registered with Tanzania's National Carbon Monitoring Center (NCMC) prior to requesting design certification by:				
a. Verifying the project's registration status on the NCMC portal				
b. Confirming all required NCMC documentation has been submitted and approved as applicable				
c. Ensuring compliance with any NCMC-specific requirements or conditions				
Project participant response				Date: 29/04/2026
a. No further action required from the PP.				
b. No further action required from the PP.				
c. No further action required from the PP.				
Documentation provided by project participant				
None				
VVB assessment				Date: 20/05/2026
a. The validation team confirms that the project is successfully registered on the NCMC registry website, as verified from the official confirmation of successful registration issued by NCMC /09/. Additionally, the validation team confirms that the project has progressed to the next stage of registration in line with the NCMC National Carbon Trading Guidelines (October 2022) /29/. Hence, this part of the CAR is closed.				
b. The validation team confirms that the project is designed and developed in accordance with the NCMC National Carbon Trading Guidelines (October 2022) /29/ as verified from Carbon Project Application Form /09/ and other documents /09/ provided by PD. Hence, this part of the CAR is closed.				
c. The validation team confirms that the project is compliance with the NCMC National Carbon Trading Guidelines (October 2022) /29/ as verified from Carbon Project Application Form /09/ and other documents /09/ provided by PD. Hence, this part of the CAR is closed.				
A FAR is raised for the first verification to monitor the status of project registration on the NCMC registry.				

CAR ID	04	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				

FAR 4. Stakeholder Report Completion and Public Consultation Feedback Round

The public consultation feedback round is incomplete according to the Preliminary Review Submission. As a result, Question 35 should not be marked "Yes." A Forward Action Request (FAR) has been raised. The VVB shall validate the project's compliance with Gold Standard stakeholder consultation and engagement requirements through these actions:

1. Review stakeholder consultation meeting documentation, including attendance records, minutes, photographs, and feedback forms to verify inclusive representation of all relevant groups
2. Verify the stakeholder mapping exercise to ensure all affected and interested parties—particularly vulnerable groups, women, and indigenous peoples—were identified and invited
3. Confirm that consultation meetings were conducted in local languages and culturally appropriate ways by reviewing meeting materials and participant feedback
4. Interview a representative sample of stakeholders to verify their participation, project understanding, and accurate recording of their feedback
5. Examine how stakeholder feedback was incorporated into project design and implementation, including documented changes made in response
6. Assess the grievance mechanism's establishment and effectiveness by reviewing procedures and records of addressed complaints
7. Check stakeholder feedback round documentation to confirm adequate review and comment periods were provided
8. Evaluate evidence of ongoing stakeholder engagement plans and communication mechanisms for project implementation

Project participant response**Date:** 29/04/2026

- No further action required from the PP. Please refer to the updated LSC report and supporting documents submitted.

Documentation provided by project participant

- Stakeholder-Consultation-Report
- Supporting documents (attendance sheet, minutes of meeting, photographs, filled feedback forms etc.)

VVB assessment**Date:** 20/05/2026

1. The validation team confirms that the Local Stakeholder Consultation (LSC) was conducted with representation from all relevant groups, women, and indigenous peoples, in line with GS4GG Stakeholder Consultation and Engagement Requirements /01/. This has been verified from the LSC report /16/, invitations /16/, LSC invitation tracking sheet /16/, and LSC participants list /16/, and further confirmed during site visit interviews with the PD and stakeholders. Hence, this part of the CAR is closed.
2. The validation team confirms that the PD invited all relevant groups, including women and indigenous peoples, in line with GS4GG Stakeholder Consultation and Engagement Requirements /01/. This has been verified from the LSC report /16/, invitations /16/, LSC invitation tracking sheet /16/, and LSC participants list /16/ and further confirmed during site visit interviews with the PD and stakeholders. Hence, this part of the CAR is closed.
3. The validation team confirms that the consultation meetings were conducted in local languages and in culturally appropriate ways, as verified from feedback forms /16/ and further confirmed during site visit interviews with the PD and stakeholders. Hence, this part of the CAR is closed.
4. The validation team conducted interviews with a representative sample of stakeholders from the LSC participants list /16/, confirming their participation, project understanding, and the accurate recording of their feedback. Hence, this part of the CAR is closed.
5. The validation team has reviewed the feedback forms /16/ and confirms that the stakeholder consultation meeting and stakeholder feedback round did not indicate any necessity to change the design of the envisaged programme. Hence, this part of the CAR is closed.
6. The validation team has reviewed the Continuous Grievance and Improvement Mechanism (CGIM) from Supportive for Grievance Mechanisms /25/ and confirms that the CGIM mechanism is active and efficient as verified during site visit interviews with end users and stakeholders. Hence, this part of the CAR is closed.
7. The validation team has reviewed SFR emails (conducted between: 10/01/2026 to 09/02/2026) and confirms No feedback were received. Hence, this part of the CAR is closed.
8. The validation team has reviewed the Continuous Grievance and Improvement Mechanism (CGIM) from Supportive for Grievance Mechanisms /25/ and confirms that the CGIM mechanism is active and efficient as verified during site visit interviews with end users and stakeholders. Hence, this part of the CAR is closed.

CAR ID	05	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 5. Project Area Overlap Validation: The VVB shall validate the extent of any overlap between the project area and other carbon crediting projects by: 1. Conducting thorough local and regional due diligence using available databases and registries 2. Consulting with local stakeholders and authorities to identify any existing carbon projects in the region 3. Reviewing and verifying spatial data and project boundaries against other registered projects 4. Documenting evidence that confirms the absence of overlap or demonstrates double counting of impacts have been avoided by the project developer and its intended beneficiaries with other Gold Standard projects or projects under other voluntary or compliance standards.				
Project participant response				Date: 29/04/2026
• No further action required from the PP. Please refer to the updated PDD submitted.				
Documentation provided by project participant				
1. CCT eCooking Project_Tanzania_PDD				
VVB assessment				Date: 20/05/2026

The validation team confirms, after reviewing the relevant registries

1. Verra Registry: The validation team identified four projects registered in Tanzania. None of these projects involve the distribution of electric cooking devices, such as induction stoves or electric pressure cookers, to households or communities.
2. UNFCCC Registry: The validation team confirms that no cookstove projects are registered in Tanzania.
3. International REC Standard (I-REC) registry: The validation team confirms that no cookstove projects are registered in Tanzania.
4. GCC Registry: The validation team confirms that no cookstove projects are registered in Tanzania.
5. GS Registry: The validation team confirms that the following projects are registered on the Gold Standard platform and are distributing improved cookstoves (ICS) in Tanzania: GS1045, GS1046, GS850, GS11323, GS11659, GS11731, GS11732, GS12118, GS12082, GS12352, GS12315, GS12591, and GS12592. Of these, only two projects are distributing electric ICS:
GS11323 – distributing electric pressure cookers (EPC) but not induction stoves.
GS12082 – distributing both EPC and induction stoves.

The validation team confirms that no cookstove projects are registered in Tanzania other than those listed on the Gold Standard platform. Only two projects are distributing electric ICS: GS11323 (electric pressure cookers only) and GS12082 (electric pressure cookers and induction stoves). The registry review further verifies that no instances of double counting have been identified, and project records remain consistent across the reviewed registries /31/.

To prevent double counting, the Project Developer shall ensure that the proposed project is neither registered as a GS, CDM, or VERRA project activity nor included in another registered GS PoA/Project, that it is not a deregistered project activity, and that it has not been excluded from any registered GS, CDM, or VERRA PoA. The same was confirmed during interview with PD.

The Project Area is defined as the entire territorial boundary of the United Republic of Tanzania, and while it is acknowledged that other voluntary e-cooking carbon projects may exist or be implemented within the same boundary, such activities have been considered in the assessment of project boundaries and overlap risks. To mitigate double counting and physical overlap, each induction stove and electric pressure cooker distributed under the project is uniquely identifiable through a serial number, IMEI, or equivalent method, with beneficiary household details including location and address recorded at the time of distribution. A centralized distribution and monitoring database is maintained to ensure that no device included in another carbon project is also included in this project, and prior to stove distribution, local partners verify that beneficiaries have not received clean cooking technologies under any other carbon-financed or compliance-based program. These safeguards collectively ensure that the emission reductions claimed under this project are unique, additional, and not counted under any other carbon crediting mechanism. The same has been checked during site visit interview with end user and PD and sample distribution data base /24/. The project activity uses a digital customer tracking system /23/. This ensures that technology uses and end users can only be assigned to a single activity, and only be counted once, thus ensuring that double counting will not occur as verified from the site visit, end user contracts /08/ and distribution database /24/. Hence, this CAR is closed.

CAR ID	06	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 6. FAR Risk Assessment and Mitigation Validation				
The VVB shall validate the compliance with Safeguarding Principles compliance for risk assessment and mitigation planning through the following actions:				
1. Review risk assessment documentation thoroughly to verify: • Identification and evaluation of all safeguarding-related risks • Definition of appropriate mitigation measures with clear actions, timelines, and responsibilities 2. Validate monitoring systems that track mitigation effectiveness, focusing on: • Potential impacts to local communities • Displacement risks 3. Verify that: • Stakeholder feedback is integrated into risk management plans • Procedures are established for regular assessment updates				
Project participant response				Date: 29/04/2026

No further action required from the PP. Please refer to the updated PDD submitted.	
Documentation provided by project participant	
CCT eCooking Project_Tanzania_PDD	
VVB assessment	Date: 20/05/2026
1. The Validation Team confirms that the project is in compliance with all Safeguarding Principles, as validated from Appendix 1 of the PDD /10/, the Digital Safeguarding Assessment /12/ and the team's sectoral expertise. Accordingly, no ongoing monitoring is required for this project activity. The Validation Team also conducted stakeholder interviews as part of the Safeguarding Assessment and found no discrepancies between the Project Developer's assessment and stakeholder responses. Hence, this part of the CAR is closed. 2. The Validation Team confirms that no mitigation measures are required for the project activity, as validated from Appendix 1 of the PDD /10/, the Digital Safeguarding Assessment /12/ and the team's sectoral expertise. This conclusion is further supported by stakeholder interviews conducted during the site visit which revealed no discrepancies between the Project Developer's assessment /12/ and stakeholder responses. Hence, this part of the CAR is closed. 3. The Validation Team confirms that no mitigation measures are required for the project activity, as validated from Appendix 1 of the PDD /10/, the Digital Safeguarding Assessment /12/ and the team's sectoral expertise. This conclusion is further supported by stakeholder interviews conducted during the site visit which revealed no discrepancies between the Project Developer's assessment /12/ and stakeholder responses. Hence, this part of the CAR is closed.	

CAR ID	07	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 7. Validation of Legal Ownership and Transfer of Carbon Credits				
The VVB shall validate that the project demonstrates full and uncontested legal ownership transfer of all carbon credits generated under Gold Standard certification from project beneficiaries, in accordance with criteria (f), 3 GENERAL ELIGIBILITY CRITERIA, Principles and Requirements. The validation shall confirm: • Clear documentation of the transfer process exists • Evidence of Free, Prior and Informed Consent (FPIC) from beneficiaries is available • The transfer process is transparent and properly documented				
Project participant response				Date: 29/04/2026
No further action required from the PP. Please refer to the carbon credit transfer agreement submitted.				
Documentation provided by project participant				
• Carbon Credit Transfer Agreement Template (English) • Carbon Credit Transfer Agreement Template (Swahili)				
VVB assessment				Date: 20/05/2026
The Validation Team has reviewed the Carbon Credit Transfer Agreement /08/ Template in both English and Swahili (Tanzania local language) and confirms that the PD has clearly demonstrated the carbon transfer process and obtained Free, Prior and Informed Consent (FPIC) from beneficiaries. This was further verified through Carbon Transfer Forms (CTFs) /08/ and site visit interviews conducted with end users, which provided consistent evidence supporting the PDs demonstration. Hence, this CAR is closed.				

CAR ID	08	Section no.	Preliminary review	Date: 29/01/2026
Description of CAR				
FAR 8. FAR: PAA Alignment				
To comply with PAA Requirements, the PD shall ensure that the project is designed in accordance with a PA-aligned methodology, if submitted for design review after 30/06/2026. Even if the project is design certified with an older version of the methodology, any vintage 2026 or later shall be monitored, reported and verified according to a PA aligned methodology, and the transition pathway described for that methodology. The validating/verifying VVB shall provide their assessment regarding the project's compliance with the PAA Requirements.				

Project participant response	Date: 29/04/2026
PP will ensure that emission reductions from the 2026 vintage onwards are monitored, reported, and verified in accordance with a Paris Agreement (PA)–aligned methodology, and that the transition pathway defined under the applicable methodology is followed.	
Documentation provided by project participant	
None.	
VVB assessment	Date: 20/05/2026
VVB would like to confirm that Validation is completed before 30/06/2026. Any vintage 2026 or later shall be monitored, reported and verified according to a PA aligned methodology. The Validation Team confirms that the Forward Action Request (FAR) remains open and will be verified during the first verification.	

Table 2: CLs from this validation

CL ID	01	Section no.	D.3.2	Date: 08/02/2026
Description of CL				
In Section B.3 of the PDD, The PD shall clarify why production of fuel, electricity, and transport of fuel are considered emission sources in both the baseline and project scenarios.				
Project participant response				Date: 29/04/2026
The production of fuel, electricity, and the transport of fuel were initially included as emission sources in both the baseline and project scenarios due to an oversight. Following a review, the project participant has corrected this error and excluded these emission sources from both the baseline and project scenarios in the revised PDD. Only CO ₂ emissions in the project scenario arising from transmission and distribution losses associated with electricity supply have been considered in the project.				
Documentation provided by project participant				
CCT eCooking Project_Tanzania_PDD				
VVB assessment				Date: 20/05/2026
The clarification provided and changes made by the PD in section B.3 of the PDD /10/ is acceptable to the validation team. The validation team that only CO ₂ emissions in the project scenario arising from transmission and distribution losses associated with electricity supply have been considered, and not in the baseline scenario, which is in accordance with the Table 1: Emissions sources included in or excluded from the project boundary of applied methodology /01/. Hence, this CL is closed.				

Table 3. CARs from this validation

CAR ID	01	Section no.	D.1	Date: 08/02/2026
Description of CAR				
In the table “KEY PROJECT INFORMATION” of the PDD: 1. PD shall fill “Time of First Submission Date” as per PDD template guide “This is the date project documentation was first submitted for preliminary review.” PD need to Refer to “acknowledgement email received from GS” 2. PD shall update “GHG Emissions Reductions & Sequestration Product Requirements ver 3.1 dated 24/04/2025” to latest version available on GS website . The PD shall make the required changes and maintain consistency throughout the PDD.				
Project participant response				Date: 29/04/2026
1. The “Time of First Submission Date” was 14/01/2026, corresponding to the date on which the project documentation was first submitted to the Gold Standard Assurance Platform for preliminary review, as evidenced by the GS acknowledgement email. The Time of First Submission Date” has been filled in the KEY PROJECT INFORMATION table in the revised PDD. 2. All references to “GHG Emissions Reductions & Sequestration Product Requirements” Version 3.1 dated 24/04/2025 have been updated to “GHG Emissions Reductions & Sequestration Product Requirements” Version 3.2 dated 12/12/2025, in line with the latest version available on the Gold Standard website. The update has been applied consistently throughout the revised PDD.				
Documentation provided by project participant				
1. CCT eCooking Project_Tanzania_PDD				

VVB assessment	Date: 20/05/2026
1. The changes made by the PD in KPI of the PDD /10/ is acceptable to the validation Team. The validation team confirms that the "Time of First Submission Date" was 14/01/2026, which has been correctly updated in the PDD /10/ and verified against the approved Preliminary Review Form /06/ and the supportive document for first submission (email) /07/. Hence, this part of CAR is closed. 2. The changes made by the PD in KPI of the PDD /10/ is acceptable to the validation Team. The validation team confirms that the PD has updated "GHG Emissions Reductions & Sequestration Product Requirements ver 3.1 dated 24/04/2025" to latest version available on <u>GS website</u> i.e., "GHG Emissions Reductions & Sequestration Product Requirements" Version 3.2 dated 12/12/2025 /01/. Hence, this part of CAR is closed.	

CAR ID	02	Section no.	D.1	Date: 08/02/2026
Description of CAR				
In Table 1 of the PDD,				
1. The PD shall update SDG impacts (1, 3, 4, 5, 7, 8 and 15) monitoring indicator names to ensure consistency with the Digital SDG Impact Tool. 2. As per the Digital SDG Tool, the PD has selected two different monitoring indicators for SDG 1. The PD shall include both indicators to ensure consistency. 3. The PD shall update the Digital SDG Impact Tool to include SDG Indicator Assessment for SDG 12 to maintain consistency with the PDD.				

Project participant response	Date: 29/04/2026
1. The monitoring indicator names for SDGs 1, 3, 4, 5, 7, 8, and 15 in Table 1 of the PDD have been reviewed and updated to align with the indicator nomenclature used in the Digital SDG Impact Tool. This ensures full consistency between the revised PDD and the Digital SDG assessment, while maintaining the same scope and intent of the SDG impacts as originally described. 2. PD has updated the Digital SDG Impact Tool to include only one monitoring indicator for SDG 1. 3. The PD is no longer reporting SDG 12. SDG 12 has been removed from both the PDD and the ER Sheet. Therefore, no changes are required in the Digital SDG Impact Tool. The SDG Impact Tool is now fully consistent with the PDD.	

Documentation provided by project participant	
1. CCT eCooking Project_Tanzania_PDD 2. CCT eCooking Project_Tanzania ER Estimation	

VVB assessment	Date: 20/05/2026
1. The changes made by the PD in Table 1 of the PDD /10/ is acceptable to the validation Team. The validation team confirms that the PD has updated the monitoring indicator names for the reported SDG impacts (1, 3, 4, 5, 7, 8, and 15) to ensure consistency with the validated Digital SDG Tool /12/. Hence, this part of CAR is closed. 2. The changes made by the PD in Table 1 of the PDD /10/ is acceptable to the validation Team. The validation team confirms that the PD has updated the Digital SDG Tool /12/ to include only one monitoring indicator for SDG 1. Hence, this part of CAR is closed. 3. The changes made by the PD in Table 1 of the PDD /10/ is acceptable to the validation Team. The validation team confirms that the PD has removed SDG 12 from both PDD /10/ and ER sheet /11/ to ensure consistency with the validated Digital SDG Tool /12/. Hence, this part of CAR is closed.	

CAR ID	03	Section no.	D.2	Date: 08/02/2026
Description of CAR				
In Section A.1 of the PDD,				
1. Page 6, Para 3 states: "As per the WHO, household air pollution... 3.2 million deaths... under the age of 5," which is inconsistent with Footnote 3 source stating "Household air pollution was responsible for an estimated 2.9 million deaths per year in 2021, including over 309,000 deaths of children under the age of 5." The PD shall update the PDD to maintain consistency with the cited reference.				

2. Page 7, Para 2 states **"Almost 490,000 premature deaths"** which is inconsistent with Footnote 5 source stating **"estimated 49,000 premature deaths annually"**. The PD shall update the PDD to maintain consistency with the cited reference.
3. Page 8, Para 2 states **"According to a World Bank study, approximately 26,000... 22,000 of these directly linked to household air pollution."** The PD shall clarify that the 2019 World Bank study represents the latest available data.
4. Page 10, Para 3 states **"local partners in Dar es Salaam is CEFA."** The PD shall provide CEFA's company registration documentation and all contracts signed between CEFA and CCT.

Project participant response	Date: 29/04/2026
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1. The Project Developer acknowledges the inconsistency identified by the VVB. Section A.1, Page 6, Paragraph 3 of the PDD has been revised to align fully with the cited WHO reference. The corrected text now states that household air pollution was responsible for an estimated 2.9 million deaths per year, including over 309,000 deaths of children under the age of five, consistent with Footnote 3.
2. The Project Developer confirms that the figure of "490,000 premature deaths" was a typographical error. Section A.1, Page 7, Paragraph 2 of the PDD has been corrected to state "approximately 49,000 premature deaths annually", fully consistent with the cited reference in Footnote 5.
3. The Project Developer has clarified in Section A.1, Page 8, Paragraph 2 that the cited World Bank study is a 2019 publication and represents the latest available World Bank data on household air pollution-related mortality in Tanzania.
4. The Project Developer confirms that CEFA acts as a local implementation partner in Dar es Salaam. In response to the VVB request, the CEFA NGO registration have been provided.

Documentation provided by project participant

1. CEFA NGO registration document.
2. Redacted copy of contract signed between CEFA and CCT.
3. CCT eCooking Project_Tanzania_PDD

VVB assessment	Date: 20/05/2026
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1. The changes made by the PD in A.1 of the PDD /10/ is acceptable to the validation Team. Hence, this part of CAR is closed.
2. The changes made by the PD in A.1 of the PDD /10/ is acceptable to the validation Team. Hence, this part of CAR is closed.
3. The clarification provided by the PD is acceptable to the validation Team. Hence, this part of CAR is closed.
4. The Validation Team confirms that the PD has submitted the CEFA registration certificate /13/ along with the CEFA contract agreement /13/ and the documents have been reviewed and found to be acceptable. Hence, this part of CAR is closed.

CAR ID	04	Section no.	D.2	Date: 08/02/2026
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Description of CAR

In section A.1.1 of the PDD:
The PD shall make the following corrections for relevant eligibility criteria as per GS4GG Principles & Requirements ver 2.1:

1. **"Demonstrate the activity is NOT located in a host country, region, locality or state that has an emission reduction cap enforced OR has the possibility to trade emissions that include the scope of the proposed project"**. as per the template requirement, demonstrate the above requirement.
2. **Criterion 3:** The PD shall justify and provide an assessment confirming that the Project Area does not overlap with any other Gold Standard project or programs under voluntary/compliance standards of a similar nature.
3. **Criterion 5:** The PD shall justify and demonstrate fully as per the requirement. **"Documentation by the governing jurisdiction that proves that the entity is in good standing (defined as being a legal or other appropriate entity registered in or allowed to operate within the required jurisdiction and with no evidence of insolvency or legal/criminal notices placed against it or any of its Directors)."**

4. Criterion 6: The PD shall include details demonstrating the transfer of ownership of GS VERs from local partners, the manufacturer, and other relevant entities. Additionally, the PD shall provide the GS VERs beneficiary agreement in both English and the local language (Swahili).	
Project participant response	Date: 28/04/2026
1. The proposed project is implemented in the United Republic of Tanzania. Tanzania does not have a mandatory greenhouse gas emissions cap, emissions trading system (ETS), carbon tax, or any other legally binding compliance-based carbon pricing mechanism at the national, regional, sub-national, or local level that includes the scope of the proposed project. There is no national or sub-national cap-and-trade system or compliance market in Tanzania under which emission reductions from the clean cooking sector are regulated or traded. All carbon market activities in the country currently operate under voluntary carbon standards only. While Tanzania is developing institutional readiness for potential future participation under Article 6 of the Paris Agreement, no operational emissions trading scheme or mandatory emissions cap was in force at the time of validation of project. Therefore, the project complies fully with GS4GG eligibility requirements regarding host-country emissions caps and emissions trading systems. 2. The Project Area is defined as the entire territorial boundary of the United Republic of Tanzania. As the project boundary covers the entire host country (i.e., Tanzania), it is acknowledged that other voluntary e-cooking carbon projects may exist or be implemented within the same project boundary. The presence of such activities has been considered in the assessment of project boundaries and overlap risks. To prevent double counting and physical overlap, the project applies the following safeguards: • Each induction stove and electric pressure cooker distributed under the project is uniquely identifiable through a serial number, IMEI, or equivalent unique identification method. • Beneficiary household details, including location and address, are recorded at the time of distribution. • A centralized distribution and monitoring database is maintained to ensure that no device included in another carbon project is included in this project. • Prior to stove distribution, local partners verify that beneficiaries have not received clean cooking technologies under any other carbon-financed or compliance-based program. These measures ensure that emission reductions claimed under this project are unique, additional, and not counted under any other carbon crediting mechanism. 3. Clean Cooking Technologies S.R.L. (CCT Italy) is the Project Developer and stove manufacturer. CCT Italy is a legally registered entity in Italy and is authorized to conduct business activities within the relevant jurisdictions. In addition, Clean Cooking Technologies S.R.L. (Tanzania) is a legally registered entity in Tanzania and is authorized to operate within the host country. Documentation including certificates of registration confirms that both entities are in good standing, defined as being legally registered, permitted to operate within the jurisdiction, and with no evidence of insolvency or any legal or criminal notices placed against the company or its directors. This satisfies GS4GG Criterion 5 requirements regarding the legal status and good standing of the Project Developer and implementing entities. 4. Emission reductions generated by the project arise from the use of electric cooking devices by beneficiary households. At the point of stove distribution, beneficiaries enter into a carbon rights transfer agreement that explicitly transfers all rights, title, and interest in the resulting Gold Standard Verified Emission Reductions (GS VERs) to Clean Cooking Technologies S.R.L. (CCT Italy). The beneficiary agreement is provided in both English and Swahili, ensuring full understanding and informed consent by all beneficiaries. The agreement includes clear provisions on: • Ownership of emission reductions; • Transfer of GS VER rights to the Project Developer; and • Voluntary participation and consent. Local implementation partners support project execution but do not retain ownership of GS VERs unless explicitly agreed contractually. Any revenue-sharing or in-kind compensation arrangements with local partners are governed by separate contractual agreements and do not affect the exclusive ownership of GS VERs by the Project Developer. These arrangements ensure transparent and verifiable transfer of GS VER ownership in full compliance with GS4GG Principles & Requirements v2.1.	
Documentation provided by project participant	

1. Carbon Rights Transfer Agreement (template)	
2. CCT eCooking Project_Tanzania_PDD	
VVB assessment	Date: 21/05/2026
1. The clarification provided by the PD is acceptable to the validation Team. The Validation Team confirms that Tanzania has no enforced emission reduction cap and does not have the possibility to trade emissions within the scope of the proposed project, as verified against the host country's legal, environmental, ecological, and social regulations /29/. Hence, this part of CAR is closed. 2. The validation team confirms, after reviewing the relevant registries • <u>Verra</u> Registry: The validation team identified four projects registered in Tanzania. None of these projects involve the distribution of electric cooking devices, such as induction stoves or electric pressure cookers, to households or communities. • <u>UNFCCC</u> Registry: The validation team confirms that no cookstove projects are registered in Tanzania. • <u>International REC Standard (I-REC)</u> registry: The validation team confirms that no cookstove projects are registered in Tanzania. • <u>GCC</u> Registry: The validation team confirms that no cookstove projects are registered in Tanzania. • <u>GS</u> Registry: The validation team confirms that the following projects are registered on the Gold Standard platform and are distributing improved cookstoves (ICS) in Tanzania: GS1045, GS1046, GS850, GS11323, GS11659, GS11731, GS11732, GS12118, GS12082, GS12352, GS12315, GS12591, and GS12592. Of these, only two projects are distributing electric ICS: GS11323 – distributing electric pressure cookers (EPC) but not induction stoves. GS12082 – distributing both EPC and induction stoves. The validation team confirms that no cookstove projects are registered in Tanzania other than those listed on the Gold Standard platform. Only two projects are distributing electric ICS: GS11323 (electric pressure cookers only) and GS12082 (electric pressure cookers and induction stoves). The registry review further verifies that no instances of double counting have been identified, and project records remain consistent across the reviewed registries. To prevent double counting, the Project Developer shall ensure that the proposed project is neither registered as a GS, CDM, or VERRA project activity nor included in another registered GS PoA/Project, that it is not a deregistered project activity, and that it has not been excluded from any registered GS, CDM, or VERRA PoA. The same was confirmed during interview with PD. The Project Area is defined as the entire territorial boundary of the United Republic of Tanzania, and while it is acknowledged that other voluntary e-cooking carbon projects may exist or be implemented within the same boundary, such activities have been considered in the assessment of project boundaries and overlap risks. To mitigate double counting and physical overlap, each induction stove and electric pressure cooker distributed under the project is uniquely identifiable through a serial number, IMEI, or equivalent method, with beneficiary household details including location and address recorded at the time of distribution. A centralized distribution and monitoring database is maintained to ensure that no device included in another carbon project is also included in this project, and prior to stove distribution, local partners verify that beneficiaries have not received clean cooking technologies under any other carbon-financed or compliance-based program. These safeguards collectively ensure that the emission reductions claimed under this project are unique, additional, and not counted under any other carbon crediting mechanism. The same has been checked during site visit interview with end user and PD. Hence, this part of CAR is closed. 3. The clarification provided and changes made by the PD in section A.1.1. of the PDD /10/ is acceptable to the validation team. The Validation Team confirms that Clean Cooking Technologies S.R.L. (CCT Italy) is both the Project Developer and stove manufacturer, as verified during the interview with the PD. CCT Italy is a legally registered entity in Italy and is authorized to conduct business activities within the relevant jurisdictions, as evidenced by the company registration certificate /13/. Furthermore, Clean Cooking Technologies S.R.L. (Tanzania) is a legally registered	

entity in Tanzania and is authorized to operate within the host country, as verified from the company registration certificate /13/. Hence, this part of CAR is closed.

4. The Validation Team has reviewed the Carbon Credit Transfer Agreement /08/ Template in both English and Swahili (Tanzania local language) and confirms that the PD has clearly demonstrated the carbon transfer process and obtained Free, Prior and Informed Consent (FPIC) from beneficiaries. This was further verified through Carbon Transfer Forms (CTFs) /08/ and site visit interviews conducted with end users, which provided consistent evidence supporting the PDs demonstration. Hence, this part of CAR is closed.

CAR ID	05	Section no.	D.2	Date: 08/02/2026
Description of CAR				
In Section A.3 of the PDD,				
1. The PD shall clarify whether both technologies will be distributed to a single household. 2. The PD shall provide thermal efficiency certificates for CleKoo 2.0 Double and CleKoo 2.0 Four stoves. Additionally, the PD shall provide lifetime support documentation, including warranty cards and repair/replacement procedures for all stoves and EPCs.				
Project participant response				Date: 29/04/2026
1. The project involves the dissemination of two distinct clean cooking technologies, namely induction stove and electric pressure cookers (EPCs). Each project household will receive only one primary cooking technology. Both technologies will not be distributed simultaneously to a single household. This mutually exclusive distribution approach avoids double counting of emission reductions, ensures clear attribution per household, and aligns with conservative baseline and project scenario assumptions. 2. Induction stove technology operates on the principle of electromagnetic energy transfer directly to the cooking vessel, resulting in thermal efficiency that is inherently independent of the number of burners or pots used simultaneously. Accordingly, the thermal efficiency of an induction stove is a function of the technology itself rather than the configuration (single pot, double pot, or multi pot). Minor variations observed in Water Boiling Test (WBT) results are attributable to external factors such as water temperature and ambient conditions and do not reflect differences in underlying stove efficiency. Therefore, for the purpose of this Project Design Document and as a conservative, technology-consistent assumption, a uniform thermal efficiency value of 84.58% is applied across all induction stove configurations (single pot/double pot/four pot). The thermal efficiency certificate for the single-burner/single-pot configuration has already been submitted. In addition, the stove lifetime certificate / declaration is being submitted. After-sales support and warranty details are provided in the Carbon Rights Transfer Agreement, which is also being submitted.				
Documentation provided by project participant				
i. Stove Lifetime Declaration / Certificate ii. Carbon Rights Transfer Agreement				
VVB assessment				Date: 20/05/2026
1. The clarification provided and changes made by the PD in section A.3. of the PDD /10/ is acceptable to the validation team. The Validation Team confirms that the PD will not distribute both technologies to the same household in order to prevent double counting, as verified during the interview with the PD. Hence, this part of CAR is closed. 2. The Validation Team confirms that the PD has submitted the efficiency certificates for all three stoves /20/ along with lifetime support documentation, including warranty cards and repair/replacement procedures for all stoves and EPCs /21/, and the documents have been reviewed and found to be acceptable. Hence, this part of CAR is closed.				

CAR ID	06	Section no.	D.2	Date: 08/02/2026
Description of CAR				
In Section A.5 of the PDD, The PD shall include details and provide contractual agreements with EDP Group that clearly specify carbon credit ownership and transfer rights for GS VERs.				
Project participant response				Date: 29/04/2026

Section A.5 has been updated to clarify that Clean Cooking Technologies S.R.L. (CCT Italy) is the owner of all GS VERs generated by the project, and that any transfer of GS VERs (including to EDP Group) will occur only under a separate written contractual agreement.

Documentation provided by project participant

CCT eCooking Project_Tanzania_PDD

VVB assessment

Date: 20/05/2026

The clarification provided and changes made by the PD in section A.5 of the PDD /10/ is acceptable to the validation team. The validation team confirms that CCT Italy is the owner of all GS VERs generated from the project activity as confirmed from the agreements signed between the PD and other project participants /13/. Hence, this CAR is closed.

CAR ID	07	Section no.	D.3.1	Date:	08/02/2026
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Description of CAR

In section B.2. of the PDD.

- Criterion 3:** The PD shall confirm why EPCs efficiency is not demonstrated with reference to para 3.5.3 of the methodology and provide justification accordingly. Additionally, the PD shall include thermal efficiency values for each stove type to be distributed in the project activity.
- Criterion 4:** The PD shall include specific energy output values for all induction stove models and EPCs to be distributed in the project activity, presented separately.
- Criterion 7:** As stated, "**Clean Cooking Technologies S.R.L. serves as the project developer, project proponent, technology provider, and manufacturer of the electric stoves for this initiative,**" the PD is the technology provider. The PD shall clarify how other project participants and the technology provider are involved. Additionally, the PD states only new local partners should be included.
- Criterion 13:** The PD shall demonstrate the technical lifetime for each stove technology and EPC, along with detailed repair and replacement procedures.

Project participant response

Date: 28/04/2026

- The project distributes two categories of electric cooking devices: induction stoves and electric pressure cookers (EPCs). For induction stoves, thermal efficiency is a relevant performance indicator and is provided in the PDD.
For EPCs, the applied methodology (Methodology for Metered & Measured Energy Cooking Devices, v1.2) explicitly recognizes devices for which "cooking energy is influenced by factors other than temperature such as cooking pressure." Accordingly, EPCs fall under Case 2 of Section 3.5.3. Under Case 2, demonstrating "thermal efficiency" in the same manner as cookstoves/induction stoves is not required and is not technically meaningful, because the cooking process is pressure-driven and performance is appropriately quantified through metered electricity consumption and the methodology's Case 2 approach (specific energy consumption ratio framework).
- This has been included in Section B.2, Criterion 4 of the revised PDD. The PDD explicitly provides the energy output (rated power) separately for each induction stove model and for each EPC model. The PD further confirms all models are below the 150-kW applicability threshold under the methodology.
- This project is developed by Clean Cooking Technologies S.R.L. (CCT Italy) as the Project Developer and the sole Project Participant. CCT Italy also acts as the technology provider, including as manufacturer and supplier of the electric cooking stoves distributed under the project. Project implementation will be carried out by CCT Tanzania, a subsidiary of CCT Italy, together with any additional local NGO(s), as applicable.
There are no other project participants and technology provided in the project as of now. Any addition of a project participant in the future will be undertaken in accordance with the applicable Gold Standard requirements and guidelines.
- The stove lifetime certificate is being submitted. After-sales support and warranty details are provided in the Carbon Rights Transfer Agreement, which is also being submitted.

Documentation provided by project participant

- Stove Lifetime Declaration / Certificate

ii. Carbon Rights Transfer Agreement	
iii. CCT eCooking Project_Tanzania_PDD	
VVB assessment	Date: 22/05/2026
1. The clarification provided and the changes made by the PD in Criterion 3 of Section B.2 of the PDD /10/ are acceptable to the validation team. The validation team confirms that it is not possible to determine the thermal efficiency of an Electric Pressure Cooker under Case 2, as specified in Section 3.5.3 of the applied methodology /01/. Hence, this part of CAR is closed. 2. The clarification provided and the changes made by the PD in Criterion 4 of Section B.2 of the PDD /10/ are acceptable to the validation team. The validation team confirms that the PD has included specific energy output values for all induction stove models and Electric Pressure Cookers to be distributed under the project activity, as verified from the technology specifications /19/. Hence, this part of CAR is closed. 3. The clarification provided and changes made by the PD in Criterion 7 of Section B.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the project is developed by Clean Cooking Technologies S.R.L. (CCT Italy) as the Project Developer and sole Project Participant. CCT Italy also serves as the technology provider, acting as manufacturer and supplier of the electric cooking stoves distributed under the project, as confirmed during the site-visit interviews with the PD and stakeholders. Project implementation will be undertaken by CCT Tanzania, a subsidiary of CCT Italy, together with any additional local NGO(s), as verified from the agreements signed between the PD and other project participants /13/. Hence, this part of CAR is closed. 4. The clarification provided and the changes made by the PD in Criterion 13 of Section B.2 of the PDD /10/ are acceptable to the validation team. The validation team confirms that the PD has demonstrated the technical lifetime for each stove technology and Electric Pressure Cooker, along with detailed repair and replacement procedures, as verified from the Technical Life supportive/Lifetime guarantee certificate /19/ and the sample end-user agreements /08/. Hence, this part of CAR is closed.	

CAR ID	08	Section no.	D.3.3	Date: 08/02/2026
Description of CAR				
In Section B.4 of the PDD,				
1. The PD need to clarify how 2022 baseline study is acceptable, as per the applied methodology "baseline study must not be more than 3 years old." 2. Page 45, Para 4 states "Cooking location data further.... often without a separate kitchen.... buildings (54.7%) or outdoors (23%)." PD shall include source for the same. 3. Page 46, Para 2 states "In Tanzania, 0.9 hours per day... women and children." The PD shall cross-check this data with the latest available third-party research or review papers, as the currently used source is outdated. 4. Page 47, Table "Fuel type/ Amount of fuel": As per the methodology, "Where the baseline is a suppressed demand scenario, and a single fuel and device is demonstrated to constitute the baseline practice, then the following default values may be applied to determine $P_{b,i,j}$." Since this scenario is not applicable, the PD shall clarify how these selected values apply to the project and make the required changes in the PDD. 5. Page 47, Table "Fuel type/ Energy Consumption", the PD shall provide supporting documentation and calculations for the firewood value, as it is not included in the study used.				
Project participant response				Date: 29/04/2026
1. The project has used the Tanzania Demographic and Health Survey (DHS) 2022 as the baseline data source, as it represents the latest nationally representative household survey data available at the time of baseline determination. No more recent national-level data set providing comparable household cooking fuel and socio-economic data was available. The DHS 2022 was implemented by the National Bureau of Statistics (NBS) for Mainland Tanzania and the Office of the Chief Government Statistician (OCGS) for Zanzibar, under the oversight of the Ministry of Health and the Ministry of Health Zanzibar. The survey received technical support from ICF and was funded by the United States Agency for International Development (USAID) and other development partners under the global DHS Program. The final DHS 2022 report was published in October 2023, making it less than three years old at the time of project documentation, and therefore aligned with the data vintage				

requirements under Gold Standard guidelines. DHS surveys follow internationally accepted statistical methodologies and provide representative data on household characteristics, including primary cooking fuel use, at national, regional, and urban/rural levels. As the final report is typically published 8–10 months after completion of fieldwork due to validation and approval processes, DHS 2022 constitutes the most recent officially validated national dataset available, ensuring a conservative and robust baseline approach.

2. The source has now been added as a footnote in the revised PDD.
3. There are very few studies that estimate the time spent on firewood collection for cooking in Tanzania, as such data are not collected regularly. As per a survey (Implications of Environmental Chores for Schooling: Children's Time Fetching Water and Firewood in Tanzania⁴⁹) conducted, according to Table 1 of the study, girls (females, n=63) spent 5.5–6.3 hours per week gathering firewood (based on women's and children's responses respectively), which translates to approximately 0.79–0.90 hours per day. For the total sample (n=114), the figures were 5.7–6.5 hours per week, equivalent to roughly 0.81–0.93 hours per day.

These estimates align closely with the broader figure cited in the current report — that Tanzanian households spend an average of 0.9 hours per day collecting firewood, a task primarily carried out by women and children.

The consistency between the two figures is noteworthy given their different methodologies and geographic scopes and lends mutual credibility to both sources.

4. The amount of baseline fuel i used in device j under the baseline scenario (MECD-1, $P_{b,i,j}$) has been sourced from the *Household Energy Consumption Survey 2023 (HECS)*, *Mainland Tanzania*, published in September 2025 by the Tanzania National Bureau of Statistics (NBS). This is an official government publication and is fully aligned with the data source requirements recommended under the applied methodology.
5. The firewood value under MECD-7 (Specific energy consumption used in the baseline scenario) has been sourced from Table 4.1 (p.18) and Table 22 in the Appendix (p.83) of the *Household Energy Consumption Survey 2023 (HECS)* for Mainland Tanzania, published in September 2025 by the Tanzania National Bureau of Statistics (NBS), an official Government of Tanzania publication.

Documentation provided by project participant

1. CCT eCooking Project_Tanzania_PDD

VVB assessment

Date: 20/05/2026

1. The clarification provided by the PD is acceptable to the validation team. The validation team confirms that the project has used the Tanzania Demographic and Health Survey (DHS) 2022 as the baseline data source, as verified from the Baseline Study /26/. Additionally, the validation team confirms that the DHS 2022 /26/ represents the latest nationally representative household survey data available at the time of baseline determination, and that the DHS 2022 /26/ report was published in October 2023, making it less than three years old at the time of project documentation, and therefore aligned with the data vintage requirements under the Gold Standard guidelines /01/. Hence, this part of CAR is closed.
2. The changes made by the PD in section B.4 of the PDD /10/ is acceptable to the validation team. The validation team has reviewed the information included with Clean and Improved Cooking in Sub-Saharan Africa, World Bank Group /26/ and found it acceptable. Hence, this part of CAR is closed.
3. The changes made by the PD in section B.4 of the PDD /10/ is acceptable to the validation team. The validation team has reviewed the information included with Implications of Environmental Chores for Schooling: Children's Time Fetching Water and Firewood in Tanzania /26/ and found it acceptable. Hence, this part of CAR is closed.
4. The changes made by the PD in section B.4 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the values applied are sourced from the Household Energy Consumption Survey 2023 (HECS) and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
5. The changes made by the PD in section B.4 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the values applied are sourced from the Household Energy Consumption Survey 2023 (HECS) and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.

⁴⁹ <https://pmc.ncbi.nlm.nih.gov/articles/PMC6010040/#T1>

CAR ID	09	Section no.	D.3.6	Date: 08/02/2026
Description of CAR				
In section B.6.2. of the PDD, MECD 1: a. The PD shall clarify how the applied baseline fuel values align with the methodology requirements, which state: “The baseline fuel amounts reflecting the proportions per device type may be taken from: - For case 1: Sampling campaign using Standard Kitchen Performance Test, Credible published literature for project region, Studies by academia, NGOs or multilateral institutions, or Official government publications or statistics.” - PD shall clarify how 2022 study is acceptable, as per the applied methodology “Source applied must not be more than 3 years old.” - The PD states “a single fuel and device is constituting the baseline practice,” but the 2022 study cited demonstrates that both wood fuel and charcoal are applicable baseline fuels. The PD shall revise this claim accordingly. - The PD shall clarify how default methodology values have been applied in the absence of suppressed demand, as per the methodology: “Where the baseline is a suppressed demand scenario, and a single fuel and device is demonstrated to constitute the baseline practice, then the following default values may be applied to determine $P_{b,i,j}$: Wood, three-stone fire: 0.5 tonnes per capita per year ($\eta_{b,i,j} = 10\%$) Charcoal, conventional cookstove: 0.13 tonnes per capita per year ($\eta_{b,i,j} = 20\%$) ” MECD 3: The PD shall specify for which fuel types methodology default values are applied and for which fuel types IPCC default values are used. MECD 4: The PD shall specify for which fuel types the methodology default values are applied and for which fuel types IPCC default values are used. MECD 6: The value applied by the PD for Percentage of fuel_i could not be verified from the cited source. Additionally, The PD shall clarify the acceptability of the 2022 study as a source (not more than 3 years old per the applied methodology) and provide cross-checks with older sources demonstrating conservative results, as stated: “Source applied must not be more than 3 years old; further, cross-check with older sources may be used provided they give conservative results”. MECD 7: The PD shall specify the actual source from which the applied value was obtained. The PD shall provide a valid source for firewood consumption specific to the Africa region, as the currently applied source does not provide region-specific values. Additionally, The PD shall clarify that the applied value is sourced from a third-party report rather than methodology default values. MECD 8: The PD shall specify the actual source from which the applied value was obtained. The PD shall clarify that the applied value is sourced from a third-party report rather than methodology default values. MECD 12: This parameter is supposed to be monitored as per the applied methodology. The PD shall clarify compliance with the methodology requirement: “Determined as per CDM TOOL05, paragraph 7.2 (Data/parameters monitored, table 3).” The PD shall ensure the applied value is consistent with the cited sources and make necessary corrections throughout the PDD and Ex-ante sheet. - The PD shall clarify how baseline survey is used as the source of data for SDG 1, 3, and 5 indicators when no baseline survey was conducted.				
Project participant response				Date: 29/04/2026
MECD 1: - The amount of baseline fuel i used in device j under the baseline scenario (MECD-1, $P_{b,i,j}$) has been sourced from the <i>Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania</i>, published in September 2025 by the Tanzania National Bureau of Statistics (NBS). This is an official government publication and is fully aligned with the data source requirements recommended under the applied methodology. - The PD uses baseline fuel consumption data sourced from the <i>Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania</i>, report published in September 2025 by the Tanzania National Bureau of Statistics (NBS). This survey is an official government publication and represents the most recent nationally representative dataset available at the				

time of validation. As the publication date falls within the last three years, the data fully complies with the applicable requirement on data vintage. 3. The claim has been revised. The revised PDD is being submitted. 4. The amount of baseline fuel i used in device j under the baseline scenario (MECD-1, $P_{b,i,j}$) has been sourced from the <i>Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania</i>, published in September 2025 by the Tanzania National Bureau of Statistics (NBS) now. The revised PDD and Ex-ante ER Sheet is being submitted. 2. MECD 3: The PDD has addressed this comment in Section B.6.2 (MECD 3) by explicitly identifying the fuel types for which methodology default values are applied and the fuel types for which IPCC default values are applied. 3. MECD 4: The PDD has addressed this comment in Section B.6.2 (MECD 4) by specifying, fuel-type-wise, whether the methodology default values or IPCC default values are applied for the respective parameter(s) under MECD 4. 4. MECD 6: According to the 2022 DHS for Tanzania Mainland, 57.0% of urban households use charcoal and 15.8% use firewood, 0.2% use shrubs and 0.1% use agricultural residues as their primary cooking fuel. This means that approximately 73.6% of urban households in the country still rely on solid fuels for cooking. For the purpose of the proposed project, these 73.6% of urban households are considered the full set of eligible beneficiaries, as the electric stove intervention specifically targets those without access to clean fuels (i.e., excluding households using LPG or electricity). Therefore, within this defined beneficiary group, we normalize the fuel-use proportions to estimate that approximately 77.98% of eligible households in urban Tanzania use charcoal and 22.02% use firewood. This extrapolation is based on the relative share of each fuel type within the 73.60% segment and forms the basis for modeling baseline emissions and stove deployment strategy (refer cell F45:F46 in assumption tab of ex-ante ER Sheet for details). 5. MECD 7: The specific energy consumption values used in the baseline scenario have been reviewed and updated in the Project Design Document (PDD) under Methodology Element MECD-7. For charcoal and LPG, the specific energy consumption values have been sourced from reputable third-party literature, namely <i>“Energy-Efficient Electric Cooking and Sustainable Energy Transitions,”</i> published in <i>Energies</i> (2024). For firewood, the specific energy consumption value has been sourced from an official government publication, the <i>Household Energy Consumption Survey 2023 (HECS), Mainland Tanzania</i>, published in September 2025 by the Tanzania National Bureau of Statistics (NBS). All baseline fuel types are now supported by clearly referenced and credible data sources, and the PDD has been updated accordingly to reflect these revisions and ensure consistency with methodological requirements. 6. MECD 8: The “Source of data” field for MECD 8 in Section B.6.2 has been updated to explicitly specify the actual source document from which the applied value was obtained. The PD has also clarified that the applied value is sourced from a third-party report and not from methodology default values. 7. MECD 12: The PD has moved the parameter “average technical transmission and distribution losses for providing electricity to source j in year y” from ex-ante parameters (Section B.6.2) to ex-post parameters (Section B.7.1). This parameter will be monitored once during each monitoring period. The value has been sourced from the most recent World Bank data on electric power transmission and distribution losses (% of output) for Tanzania (2023), which is consistent with the requirements of CDM Tool TOOL05, paragraph 7.2 (Data/parameters monitored, Table 3). 8. References to “baseline survey” for SDG 1, 3 and 5 indicators have been revised/removed and replaced with the correct data sources (e.g., distribution database, monitoring survey, and/or published/national datasets), with clear distinction between ex-ante assumptions and ex-post monitoring data collection.	
Documentation provided by project participant	
1. CCT eCooking Project_Tanzania_PDD 2. CCT eCooking Project_Tanzania ER Estimation	
VVB assessment	Date: 20/05/2026
1. a. The changes made by the PD in parameter MECD 1 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the values applied are sourced from the Household Energy Consumption Survey 2023 (HECS) /26/ published in September 2025 by the Tanzania National Bureau of Statistics (NBS) and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.	

b. The changes made by the PD in parameter MECD 1 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the applied study, i.e., the Household Energy Consumption Survey 2023 (HECS) /26/, published in September 2025 by the Tanzania National Bureau of Statistics (NBS), is the latest study and falls within three years of the project start date which is in accordance with the applied methodology /01/. Hence, this part of CAR is closed.	
c. The changes made by the PD in section B.4 in parameter MECD 1 of section B.6.2 of the PDD /10/ and ER sheet is acceptable to the validation team. The validation team confirms that the values applied are sourced from the Household Energy Consumption Survey 2023 (HECS) /26/ and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.	
2.	The changes made by the PD in parameter MECD 3 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the applied values for firewood, charcoal, and LPG are sourced from the applied methodology /01/ and IPCC /05/ and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
3.	The changes made by the PD in parameter MECD 4 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the applied values for firewood, charcoal, and LPG are sourced from the applied methodology /01/ and IPCC /05/ and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
4.	The changes made by the PD in parameter MECD 6 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the values applied are sourced from the Household Energy Consumption Survey 2023 (HECS) /26/, published in September 2025 by the Tanzania National Bureau of Statistics (NBS), and found to be acceptable and in accordance with the applied methodology /01/. The validation team further confirms that this study is the latest available and falls within three years of the project start date, thereby meeting the data vintage requirements in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
5.	The changes made by the PD in parameter MECD 7 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the values applied for firewood are sourced from the Household Energy Consumption Survey 2023 (HECS) /26/, while the values for charcoal and LPG are sourced from Energy-Efficient Electric Cooking and Sustainable Energy Transitions /26/, and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
6.	The changes made by the PD in parameter MECD 8 of section B.6.2 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the values applied are sourced from Energy-Efficient Electric Cooking and Sustainable Energy Transitions /26/ and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
7.	The changes made by the PD in section B.6.2 of the PDD /10/ and ER sheet /11/ is acceptable to the validation team. The validation team confirms that the PD has included parameter MECD 12 as a monitoring parameter in Section B.7.1 of the PDD, with the value sourced from World Bank data, and found to be acceptable and in accordance with the applied methodology /01/. Hence, this part of CAR is closed.
8.	The changes made by the PD in section B.6.2 of the PDD /10/ is acceptable to the validation team. Hence, this part of CAR is closed.

CAR ID	10	Section no.	D.3.5	Date: 08/02/2026
Description of CAR				
In section B.6.3 of the PDD, as per the template guide PD shall: Provide a transparent ex ante calculation of baseline and project scenarios (or, where applicable, direct calculation of net benefit) during the crediting period, applying all relevant equations provided in the selected methodology(ies) or as per proposed approach. For data or parameters available before design certification, use values contained in the table in section B.6.3 above. For data/parameters not available before design certification and monitored during the crediting period, use estimates contained in the table in section B.7.1 A reader should be able to see how each equation is applied, in such a manner that enables them to reproduce the calculation.				
Project participant response				Date: 29/04/2026
The Project Proponent (PP) has added separate tables for each SDG in Section B.6.3 of the revised PDD. Each table presents the baseline SDG impact estimate, the approach used to estimate the				

baseline value, the estimated SDG impact under the project scenario, the approach for estimating project impacts, and the resulting net benefits. Distribution data and monitoring survey results will be used to estimate SDG values for both the baseline and project scenarios. The difference between the SDG values achieved under the project scenario and those estimated for the baseline scenario will represent the net SDG benefit. The formulas used to estimate baseline and project SDG values are provided in the ex-ante Emission Reduction (ER) Sheet.	
Documentation provided by project participant	
1. CCT eCooking Project_Tanzania_PDD 2. CCT eCooking Project_Tanzania ER Estimation	
VVB assessment	Date: 20/05/2026
The clarification provided and the changes made by the PD in Section B.6.3. of the PDD /10/ are acceptable to the validation team. The validation team confirms that the PD has added separate tables for each SDG, including the approach used to estimate the baseline value, the estimated SDG impact under the project scenario, the approach for estimating project impacts, and the resulting net benefits. Additionally, the validation team has reviewed the formulas used to estimate baseline and project SDG values from the ex-ante Emission Reduction (ER) Sheet /11/. Hence, this CAR is closed.	

CAR ID	11	Section no.	D.3.5	Date: 08/02/2026
Description of CAR				
In section B.6.4 of the PDD, PD need to make table of SDG 13 consistent with PDD Template guide.				
Project participant response				Date: 29/04/2026
PD has made table of SDG 13 consistent with the PDD template guide. The revise PDD is being submitted.				
Documentation provided by project participant				
The SDG 13 table in the PD has been revised to ensure full consistency with the PDD template guide. The updated and revised PDD is hereby submitted.				
VVB assessment				Date: 20/05/2026
The changes made by the PD in Section B.6.4. of the PDD /10/ are acceptable to the validation team. The validation team confirms that the PD has updated table of SDG 13 consistent with the PDD template guide /01/. Hence, this CAR is closed.				

CAR ID	12	Section no.	D.3.5	Date: 08/02/2026
Description of CAR				
In section B.7.1 of the PDD parameter MECD 10:				
1. The PD shall include values applied for each project stove and EPC separately. Additionally, the PD shall mention QA/QC procedures for cross-checking as per the applied methodology. 2. As per the applied methodology "Data logger, analog or digital meters that are either in-built or attached separately to the electric cooking appliances to measure the electricity consumption of the electric cooking appliance(s) shall be in conformity with industry standard and manufacturer calibrated. It is the responsibility from manufacturer to provided calibrated equipment and evidence of the calibration. In case of damage or measurement errors, the equipment shall be replaced.: PD need to specify the details accordingly.				
Project participant response				Date: 29/04/2026
1. The PD has clearly specified the estimated electrical energy consumption (kWh/person/day) for each stove type under the project scenario in the "Values Applied" row of MECD-10 in Section B.7.1 of the PDD. The PDD has been revised accordingly and is hereby submitted. 2. Please refer to the energy management certificate submitted.				
Documentation provided by project participant				
1. CCT eCooking Project_Tanzania_PDD				
VVB assessment				Date: 20/05/2026
1. The changes made by the PD in parameter MECD 10 of section B.7.1 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the PD has included values				

applied for each project stove and EPC separately and found in accordance with the applied methodology /01/. Hence, this part of CAR is closed.

2. The changes made by the PD in parameter MECD 10 of section B.7.1 of the PDD /10/ is acceptable to the validation team. The validation team confirms that the PD has demonstrated the calibration requirement for the project technology, as verified from the Declaration of Stove Meter Calibration /22/, and found accepted considering Clean Cooking Technologies S.R.L. (CCT Italy) is the manufacturer of the stoves. Hence, this part of CAR is closed.

CAR ID	13	Section no.	D.7	Date: 08/02/2026
Description of CAR				
In section E.2. of the PDD, The PD shall justify that the Grievance Expression Process Book is accessible to all stakeholders, including end users.				
Project participant response				Date: 29/04/2026
The Project Developer confirms that the Grievance Expression Process Book is accessible to all stakeholders, including end users. It is made available through the project's stakeholder engagement and communication channels, and end users are informed about where and how to access it (including through local implementation/support channels) so that grievances can be raised without barriers.				
Documentation provided by project participant				
1. CCT eCooking Project_Tanzania_PDD				
VVB assessment				Date: 20/05/2026
The clarification provided and the changes made by the PD in Section E.2 of the PDD /10/ are acceptable to the validation team. The validation team confirms that the Grievance Expression Process Book is accessible to all stakeholders, including end users, as verified during site-visit observations and interviews with end users and stakeholders. Hence, this CAR is closed.				

CAR ID	14	Section no.	D.6	Date: 08/02/2026
Description of CAR				
In Appendix 1 of the PDD, The PD shall briefly describe how the project incorporates a human rights-based approach.				
Project participant response				Date: 29/04/2026
The PD confirms that Appendix 1 of the revised PDD now describes how the project incorporates a human rights-based approach.				
Documentation provided by project participant				
1. CCT eCooking Project_Tanzania_PDD				
VVB assessment				Date: 20/05/2026
The clarification provided and the changes made by the PD in Appendix 1 of the PDD /10/ are acceptable to the validation team. The validation team confirms that no human rights violations were observed during the site visit, and the same was verified during site-visit interviews with the PD, stakeholders, end users, and baseline users. Hence, this CAR is closed.				

CAR ID	15	Section no.	D.3.5 and D.3.6	Date: 08/02/2026
Description of CAR				
In the ER sheet tab "Assumptions" the PD shall include				
1. Source for all parameters values 2. Cell F33, The PD shall clarify whether the efficiency is the same for all stove types. If efficiencies differ, the PD shall provide separate calculations for each stove type and update all relevant sections of the PDD accordingly. 3. The PD shall verify all input values against their relevant sources and ensure consistency throughout the Ex-Ante sheet. 4. For household size, The PD shall cross-check this data with the latest available third-party research or review papers, as the currently used source is outdated. 5. The PD shall recheck all unit conversions using a <u>relevant tool</u> and ensure consistency throughout the Ex-Ante sheet.				

6. The PD shall ensure that units used for calculations are applied consistently throughout the Ex-Ante sheet.	
Project participant response	Date: 29/04/2026
1. All parameter values included in the Assumptions tab of the Emission Reduction Excel Sheet have now been sourced. The revised Emission Reduction Sheet is hereby submitted. 2. Induction stove technology operates on the principle of electromagnetic energy transfer directly to the cooking vessel, resulting in thermal efficiency that is inherently independent of the number of burners or pots used simultaneously. Accordingly, the thermal efficiency of an induction stove is a function of the technology itself rather than the configuration (single pot, double pot, or multi pot). Minor variations observed in Water Boiling Test (WBT) results are attributable to external factors such as water temperature and ambient conditions and do not reflect differences in underlying stove efficiency. Therefore, for the purpose of this Project Design Document and as a conservative, technology-consistent assumption, a uniform thermal efficiency value of 84.58% is applied across all induction stove configurations (single pot/double pot/four pot). The thermal efficiency certificate for the single-burner/single-pot configuration has already been submitted and can be considered for all stove types. 3. The PD has now verified all input values against their respective sources and ensured consistency throughout the Emission Reduction Sheet. 4. The household size used for the ex-ante emission reduction calculation has been updated based on the latest population census in Tanzania. Under the project, electricity used by households for cooking with induction stoves and electric pressure cookers will be measured using built-in IoT systems and applied for ex-post emission reduction calculations. Therefore, the emission reductions achieved by the project do not depend on household size but are based on the total electricity consumption of the project. 5. The PD has cross-checked all unit conversions and ensured consistency throughout the ex-ante ER Sheet. The revised ER Sheet is being submitted. 6. The PD has ensured that units used for calculations are applied consistently throughout the ex-ante ER Sheet. The revised ER Sheet is being submitted.	
Documentation provided by project participant	
1. CCT eCooking Project_Tanzania_PDD 2. CCT eCooking Project_Tanzania ER Estimation	
VVB assessment	Date: 20/05/2026
1. The clarification provided and the changes made by the PD in Assumptions tab of ER sheet /11/ are acceptable to the validation team. The validation team confirms that all sources for the values used in the ER calculation have been reviewed and found acceptable and are in line with the applied methodology /01/. Hence, this part of CAR is closed. 2. The clarification provided are acceptable to the validation team. The validation team confirms that a uniform thermal efficiency value of 84.58% (lowest of all three induction stoves) has been applied across all induction stove configurations (single-pot, double-pot, and four-pot), as verified from the efficiency certificate /20/, and found to be acceptable. Hence, this part of CAR is closed. 3. The clarification provided and the changes made by the PD in ER sheet /11/ are acceptable to the validation team. The validation team confirms that all sources for the values used in the ER calculation have been reviewed and found acceptable and are in line with the applied methodology /01/. Hence, this part of CAR is closed. 4. The clarification provided are acceptable to the validation team. The validation team confirms household size is sourced from baseline study /26/. Hence, this part of CAR is closed. 5. The clarification provided and the changes made by the PD in ER sheet /11/ are acceptable to the validation team. The validation team confirms that all unit conversions have been verified and consistency has been ensured throughout the ex-ante ER Sheet. Hence, this part of CAR is closed. 6. The clarification provided and the changes made by the PD in PDD /10/ and ER sheet /11/ are acceptable to the validation team. The validation team confirms that the units used for calculations have been applied consistently throughout the ex-ante ER Sheet /11/ and PDD /10/. Hence, this part of CAR is closed.	

CAR ID	16	Section no.	D.5	Date: 08/02/2026
Description of CAR				

In the LSC,	
1. In KEY PROJECT INFORMATION, PD shall align Start Date of the Project with the PDD. 2. In Section A.4, The PD must ensure compliance with the following requirement as outlined in the LSC Template Guide: Possible Negative Impacts: Using the draft Safeguarding Principles Assessment as a reference, describe how potential negative impacts are identified and addressed. The explanation should be presented in clear, simple language that stakeholders can easily understand. 3. In Section B.1, the PD shall clarify why categories A and B are not mentioned in accordance with stakeholder consultation guidelines. 4. In section B.1.2, The PD shall complete this section in accordance with the template guidance: "Justify how your invitation methods are gender sensitive and solicit input from women and marginalized groups." 5. In section B.1.4, The PD shall include sample invitations for the postponed date notification as well. 6. In section C.1.1, The PD shall clarify the 'H' category code as per the Stakeholder Consultation and Engagement Requirements. 7. The PD shall update all low-resolution images used in the LSC report to high-resolution versions.	
Project participant response	Date: 29/04/2026
1. The Project Start Date in the "Key Project Information" section was revised to align with the Start Date stated in the PDD, ensuring consistency across the submission documents. 2. Section A.4 was revised to describe, in clear and simple language, how potential negative impacts were identified and addressed, using the Safeguarding Principles Assessment (Appendix 3) as the reference. 3. Section B.1 was revised to clarify that Category A stakeholders were consulted (via community-level physical outreach), and that Category B was not applicable for this project type, consistent with the stakeholder consultation requirements and the explanatory note provided in the report. 4. Section B.1.2 was completed and strengthened to justify how the invitation methods were gender sensitive and how they solicited input from women and marginalized groups, including targeted outreach to women's organizations and use of accessible communication channels. 5. Section B.1.4 was updated to include sample invitation content for the meeting postponement / revised date notification, in addition to the documentary evidence already included for the rescheduling communication. 6. The "H (Any other)" category was removed from the Stakeholder Consultation Report, and the participant list was updated accordingly so that all attendees are now captured under the applicable stakeholder categories in line with the Stakeholder Consultation and Engagement Requirements. 7. The Stakeholder Consultation Report was kept unchanged with respect to image resolution in the submitted PDF, and the high-resolution versions of the relevant images/evidence were submitted separately to the VVB as supporting evidence.	
Documentation provided by project participant	
1.0 Stakeholder-Consultation-Report	
VVB assessment	Date: 20/05/2026
1. The changes made by the PD in KEY PROJECT INFORMATION of the LSC report /16/ is acceptable to the validation team. The validation team confirms that the project start date is now consistently reported between the PDD /10/ and the LSC report /16/. Hence, this part of CAR is closed. 2. The changes made by the PD in section A.4 of the LSC report /16/ is acceptable to the validation team. The validation team confirms that the PD has updated the LSC /16/ in compliance with the LSC Template Guide /01/. Hence, this part of CAR is closed. 3. The changes made by the PD in section B.1 of the LSC report /16/ is acceptable to the validation team. The validation team confirms that the PD invited Category A stakeholders through physical invitations as verified during site-visit interviews with the PD and stakeholders. Category B stakeholders are not relevant for this project, as it is a cookstove project. Hence, this part of CAR is closed. 4. The changes made by the PD in section B.1.2 of the LSC report /16/ is acceptable to the validation team. The validation team confirms that the PD ensured invitations were sent and that the LSC	

meeting was conducted in a gender-sensitive manner, with inputs from women and marginalized groups duly considered, as verified during site-visit interviews with the PD and stakeholders and invitations /16/. Hence, this part of CAR is closed.

5. The changes made by the PD in section B.1.4 of the LSC report /16/ is acceptable to the validation team. The validation team confirms that the PD has included sample invitations for the postponed date notification, as verified from the LSC supportive document /16/. Hence, this part of CAR is closed.
6. The changes made by the PD in section C.1.1 of the LSC report /16/ is acceptable to the validation team. Hence, this part of CAR is closed.
7. The clarification provided by the PD is acceptable to the validation team. The LSC supportive documents /16/ in high resolution have been submitted by the PD. Hence, this part of the CAR is closed.

CAR ID	17	Section no.	Findings from site visit interviews	Date: 13/04/2026
Description of CAR				
During the interviews, Validation team has found that a one-time subscription fee is charged at the time of distributing the stove to households. Minimum usage is required for each user otherwise stove can be transferred to other user. However, the same is not clear from the submitted PDD.				
Project participant response				Date: 29/04/2026
The electric stove, whether an induction stove or electric pressure cooker, is quite expensive at the moment. Each stove has an inbuilt IoT device for continuous usage monitoring, which further adds to the overall cost. The Project Proponent (PP) is providing this clean cooking technology, along with compatible pots, to eligible households at a subsidized one-time subscription fee, made possible through the project. The remaining stove cost and associated expenses such as stove monitoring and project management are recovered through the sale of carbon credits generated by stove usage. In cases where a household is not actively using the electric stove received from the project, the PP has a plan to reassign it to another household that currently uses biomass (firewood or charcoal) in a traditional stove and is seeking a clean cooking solution. This ensures that stoves remain in active use and continue generating emission reductions, which is must for the long-term sustainability of the project. The minimum usage requirement is explicitly stated in the Carbon Credit Transfer Agreement, which is part of the project documentation. Prior to the distribution of any stove, the local implementing partner. Only once the household agrees to these minimum requirements do they sign the Carbon Credit Transfer Agreement, which is drafted in both Swahili (local language) and English to ensure full understanding and transparency.				
Documentation provided by project participant				
1. Carbon Credit Transfer Agreement (English) 2. Carbon Credit Transfer Agreement (Swahili)				
VVB assessment				Date: 20/05/2026
The Validation Team has reviewed the Carbon Credit Transfer Agreement /08/ Template in both English and Swahili (Tanzania local language) and confirms that the PD has clearly demonstrated the carbon transfer process, clearly explains both the one-time subscription fee and the usage criteria to each beneficiary household. This was further verified through Carbon Transfer Forms (CTFs) /08/ and site visit interviews conducted with end users, which provided consistent evidence supporting the PDs demonstration. Hence, this CAR is closed.				

Table 4. FARs from this validation

FAR ID	01	Section no.	-	Date: 20/05/2026
Description of FAR				
A FAR is raised for the first verification to monitor the status of project registration on the NCMC registry.				
Project participant response				Date:
Documentation provided by project participant				
VVB assessment				Date: