# GOLD STANDARD VALIDATION REPORT

For: Offgridsun

# REPORT NO.: GS11730\_VAL



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## Abbreviations used in this Report

CAR	Corrective Action Request
CDM	Clean Development Mechanism
CL	Clarification request
CO2	Carbon dioxide
CO2e	Carbon dioxide equivalent
DNA	Designated National Authority
DR	Document Review
EF	Emission Factor
ERPA	Emission Reduction Purchase Agreement
ER	Emission Reductions
EIA	Environmental Impact Assessment
FAR	Forward Action Request
GWP	Global Warming Potential
GS	Gold Standard
GHG	Greenhouse gas(es)
IPCC	Intergovernmental Panel on Climate Change
IRR	Internal Rate of Return
kWh	Kilo Watt Hour
MW	Mega Watt
NC	Non-Conformity
NCV	Net Calorific Value
NGO	Non-governmental Organisation
ODA	Official Development Assistance
PDD	Project Design Document
PD	Project Developer
tCO2e	Tonnes of CO2 equivalents
UNFCCC	United Nations Framework Convention on Climate Change
BH	Borehole
GS4GG	Gold Standard for the Global Goals
ICS	Improved Cookstove
MWh	MegaWattHour
CH4	Methane
MR	Monitoring Report
N2O	Nitrous Oxide
POA	Programme of Activity
SGP	Safeguarding Principles
SDG	Sustainable Development Goal
SC	SustainCERT

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TPDDTE C	Technologies and Practices to Displace Decentralised Thermal Energy Consumption
UN	United Nations
VVB	Validation and Verification Body
VER	Verified Emission Reduction
VPA	Voluntary Project Activity

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#### 1 OBJECTIVE AND CRITERIA

#### 1.1 Objective

Gold Standard projects must undergo independent validation/verification of emission reductions and overall compliance with Gold Standard rules as the basis for issuance of Gold Standard Voluntary Emission Reductions (GS VERs).

The objectives of this validation are to determine if the projected GHG statements and other reporting information are likely to be achieved by the implementation of the project and in compliance with the criteria defined in Gold Standard rules.

This report details the objectives, scope, criteria, methodology and findings of this process and a final opinion.

The Gold Standard requires that the final version of this report is published in the public domain. The client to whom this report is addressed therefore acknowledges that the final version of this report will be published unless SustainCERT (SC) are informed in writing within 1 business day following issuance of the final version to the client.

#### 1.2 SCOPE

GHG related activity	Validation
Project Title (s)	Chipangali Safe Water Access Project
Project ID (s) (i.e.: GS-ID)	GS11730
GS Project Type	Safe Drinking water
PoA Title (if applicable)	N/A
POA ID (if applicable)	N/A
Responsible Party	Offgridsun

The scope of validation<sup>1</sup> covers the emissions reductions project prepared in accordance with the Project Design Document<sup>2</sup> of the GS ID (s) listed above.

Consistent with Gold Standard requirements, only the following GHGs are considered within the scope of the assessment:  $CO_2 CH_4 N_2O$ .

#### 2 TEAM COMPOSITION

Validation/Verification Team

<sup>&</sup>lt;sup>2</sup> Project Design Document may also refer to VPA-DD (the Design document for a VPA).

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<sup>&</sup>lt;sup>1</sup> The term validation is used synonymously with the term inclusion (the process of validating if a project is eligible within a programme of activities). The Protocol in this report is specially designed to accommodate these analogous but slightly different assessments.



Name	Qualification	Coverage of sectoral/technical area	Host country experience	Conducted Site visit / Remote Audit
Nayan Jyoti Deka	TL	☑ (All)		$\checkmark$
Sandeep Kanda	Expert	☑ (Energy)		

Independent Review team and approver

Name	Role	Coverage of technical area
Indrapal Parmar	Independent R	⊠ (All)
Shivraj Sharma	Approver	N/A

#### 3 PROJECT INFORMATION

#### 3.1 Monitoring Period

Start of Monitoring Period	N/A
End of Monitoring period	N/A
Total Emission Reductions	N/A
Total SDG x	N/A
Total SDG y	N/A
Date of MR Report	N/A
Version of MR Report	N/A

#### 3.2 Annual projections

Annual Average Emission Reductions (SDG 13)	10,000 tCO2
Total SDG 15	7,256 Tonnes/y
Total SDG 3	Number of households that observed reduction in PM2.5 & carbon monoxide (CO) concentration reductions - 100 Percentage
Total SDG 5	Proportion of households who perceive saved time from collecting wood and water boiling - 100 Percentage
Total SDG 6	Amount of safe water served at the required quality by National standards. – 44,138, 400 L
	Increased awareness due to annual Water hygiene campaigns - Minimum one campaign per year
Total SDG 8	Number of temporary and permanent jobs created - 8 jobs created Number

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#### 4 VERIFICATION/VALIDATION OPINION

Unmodified Opinion		
Modified Opinion reasons below)	(see	
Adverse Opinion reasons yeahbelow)	(see	
Disclaimer of Opinion		

The project representative to whom this report is addressed is responsible for the preparation and fair presentation of GHG and other reporting information in accordance with Gold Standard rules.

SustainCERT is responsible for expressing this validation opinion on the GHG and other reporting information based on the evidence gathering procedures documented in this report. The GHG validation was planned and carried out in accordance with ISO 14064-3 (Specification with guidance for the verification and validation of greenhouse gas statements) to provide a reasonable level of assurance that the information is accurate.

Reason for Modified Opinion (if applicable)	N/A
Reason for Adverse Opinion (if applicable)	N/A
Reason for Disclaimer (not issuing) of Opinion (if applicable)	N/A

#### **Conclusion:**

Considering the following information and the one provided in this report:

GHG-related activity	Validation
Project Title (s)	Chipangali Safe Water Access Project
Responsible Party	Offgridsun
Start of Monitoring Period	N/A
End of Monitoring period	N/A
Date of PDD	12/09/2023
Version of PDD	3.1

Verification period is equal to the monitoring star and end dates mentioned above.

SustainCERT (SC) concludes that:

Validation

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The review of the project documentation and the subsequent follow-up interviews have provided SC with sufficient evidence for concluding that the project fulfils with all stated criteria. In our opinion, the project meets all relevant requirements for this GHG scheme, the annual projections have been prepared in accordance with the validation criteria and are materially correct and fair representation of likely GHG information and other reporting information. The validated baseline (continuation of inefficient cooking) has been determined in line with the methodology and Gold Standard rules. The emission reductions attributable to the project are confirmed as additional to any that would occur in the absence of the project activity. It is important to note that actual GHG emission reduction results may differ from GHG emission reduction projections as the estimate is based on assumptions that may change in the future. Therefore, SC recommends the validation of the project.

Year	Baseline emissions or removals (tCO <sub>2</sub> e)	Project emissions or removals (tCO <sub>2</sub> e)	Leakage emissions (tCO2e)	Net GHG emission reductions or removals (tCO <sub>2</sub> e)
01/07/2024- 31/12/2024	5,320	0	0	5,320
2025	10,639	0	0	10,639
2026	10,639	0	0	10,639
2027	10,639	0	0	10,639
2028	10,639	0	0	10,639
01/01/2029- 30/06/2029	5,320	0	0	5,320
Average	10,000	0	0	10,000
Total	53,200	0	0	53,200

Estimated GHG emission reductions and removals:

The conclusion is reached based on the following criteria:

The criteria for this validation are defined in the versions of the following documents stated in the project design document (PDD)

- GS4GG Principles & Requirements
- GS4GG Stakeholder Consultation Requirements & Guidelines
- GS4GG Safeguarding Principles & Requirements
- GS4GG GHG-Emissions-Reduction-Sequestration-Product-Requirements

**Optional Requirements** 

- 100-GS4GG-Programme-of-Activity-Requirements-
- Applied methodology GS Methodology for Emissions Reduction from Safe Drinking Water Supply (v 1.0)
- Add if applicable.

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Authorised Signatory Name:	Shivraj Sharma, Director – Validation & Verification
Signature	DocuSigned by: Slivraj Sliarma 4E3DA74DBE7A462
Date of this report approval	28/09/2023
Version of this report	01
Office Location	Luxembourg

The verification / validation of the GHG statement was conducted in accordance with ISO 14064-3 and corresponding GHG scheme.

The responsible party is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria.

#### 5 METHODOLOGY

#### 5.1 Desk Review

An initial validation documentary review was conducted by SustainCERT involving:

- An assessment of the data and information presented in the PDD to determine if the GS project activity meets relevant GS requirements
- An assessment of whether the chosen methodology (see Criteria above) has been applied correctly, including the baseline selection and monitoring plan
- An assessment of the additionality argument of the project activity against relevant GS rules

A Protocol was used to assess each requirement during the execution of assessment activities and is explained below. The completed Protocol is available in section 5.5 below.

#### 5.2 Example Protocol

The name/section of the reporting template is indicated in the top row					
Туре	Ref	Rule	Assessment Question	Findings/Comm ents	Conc.
V or I This indicates the type of assessment. V = validation/verifica tion I = inclusion (a streamlined validation for VPAs)	Details the section and section number in the reporting template (PDD or MR)	Provides a reference to the GS rule	Question used to determine compliance with the rule, or if the rule is applicable	Used to track clarifications or corrective actions raised when the assessment question does not immediately lead to a conclusion.	Conclusion of each assessment question.

Whenever the assessment question does not immediately lead to a conclusion, clarifications (CLs) and corrective action requests (CARs) are issued as Findings/Comments against the relevant Rule and Assessment Question.

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If a Findings is closed, it will result in a conclusion of either OK, a Forward Action Request (FAR) or an Observation (OBS). If a Finding cannot be closed and a requirement cannot be shown to be met, an NC (Non-conformity) is issued.

OK, CARs, CLs, FARs, OBS and NC are further explained below:

- OK issued when a requirement has been met.
- CAR (Corrective Action Request) issued if one of the following occurs:
  - There is a risk that emission reductions cannot be monitored or calculated
  - Mistakes have been made in applying assumptions, data or calculations of emission reductions that will impact the quantity of emission reductions
  - Gold Standard requirements have not been shown to be met
- Clarification request (CL) issued if information is insufficient or not clear enough to determine whether a requirement has been met
- Forward Action Requests (FARs) issued to highlight issues related to implementation that require review at the next verification
- Observations (OBS) issued where there may be a possible future non-conformity against a requirement.
- Non-Conformity (NC) issued if a requirement has not been met and cannot be met.

To demonstrate transparency, all Findings (along with the relevant Rule and Assessment Question) are transferred to a separate Review Feedback table (shown below) to provide a written record of how they are discussed and how the conclusion was reached. A transcript of the Review Feedback is available as Appendix 1, which also includes a list of the Supporting Document (s) provided and Reviewed.

#### 5.3 Example Review Feedback

Rule	Assessment Question	Findings/Comments	Developer Response
Copied from the Protocol	Copied from the Protocol	Copied from the Protocol, the nature (and number – e.g. CAR 1/CAR 2) of the Finding is included for traceability	The response should include an explanation of what evidence has been provided in response to the Finding

#### 5.4 Site Visit

A site visit is chosen on the basis of risk assessment.

No physical site visit required, since this is a GS micro scale project and as per the Site Visit and Remote Audit requirements and procedures, ver 2.0, para 3.2.1 "A physical site visit by VVB is not mandatory at the validation (Design Certification or Design Certification Renewal) of a project.)" In this case the project is under design certification and based on the risk analysis we have concluded that a physical site visit is not required since the project's parameters possess low to medium risk and same can be covered by remote audit (in line with ANNEX 2 – TECHNOLOGY/ELECTRONIC MEANS FOR REMOTE ASSESSMENT/AUDIT)

However, a remote audit has been conducted on 24/07/2023 with the PD, field team and end users to check the project baseline, project implementation etc.

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#### 5.5 ASSESSMENT PROTOCOL

The Protocol covers the key thematic areas in Gold Standard certification and is tailored to the review type and the mandatory reporting template (MR/PDD). The key thematic areas addressed in the Protocol are:

- GHG emission reductions (known as SDG 13 contributions)
- Other SDG contributions
- Compliance with Safeguarding Principles
   Compliance with Stakeholder Consultation (LSC) requirements

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## Appendix: 1- CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS

Supporting Decument (a) provided and Poviewed	
<ul> <li>Emiss</li> <li>SDG</li> <li>Zaml</li> <li>fNBR</li> <li>Lette</li> <li>Lette</li> <li>GS1</li> <li>Proje</li> <li>GS1</li> <li>Emiss</li> <li>CC_0</li> <li>CC_1</li> <li>Solst</li> <li>fNBR</li> <li>ODA</li> <li>Bore</li> <li>Invito</li> </ul>	ct Design Document (GS11730_V1.2-Project-Design-Document_V2.0_clean.pdf) ion Reduction Calculation Excel File (Zambia_ER Calculation_v2.xlsx) Tool (430_V1.0_IQ_SDG-Impact-Tool V2.0.xlsx) bia_Boreholes_Locations.xlsx _Zambia_2023.xlsx r Councillor Kasenga.JPG r Councillor Lunkushwe.JPG r Councillor Nthope.JPG 1730-Stakeholder-Consultation-Report_V2.0_clean.pdf ct Design Document (GS11730 PreReview_V1.5-Project-Design-Document_V3.pdf; 1730 PreReview_V1.5-Project-Design-Document_V3.pdf; 1730 PreReview_V1.5-Project-Design-Document_V3.pdf; 1730 PreReview_V1.5-Project-Design-Document_V3.xlsx) General_Information -Household Survey.xlsx Borehole_Data_Collection_2023-05-01_complete_v3.xlsx cce.pdf _Zambia_2023_V2.xlsx declaration form zambia_signed.pdf nole Coordinates.xlsx ttion to SFR_Zambia.pdf 1730-Stakeholder-Consultation-Report_V2.0_clean(1).pdf

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Rule	Assessment Question	Findings/Comments	Developer Response
	Is the report prepared using the most up to date version of GS4GG template at time of submission? (note this checklist is applicable to template versions later than the above version only)	CAR-1: The PDD has not been prepared using the most up to date version of GS4GG template available currently. It is advised to update the PDD template along with other corrections following the current recent template.	The PDD version is updated.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
	Does the responsible party own or have the right to claim emission reductions or removal enhancements expressed in the GHG statement?	CL-1: The written assertions signed by relevant representative regarding right to claim emission reductions to the project developer have been submitted, as follows: Letter Councillor Kasenga; Letter Councillor Lunkushwe; and Letter Councillor Nthope. However, please clarify the sentence in section A.1.2 'The Verified Carbon Reductions (VER) generated by the project belongs to the individual end-usersBy the signature of the signature of the agreement, the end-users accept to waive the carbon rights.'	Typo error has been corrected. The provided evidence letter includes statements about waiving carbon rights. The signature of those agreement shows that the end-users accept the transfer of rights to the project developer.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
P&R	Are there any FARs from preliminary	CAR-2: Please clarify about any FAR raised in Preliminary Review,	FAR1. The project account under Sustain-cert platform is updated to list all
	review adequately addressed?	and how they have been resolved.	6 SDG contributions.
		List of FARs raised for Project Developer/CME:	FAR.2. fNRB value is calculated and the excel sheet has been uploaded to
		FAR 1. The project lists 6 SDG impacts to be monitored in the	Sustain-cert.
		SustainCERT app while in the SDG tool, tab "use case", only 3 SDGs	FAR.3 The project is in line with government's goals regarding proving
		are completed. The PD should either complete all the 6 SGDs or	safe water supply. Related laws and regulations are also added under
		revise on the number of SDGs to be monitored by the project in the	Section A.1.1 and Appendix.1 Safeguarding principles assessment.
		SustainCERT App.	FAR.4 This has been discussed during the meeting. Please see the minutes
		FAR 2. PP to provide the exact reference to the values used in the	of meeting in the Stakeholder consultation report.
		determination of fNRB. Further, the most recent available dataset is to	FAR.5 Stakeholder feedback round was carried out and included in the
		be used for the determination of fNRB and the same has to be in	revised Stakeholder consultation report.
		accordance with TOOL30.VVB to validate the appropriateness of the	FAR.6 The present situation of the boreholes is clearly indicated and
		source of data and values applied.	confirmed in the consent letters signed by Councillors.

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Rule	Assessment Question	Findings/Comments	Developer Response
Rule	Assessment Question	<ul> <li>Findings/Comments</li> <li>FAR 3. Demonstrate that the project is in compliance with applicable Host Country's legal, environmental, ecological and social regulations.</li> <li>FAR 4. PD to clarify whether transfer of carbon rights from the boreholes was transparently discussed during local stakeholder consultations.</li> <li>FAR 5. PD to carry out Stakeholders Feedback Round (SFR) following the requirements of para 3.6.9 to 3.6.13 of the Stakeholder Consultation and Engagement Requirements ver 2.1.</li> <li>FAR 6. The PD to provide evidence that the boreholes to be rehabilitated were non-operational and that there were no planned maintenance or repair for at least 3 months after the date they became non-operational (parameter SWDS 2). VVB to check the evidence during validation.</li> <li>FAR 7. PP to clarify further the basis and representativeness of the annual fuelwood use cited as 5.35. PP should demonstrate the actual implementation of sampling approach to estimate the proportion of baseline fuels displaced and its compliance with the reliability requirements (i.e. confidence/precision) according to "Standard: Sampling and surveys for CDM project activities and programme of activities". VVB to provide their assessment as to how the baseline fuel consumption has been checked and confirmed also with reference to other cross-checks.</li> <li>FAR 8. The Stakeholder Consultation Report was not submitted to Gold Standard within 3 months of the physical stakeholder consultation meeting. Since the timeline was missed, the project should be considered retroactive and not regular.</li> </ul>	<ul> <li>FAR.7 No such value could be located in the PDD and is not applicable as per the applied methodology. The new GS methodology only requires the usage rate of fuel types and thermal efficiencies of cookstove types. The amount of energy used to boil 1 liter of water is fixed 360.83 kJ.</li> <li>FAR.8 GS Principles and Requirements, paragraph 4.1.42 identifies the retroactive projects as the ones which stakeholder consultation is conducted after project start date. The project has not started yet, so the regular project cycle is applicable.</li> <li>The date of meeting is 08/02/2022 and the project documents was submitted on 05/07/2022.The reason for the late submission was financial. The project owner was looking for finance to continue with the certification.</li> <li>VVB FARs:</li> <li>FAR.1 Please see the consent letters from Councillors.</li> <li>FAR.2 The project has not started yet. The indicative start date for construction is 15/12/2023. All boreholes is estimated to be operational by July 2024. The evidence will be provided in the first monitoring report.</li> <li>FAR.3 SFR process has been summarized in the Stakeholder Consultation Report.</li> </ul>
		List the FARs raised for validating/verifying VVB here. FAR 1. The carbon title waiver and agreement signed between project developer and VPA implementer shall be validated. FAR 2. The start date shall be justified in line with the definitions of the start date. For distributed technology projects only, the start date is defined as the implementation of the first unit under the project. The relevant evidence for the start date shall be provided at the time of validation. The VVB to confirm compliance to start date at the time of validation. FAR 3. VVB to review the SFR process and validate if it has been carried out in compliance with Stakeholder Consultation and Engagement Requirements ver 2.1. FAR 4. VVB to validate evidence produced on non-operation of rehabilitated boreholes and confirm how the compliance to the methodology's requirement has been assessed.	FAR.4 Please see the consent letters from Councillors. FAR.5 Default values form the methodology are used for baseline stoves. Three-stone fire: 10% Improved cookstoves: 30%

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Assessment Question	Findings/Comments	Developer Response
	FAR 5. VVB to check the efficiency of baseline stoves and validate the values applied and provide and opinion about the appropriateness of the reported values.	
Rd 2	The comment/request is closed.	
Were all likely CARs from preliminary review addressed?	<ul> <li>CAR-3: Please clarify about any CAR/CL raised in Preliminary Review, and how they have been resolved.</li> <li>List of other relevant OBs/CLs, as needed here.</li> <li>1. PD to use the latest ODA template and submit the revised form to SustainCERT App</li> <li>2. PD to use the latest version of the PDD template.</li> <li>3. GS ID of the project should be indicated in the KPI of the consultation report and the PDD</li> <li>4. Estimated annual average value for SDG 15 is not indicated in the table 1 of the PDD</li> <li>5. PP to clarify the context of drainage and uncovered sewer in context of justification of the applicability condition provided.</li> <li>6. PD to indicate the contribution towards SDG 15 in Table 1 of the PDD</li> <li>7. As the Project Area overlaps with that of several other Gold Standard or other voluntary and compliance standard programmes of a similar nature, further elaborate on the demonstration of no potential for double counting/misestimation of impacts. PD to confirm that the project is not registered with any other voluntary or compliance schemes.</li> <li>8. The efficiency of the charcoal stove at 10% be substantiated</li> <li>9. Please submit the appropriate evidence of the Project Start Date and the basis of crediting period start date. The same be validated by the VVB on their appropriateness and compliance to GS requirements.</li> <li>10. The last column of Appendix1 of the PDD should be completed.</li> </ul>	<ol> <li>ODA declaration is revised and uploaded.</li> <li>PDD is updated.</li> <li>GS ID is added in the KPI of the consultation report.</li> <li>Indicated in the revised PDD.</li> <li>The uncovered sewer was reported for one of the boreholes but not related with the project. This typo error has been removed.</li> <li>Indicated.</li> <li>Following statement has been added to Section A.1.1: "The project does not seek certification under any other voluntary or compliance standards programme.</li> <li>The host country, Zambia does not have an emission reduction cap enforced OR have the possibility to trade emissions that include the sco of the proposed project.</li> <li>If a risk of double counting exists, the project developer commits to reti eligible units equal to the quantity of Gold Standard VERs. "</li> <li>No charcoal stove is reported under the baseline scenario, so the efficiency value is not applied, so this is deleted.</li> <li>The project has not started yet. The indicative start date for construction is 15/12/2023. All boreholes is estimated to be operation by July 2024. The evidence will be provided in the first monitoring rep 10. The PDD is updated with the new version.</li> </ol>
Rd 2	The comment/request is closed.	

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Rule	Assessment Question	Findings/Comments	Developer Response
<u> </u>	Do the 3 SDG Impacts (including SDG 13) match B.6 (please review B.6. first)? Do the 3 SDG Impacts (including SDG 13) match the design certified VPA-DD in the KPI?	CAR-4: The summarised SDG impacts in table 1 do not match those in B.6 for SDG 8. Also, SDG 13 is to be corrected for change in fNRB.	Section B.6 is corrected to include the SDG 8 outcome and the ER calculations as per the updated fNRB value.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
Rule <u>P&amp;R</u>	Assessment Question Is the project uniquely identifiable? Rd 2	Findings/Comments         CAR-5: Section A.2 in the PDD should confirm the location of the project as uniquely identifiable.         Please clarify the inclusion of recently constructed boreholes too. There are a few 2020 and 2021 boreholes presented in Table 2. Also, clarify the borehole no. 62 and 100 cited with construction dates Jan-65 and Jan-70, respectively. The comment/request is Open.	Developer ResponseMap of the project site is added to Section A.2.The coordinates of 106 boreholes with population estimate could be accessed at: https://share.solstice.world/v3/dashboard_link/4927f81779264677aef 2fcb46e8a0560?share=e7f51016f51f46a59205367742bb37c0There are 18 boreholes that are built between 2020-2022. They are 
	Rd3	The comment/request is closed.	Borehole 100: Built 1970. Is the oldest borehole. It belongs to the clinic. The clinic puts chlorine inside the borehole. The apron and the drainage are in need of maintenance.

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Rule	Assessment Question	Findings/Comments	Developer Response
P&R	Is the lifespan of the technology included,	CAR-6: Section A.3: Please provide details of the technology and/or	Section A.3. is revised accordingly.
	reasonably stated with supporting	measure being deployed as part of the project activity and also	
	evidence and incorporated into emission	submit documentary evidence to confirm the technical specification	
	reduction projections?	and life.	
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
	Have methodology applicability criteria been listed in full and complied with? Have methodology applicability criteria been listed in full and complied with in the same manner as the design certified VPA- DD in the KPI?	CAR-7: Project shall document the national, regional and local regulatory framework for provision of safe drinking water in the project boundary (parameter SDWS 4). Also, the PDD must describe the maintenance and repair plan, including the system for logging/documenting of technology operation and maintenance events including periods of downtime.	Related laws and regulations are added to the SDWS 4 as values applied. The Project complies with all listed items and approved by the Councillors. Maintenance and repair plan is added to Section B7.3.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
	Is the baseline scenario in compliance with the methodology? Does the baseline scenario description match the design certified VPA-DD in the KPI?	CAR-8: The referred Baseline Survey performed between 07 February- 24 March 2022 in Mafuta and Chinunda is to be submitted.	The excel sheet is submitted.
	Rd 2	The comment/request is closed.	

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Rule	Assessment Question	Findings/Comments	Developer Response
	For SDG 13 projects, where a GS	CAR-9: Please clarify and/or correct the section B.6.1 with reference	Leakage emissions are included in Section B.6.1
	approved methodology has been	to leakage emission calculations as per the methodology.	
	applied, are methodological choices/approaches and equations		
	correctly stated?		
	For SDG 13 projects, where a GS		
	approved methodology has been		
	applied, do methodological		
	choices/approaches and equations match		
	the design certified VPA-DD in the KPI?		
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>P&amp;R</u>	Other SDGs only, are the SDG Impacts monitored, calculated and evidence- based (i.e. backed up with literature) not just simply claimed? Other SDGs only, do the SDG impacts match the design certified VPA-DD in the KPI?	CAR-10: Please clarify and/or correct the section B.6.1 for estimating the other SDG impacts apart from SDG 13, citing the approaches and equations.	Section B6.1 is revised to include equations.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>P&amp;R</u>	For SDG 13 projects - do all <u>fixed</u> , ex ante parameter boxes match the methodology correctly? For SDG 13 projects - do all <u>fixed</u> , ex ante parameter boxes (values may differ) match the design certified VPA-DD in the KPI?	CAR-11: Section B.6.2 of the VPA-DD is to be revisited with reference to the parameter IDs as per the methodology. For SDWS 1 the GPS coordinates of the CWS are not provided (neither cited in section A.2). The parameter SDWS 2 is not included (neither cited in section A.3). The other parameters too such as SDWS 3, SDWS 4, SDWS 5, SDWS 6 are also missing.	The parameter IDs are added. All parameters are checked from the applied methodology. For the SDWS 1- Number of household/institution per CWT/CWS, the total population served by each borehole is fixed as 300 persons, as per the technical specification for the technology. The household data from health clinics is also shared. Please see excel file: CC_General_Information -Household Survey, 2.Health data 2019. The average hh size is 7.32 as presented in the analysis of the household survey; when multiplied by the total 5,137 households; the total population is 37,603. We took the conservative approach as 31,800 (330 x 106 boreholes). Coordinates of the boreholes are now available under Section A.1.1.

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Rule	Assessment Question	Findings/Comments	Developer Response
			The population served is checked from Solstice data, could be accessed at: <u>https://share.solstice.world/v3/dashboard_link/4927f81779264677aef</u> <u>2fcb46e8a0560?share=e7f51016f51f46a59205367742bb37c0</u>
	Rd 2	The value of fNRB is reported inconsistently in section B.6.2. <b>The comment/request is Open.</b>	Section B.6.2 is revised.
	Rd3	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
	Do the equations/algorithms in this	CAR-12: Section B.6.3 of the VPA-DD is to be revisited with reference	ER calculation is revised asper the previous comments.
	section match the calculation sheet,	to the earlier CARs with regards to methodology.	
	those stated in the methodology (and		
	for other SDGs B.6.1. of the PDD)?		
	Do the equations/algorithms in the		
	calculation sheet match the design		
	certified VPA-DD? (the calculation sheet		
	must be the same format as the design		
	certified VPA-DD – if it is not, a CAR		
	should be issued to use an approved		
	version so that we do not have to check it		
	<u>each time)</u>		
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>P&amp;R</u>	Does each year in the ex-ante estimate table reflect events that may influence emission reductions?	CAR-13: Please clarify and correct the ex-ante estimate of SDG 13 following corrections in the determination of fNRB. The total consumption in the fNRB computation double counts the fuelwood consumption for charcoal consumption. Only the value of 30,653 m3 of fuelwood is to be taken into consideration.	fNRB calculation is revised.
	Rd 2	The fNRB value is not to be rounded up. <b>The</b> comment/request is Open.	The fNRB value is not rounded up. The figure up to 3 digits is 0.730. Please check the fNRB calculations sheet loaded previously by increasing the digit numbers. We have checked the calculated values. No roundup formula is used.

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Rule	Assessment Question	Findings/Comments	Developer Response
	Rd3	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
	For SDG 13 (VER projects) only - Are all	CAR-14: Section B.7.1 of the VPA-DD is to be revisited with reference	Section B 7.1 is revised to include parameter IDs.
	meth monitored parameters are present	to the parameter IDs and order as per the methodology. Further, the	Comma and decimal notation are also checked. We use same notation on
	and the monitoring approach is defined	comma and decimal notation is also to be corrected.	GS webpage and Sustain-cert platform.
	in line with the applied meth.		
	For SDG 13 (VER projects) only - do all		
	meth monitored parameters match the		
	design certified VPA-DD in the KPI?		
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>P&amp;R</u>	Other SDGs only, are all monitored parameters In B.6.1. are present, correct and are also clearly separated for each SDG. Other SDGs only, do all meth monitored parameters match the design certified VPA-DD in the KPI?	CAR-15: The monitored parameters for the SDG 15 impact are not cited in section B.7.1.	Parameter is added to Section B.7.1
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>P&amp;R</u>	Where a sampling plan is used, does it	CAR-16: The sampling plan is not in line with nor references the latest	References to the methodology and CDM guidelines are provided.
	follow the latest version of the CDM	version 9.0 of the CDM Standard on Sampling in section B.7.2	
	Standard on Sampling if VER/CER		
	methodology data and parameters		
	monitored in section B.7.1 above are to		
	be determined by a sampling approach?		

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Rule	Assessment Question	Findings/Comments	Developer Response
	Where a sampling plan is used, does it		
	match the design certified VPA-DD in the		
	KPI?		
	Rd 2	The comment/request is closed.	
		The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>P&amp;R</u>	*For distributed technology projects only, is the start date defined as the implementation of the first unit under the project?	CL-2: The start date is to be cited in dd/mm/yyyy format. Please provide the documentary evidence for the indicated start date.	The project has not started yet. The indicative start date for construction is $15/12/2023$ . All boreholes is estimated to be operational by July 2024. The evidence will be provided in the first monitoring report.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>Reqs</u>	Is the CP start of project <u>the later of</u> the start date of operations OR a maximum of two years prior to the date of Project Design Certification?	CL-3: The crediting period start date is to be corrected and documentary evidence for the same is to be submitted.	The project has not started yet. The indicative start date for construction is $15/12/2023$ . All boreholes is estimated to be operational by July 2024. The evidence will be provided in the first monitoring report.
	Rd 2	The comment/request is closed.	

Rule	Assessment Question	Findings/Comments	Developer Response
<u>Reqs</u>	Has the project provided an acceptable response to the four gender questions? Has the project provided an acceptable response to the four questions to match the design certified VPA-DD in the KPI?	CAR-17: The responses to the four gender questions in section D.2 of the PDD are to be corrected as they are cited in context of improved cookstoves.	No improved cookstove is mentioned in the Section D.2. Please clarify.
	Rd 2	The comment/request is closed.	

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Rule	Assessment Question	Findings/Comments	Developer Response
SC <u>Reqs</u> 6.1.1	Do the <u>Actual</u> Dates span 2 months or greater?	CL-4: Please clarify about the stakeholder feedback round.	Stakeholder feedback round was carried out between 19 Oct to 19 Dec 2022 for 60 days. No feedback was received. The process is included in the revised Stakeholder Consultation Report. Sample invitation letter is uploaded. All invitees to the live meeting is invited to stakeholder feedback round.
	Rd 2	The comment/request is closed.	

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## Appendix: 2 - FORWARD ACTION REQUESTS

No FAR has been raised.

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