

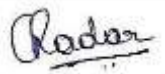


# Sustainable Development Verified Impact Standard

## KENYA JIKO KISASA IMPROVED COOKSTOVE PROGRAM I



Document Prepared by 4K Earth Science Private Limited

|                     |                                                                                                                                                 |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Report title        | Kenya Jiko Kisasa Improved Cookstove Program I                                                                                                  |
| Date of Issue       | 11-Jan-2026                                                                                                                                     |
| Version             | 05                                                                                                                                              |
| Report ID           | 24070-VCS/SD Vista-CVV                                                                                                                          |
| Prepared By         | 4K Earth Science Private Limited                                                                                                                |
| Contact             | No.56, 6th Cross Road, Muniswamyappa Layout,<br>HAL 3rd Stage, Bengaluru-560017.                                                                |
| Approved By         | <br>Chandrakala R<br>Managing Director                       |
| Work Carried Out By | Mr. Sanjay Kandari (Team Leader & Technical Expert TA 3.1)<br>Mr. Martin Luther King (Local Expert)<br>Mr. Stalin S (Technical Reviewer TA 3.1) |

|                         |                                                               |
|-------------------------|---------------------------------------------------------------|
| <b>Client</b>           | Guangzhou Iceberg Environmental Consulting Services Co., Ltd. |
| <b>Project Title</b>    | Kenya Jiko Kisasa Improved Cookstove Program I                |
| <b>Project Location</b> | Republic of Kenya                                             |

## Summary

Guangzhou Iceberg Environmental Consulting Services Co., Ltd. has commissioned “4K Earth Science Private Limited” (4KES) to carry out the SD Vista Validation of the project - “Kenya Jiko Kisasa Improved Cookstove Program I”, with respect to the relevant requirements of SD VISTa Standard Version 1.0.

The proposed project activity aims to increase access of households and communities to improved cookstoves by disseminating high thermal efficiency and low greenhouse gas emitting cooking stoves known as Improved Cook Stoves (ICS) to the rural and semi-urban households of rural Kenya. The implementation of the project activity will result in replacement of low efficiency and high greenhouse gas emitting stoves in the households, thereby resulting in reduction of firewood consumption & consequent emissions from combustion. Overall objectives through the implementation of the project are reduction of greenhouse gases, conservation of forests leading to climate change mitigation in a sustainable manner, as well as improved health conditions of ICS users due to improved indoor air quality along with drudgery reduction in everyday cooking. The project aims to create social and behavioral changes within rural/semi-urban households’ attitudes regarding fuelwood collection, consumption and conservation and to help the communities over time, to manage their time and health in a better way. The project proponent will distribute 100,000 ICSs, and the ICSs are produced in local factories. The project has distributed 24,696 ICSs to households from 06/08/2022 to 05/08/2024, and 24,232 are still operating. So, the implementation of the project results in more people with access to basic services, job opportunities and income. (SDI 1.14.1)

Most non-renewable biomass local people used for cooking is firewood, which generates high PM2.5 and high CO biomass smoke when inefficiently burnt. By using ICS, it reduces people’s exposure to high PM2.5 and high CO due to higher efficiency of combustion leading to faster cooking and more complete combustion. (SDI 3.9.1). And it also reduces the burn risk, significant to children and toddlers due to the enclosure of the fire in the combustion chamber. (SDI 3.2.1).

The project reduces the time spent on firewood collection for children, especially for girls. It increases their time for education. The implementation of the project needs plenty of local people to participate in production, distribution or use steps. They get relevant skills and sustainable development and global citizenship education through training by project proponent. (SDI 4.3, 4.1, 4.7.1).

The project reduces women and children’s drudgery through the time savings in cutting, collecting, and carrying firewood from trees far away from households as well as cooking over toxic smoky open fires. These tasks, if being undertaken without relief, are a major cause of gender inequality. (SDI 5.4.1).

The project protects an important water related ecosystem-forest through reducing deforestation by firewood collecting. (SDI 6.6.1). The project increases the proportion of population with primary reliance on clean fuels and technology in project area. (SDI 7.1.2).

The factory which produces ICS is a local enterprise. It hires more workers to produce ICSs for the project. During the project crediting period, the project proponent and its local partners oversee maintenance and monitoring plan, which also needs to hire local people, including people with disabilities and minorities. (SDI 8.3.1, 8.5.1). The local factories are small-scale industries. They expand production capacity to satisfy the needs of the project. Thus, the upstream and downstream supply chain benefits from the project. (SDI 9.3.1).

The average annual GHG emission reduction from the project is expected to be 222,137 tCO<sub>2</sub>e due to less firewood combustion for cooking in the households. (SDG 13).

The project helps local people consume less firewood as the ICS has higher thermal efficiency and it results in a reduction deforestation compared to the baseline scenario. (SDI 15.1.1, 15.2.1).

A risk-based approach has been followed to perform the validation of the project in terms of SDG targets.

During the validation 00 Corrective Action Requests (CAR) and 09 Clarification Requests (CL) were raised and successfully closed out.

The validation is based on the SD VISta PD, proof of title, proof of right, additional documents related to SDG impacts; the subsequent background investigation, follow-up interviews and supporting documents made available to the validation team by project proponent.

As a result of the validation, the validation team confirms that:

- The project fulfils criteria of SD VISta Standard Version 1.0.
- The project is in line with all relevant SD VISta requirements.
- The project SDGs are sufficiently justified in the PD.

No restrictions or uncertainties were identified related to the validation.

# CONTENTS

|          |                                                                                                         |           |
|----------|---------------------------------------------------------------------------------------------------------|-----------|
| <b>1</b> | <b>VALIDATION PROCESS .....</b>                                                                         | <b>6</b>  |
| 1.1      | Objective .....                                                                                         | 6         |
| 1.2      | Scope and Criteria .....                                                                                | 6         |
| 1.3      | Level of Assurance .....                                                                                | 7         |
| 1.4      | Summary Description of the Project .....                                                                | 7         |
| 1.5      | Audit Team Composition .....                                                                            | 9         |
| 1.6      | Method and Criteria .....                                                                               | 10        |
| 1.7      | Document Review .....                                                                                   | 12        |
| 1.8      | Interviews .....                                                                                        | 12        |
| 1.9      | Site Inspections.....                                                                                   | 15        |
| 1.10     | Public Comments.....                                                                                    | 16        |
| 1.11     | Resolution of Findings .....                                                                            | 19        |
| 1.12     | Forward Action Requests .....                                                                           | 20        |
| <b>2</b> | <b>VALIDATION FINDINGS .....</b>                                                                        | <b>20</b> |
| 2.1      | Summary of SDG Contributions .....                                                                      | 21        |
| 2.2      | Project Design .....                                                                                    | 40        |
| 2.3      | Stakeholder Engagement.....                                                                             | 54        |
| 2.4      | Project Management .....                                                                                | 62        |
| <b>3</b> | <b>BENEFITS FOR PEOPLE AND PROSPERITY .....</b>                                                         | <b>65</b> |
| <b>4</b> | <b>BENEFITS FOR THE PLANET .....</b>                                                                    | <b>75</b> |
| <b>5</b> | <b>VALIDATION CONCLUSION .....</b>                                                                      | <b>79</b> |
|          | <b>APPENDIX 1: ABBREVIATIONS .....</b>                                                                  | <b>80</b> |
|          | <b>APPENDIX 2: REFERENCES .....</b>                                                                     | <b>81</b> |
|          | <b>APPENDIX 3: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS .....</b>                             | <b>84</b> |
|          | <b>APPENDIX 4: CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUESTS .....</b> | <b>87</b> |

# 1 VALIDATION PROCESS

## 1.1 Objective

Guangzhou Iceberg Environmental Consulting Services Co., Ltd. has commissioned “4K Earth Science Private Limited” (4KES) to carry out the SD Vista Validation of the project - “Kenya Jiko Kisasa Improved Cookstove Program I”, with respect to the relevant requirements of SD VISTA Standard Version 1.0 /4/.

The purpose of validation is to ensure a thorough, independent assessment of the project description (PD), particularly the project's baseline, the SDGs, the monitoring plan (MP) and the project's compliance with

- The requirements of SD VISTA Standard Version 1.0 /4/.
- To assess the project's compliance with other relevant rules, including the project country (Kenya) legislation/24/ and
- Other relevant rules of SD VISTA sustainability criteria/4/ are validated in order to confirm that the project description as documented is sound and reasonable and meet the stated requirements and identified criteria.

## 1.2 Scope and Criteria

The scope of the validation is defined as an independent and objective review of the Project Description /01/, SDG Impacts, monitoring plan and other relevant documents. The information in these documents is reviewed against the requirements of SD VISTA Standard/4/. 4KES has employed a risk-based approach in validation, focusing on the identification of significant risks for project implementation and the SDG impacts.

The items covered in the validation are described below:

- SD VISTA Criteria
- SD VISTA Project Description, Objectives
- Stakeholder Consultation
- Stakeholder Monitoring Plan
- Background investigation and follow up interviews
- Net Positive Stakeholder Well-being Impacts
- Draft validation reporting with CARs & CLs, if any
- Final validation reporting

The validation is based on the information made available to 4KES and on the contract conditions.

The validation is not meant to provide any consulting to the project proponent. However, stated requests for clarifications and/or corrective actions may provide input for improvement of the project description. The work carried out by 4KES is free from any conflict of interest.

### 1.3 Level of Assurance

The validation report is based on SD VISTA-PD /01/, Monitoring plan, supporting documents made available to the validator and information collected through performing interviews and during the on-site assessment. Based on the process and procedures conducted 4KES states with a reasonable level of assurance that information in the SD VISTA PD:

- is materially correct and is a fair representation of the actual project details, and
- is prepared in accordance with SD VISTA requirements and the applied VCS methodology for information pertaining to GHG qualification, monitoring and reporting

The validation work is carried out as per this requirement and the validation opinion is assured provided the credibility of all the above. Details are presented in the Validation statement in section 5 below.

### 1.4 Summary Description of the Project

The proposed project activity aims to increase access of households and communities to improved cookstoves by disseminating high thermal efficiency and low greenhouse gas emitting cooking stoves known as Improved Cook Stoves (ICS) to the rural households of Kenya. The implementation of the project activity will result in replacement of low efficiency and high greenhouse gas emitting stoves in the households, thereby resulting in reduction of firewood consumption & consequent emissions from combustion. Overall objectives through the implementation of the project are reduction of greenhouse gases, conservation of forests leading to climate change mitigation in a sustainable manner, as well as improved health conditions of ICS users due to improved indoor air quality along with drudgery reduction in everyday cooking.

As confirmed through the site visit/interviews and through the review of documents, the technology deployed under the project activity shall be thermally efficient (in compliance with the methodological requirements) and have an average lifespan of 7 years /17/. The type of cookstoves to be distributed include the 'Jiko Kisasa' stoves that meet the requirements of the methodology in future. Jiko Kisasa stove has been tested for thermal efficiency of 27.2% according to WBT protocol (4.2.3) and certified by third party (KIRDI Stove Testing Centre) /17/. The efficiency of ICS has been estimated to be more than the efficiency of old cookstoves. The efficiency test report provided to assessment team was reviewed and it was concluded that the efficiency test was conducted in accordance with the procedure stipulated in the applied methodology VMR0006, version 1.1.

The start date of the project is considered as 21/06/2022 which is the date of distribution of first ICS in the project activity.

The start date was validated by reviewing the project document named “Kenya ICS Donation and Carbon Transfer Agreement for Distribution in the start Date”, which shows details of households who received ICS on first day of the project, including location of the household and unique ID of ICS etc. Moreover, this was also validated by the database maintained by the project partner in their local office. Validation team reviewed the database in conjunction with the “ICS Donation and Carbon Transfer Agreement” agreement with the first beneficiary.

Based on the interviews with the PP and manufacturer of ICS, the validation team confirms that the date is reasonably assumed. Accordingly, the duration of fixed crediting period of 10 years starts from 21/06/2022 and ends on 20/06/2032.

The PP will enter into contractual agreements with the beneficiaries (individual households using ICS) by virtue of which, the end user will confirm use of cook stove as well as transfer the VERs right to the project proponent.

The local partner and end users have signed agreements with project proponent stating clearly that the PP has the sole ownership of the VCUs arising from the project. It was validated “13\_ICs Donation and Carbon Transfer Agreement”.

VVB reviewed the other GHG registries to ensure that the project is not listed/registered with the other GHG schemes. A declaration/21/ to this effect has been submitted to the validation team that project will not claim any GHG benefits from other GHG mechanisms and project is not claiming any GHG benefits in any other schemes.

The project plans to distribute 100,000 fuel-efficient improved cookstoves (ICS) in 2 years to replace the baseline cookstoves in households from 100-400 villages all over the country.

The estimated average annual GHG emission reduction from the project is 222,137 tCO<sub>2</sub>e, and the total GHG emission reduction estimated for the whole crediting period from the project activity is 2,221,373 tCO<sub>2</sub>e/2/.

The validation team confirms that the baseline scenario represents the continued use of non-renewable wood fuel by the target population to meet similar thermal energy needs as provided by project cookstoves in absence of project activity.

Details of implementation schedule are described in the SD VISTA-PD /01/. The validation team has checked the project details with the submitted supportive documents and found it to be consistent. The project participants involved in the projects are as per the tables below.

**Project participant:**

|                            |                                                                                                                                           |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Organization Name</b>   | Guangzhou Iceberg Environmental Consulting Services Co., Ltd.                                                                             |
| <b>Role in the Project</b> | Project proponent                                                                                                                         |
| <b>Contact Person</b>      | Ji BAO                                                                                                                                    |
| <b>Title</b>               | General Manager                                                                                                                           |
| <b>Address</b>             | No.106 Fengze East Road, Nansha District, Guangzhou, China                                                                                |
| <b>Telephone</b>           | +8613560420840                                                                                                                            |
| <b>Email</b>               | <a href="mailto:baoji@icebergchina.com">baoji@icebergchina.com</a> ; <a href="mailto:hanjin@icebergchina.com">hanjin@icebergchina.com</a> |

Guangzhou Iceberg Environmental Consulting Services Co., Ltd. is the Project proponent (PP), which is as per the submitted declaration<sup>1</sup> as the project activity has been developed by Guangzhou Iceberg Environmental Consulting Services Co., Ltd. Therefore, project proponent has sole right to use the generated Emission reductions.

## 1.5 Audit Team Composition

**Mr. Sanjay Kandari (Team Leader & Technical Expert)**

**Lead Auditor & Technical Expert:**

Mr. Sanjay Kandari has around 15 years in the field of GHG Accounting and Verification & Validation. He holds a M.Tech. in 'Energy Management' and M.Sc in Physics. He has extensive experience as Team Leader, technical reviewer, Verifier & Validator and successfully executed more than 700 projects till date in Kenya, Uganda, Madagascar, Rwanda, Nigeria, Malawi, Zambia,

South Africa, Myanmar, Egypt, Bhutan, Thailand, Indonesia, Cambodia, Tanzania, Vietnam, Sri Lanka, Malaysia, Pakistan, India and LATAM countries. He has audited SD VISTA project as technical reviewer, worked in many Gold Standard assignments, GCC and VCS project for the assessment of social and environmental impacts. He has also audited the hydro projects for the compliance of 'World Commissioning on Dam', under which he has undertaken the assessment of social and environmental impacts.

#### **Dr. Martin Luther King Okoro (Local Expert, Kenya)**

Dr. Okore is an accomplished scholar and expert with over fifteen years of proven expertise in managing, implementing, and researching environment and climate change. He is a Lecturer in the Department of Geography and Environmental Studies at Moi University. Prior to his tenure at Moi University, Dr. Okore was the Principal Climate Change and Sustainable Development Specialist at SUMDEV Consulting. He holds a PhD in Environmental Planning and Management from Kenyatta University and is a recognised Technical Expert on Energy Demand (CDM Sectoral Scope 3.1), specialising in the design and assessment of carbon trading projects. Dr. Okore has also served as a Local Expert on over 20 GHG projects under Sectoral Scopes 3.1, 13.2, and 14.1. His credentials include certification as a Gold Standard Sustainable Development Auditor. Dr. Okore's deep knowledge and practical experience extend to carbon emissions assessment, climate change adaptation-mitigation synergy, renewable energy, integrated natural resource management, and environmental policy analysis.

**ORCID ID:** 0000-0002-4409-5852.

## **1.6 Method and Criteria**

The validation consisted of the following phases:

- Sampling of the baseline and project scenario by using the acceptance sampling method. The SD Vista validation was clubbed with VCS verification. The VCS verification report has been prepared separately.

VVB follows a risk-based verification approach, wherein a desk review of the project documentation is undertaken, which is followed by onsite inspection by the members of verification team. The verification protocol is filled by the verification team that is based on standard auditing practices and VCS requirements.

The verification consisted of the following three phases

- Document review.
- On-site assessment.
- Resolution of any material discrepancy and the issuance of the final verification report and certification.

During the on-site assessment, a random sampling approach has been used by the validation team to validate the baseline scenario, stakeholder consultation inter alia.

Sampling approach during verification audit is conducted in accordance with "Guidelines for Sampling and Surveys for CDM Project Activities and Programme Activities, Version

04.0"/6/ and the "Standard for Sampling and Surveys for CDM Project Activities and Programme Activities, Version 09.0"/6/.

The validation team followed the "Standard for Sampling and Surveys for CDM Project Activities and Programme Activities" version 09/13/ (Applicable to the monitoring of this group) esp. for taking samples out of the PP's sample. Verification team had adopted the acceptance sampling approach to verify the sampling result of the PP for the applied verification period.

For the determination of VVB's acceptance sample size, the validation team assumed the following factors:

1. Acceptable quality level (AQL) - 01%
2. Unacceptable Quality Level (UQL) – 20%
3. Producer risk- 5%
4. Consumer risk- 10 %

Validation team has determined acceptance sample size for all the sample survey parameters based on the "Table. Sample size and acceptance number based on AQL, UQL, and producer and consumer risks" of standard "Sampling and surveys for CDM project activities and programme of activities" version 09.0/6/. From the above assumed factors, the validation team determined the minimum sample size (n) as 18 minimum samples for the project and acceptance number (c) as one as per the chosen AQL/UQL, Consumer/Producer risk. The validation team shared the samples with PP during the on-site visit.

| Parameters                                   | VVB's Sample size (n) | No of PP's record beyond unacceptable level (C) allowed | No of PP's record beyond unacceptable level (C) identified | Accepted/ Rejected |
|----------------------------------------------|-----------------------|---------------------------------------------------------|------------------------------------------------------------|--------------------|
| Monitoring parameters as per MR (Proportion) | 18 samples            | 1                                                       | 0                                                          | Accepted           |

## 1.7 Document Review

After the submission of the draft SD Vista PD/01/ and supporting background documents related to the project design and baseline from the client, the completeness of information made available as per SD VISTA standard 1.0 /4/ requirements is reviewed. Furthermore, the validation team used additional documentation by third parties like host party legislation, grievance mechanism reports referring to the project design or to the basic conditions and data available on public domain. A desk review is carried out to assess the following:

- the project details as per SD VISTA PD template
- Compliance with relevant law and regulations
- demonstration of SDG impacts
- stakeholder comments
- proof of title

The documents that were considered during the validation process are given in Appendix 2 of this report.

## 1.8 Interviews

Details of interviews, topics covered, and additional information are presented below, the site visit was clubbed with the VCS verification of the project:

|                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                   |                                                                                  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|
| <b>Dates:</b>                                                                                                                                                                                                                                                                                                                                                                              | 17-Dec-2024 & 18-Dec-2024                                                                                                                                                                         |                                                                                  |
| <b>Key points discussed:</b>                                                                                                                                                                                                                                                                                                                                                               | <b>Name of person, interviewed</b>                                                                                                                                                                | <b>Designation, Organization</b>                                                 |
| The questions asked were following but not limited to: <ol style="list-style-type: none"> <li>I. Sampling requirements</li> <li>II. Data base maintenance</li> <li>III. Operational data, Calibration, Data collection, QA/QC procedures, Calculation of ERs,</li> <li>IV. Methodology of survey and randomization of population.</li> <li>V. Desired con/precession and actual</li> </ol> | Han Jin                                                                                                                                                                                           | Project Proponent, Guangzhou Iceberg Environmental Consulting Services Co., Ltd. |
|                                                                                                                                                                                                                                                                                                                                                                                            | Ji Bao                                                                                                                                                                                            |                                                                                  |
|                                                                                                                                                                                                                                                                                                                                                                                            | Julius G Gathuru <ol style="list-style-type: none"> <li>1. Gabriel Gathirimu</li> <li>2. Cecilia Wambui Mburu</li> <li>3. Teresia Wanjiku Ndirangu</li> <li>4. Margaret Mwihaki Githae</li> </ol> | Jumbo Capital, Project Implementer<br><br>Local Stakeholders                     |

| <p>con/precession calculations procedure.</p> <p>VII. Double Counting</p> <p>VIII. Local Stakeholders consultation &amp; Grievance addressal SDG contributions /impact SD vista requirements</p>                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |              |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|---------|-----------|---------------------|--------|------|-------------------|--------|------|----------------|--------|------|------------------------|--------|------|----------------------------------------------------|--------|------|-------------------------|--------|------|----------------------|----------|------|--------------------|----------|------|---------------------|----------|------|--------------------|----------|------|-----------------------------------------------|---------|------|-----------------------|---------|------|------------------------------------------------------------|---------|------|-------------------------|---------|------|----------------------|---------|------|------------------|
| <p>Monitoring Survey, Baseline.</p> <p>The questions asked were following but not limited to:</p> <p>I. When did you receive the ICS.</p> <p>II. Which model are you using.</p> <p>III. What was the baseline technology you were using prior to receiving of ICS.</p> <p>IV. Whether you have been surveyed by the PP or their representative.</p> <p>V. What questions the surveyor asked.</p> <p>VI. Do you still use the baseline stoves?</p> <p>VII. If yes, then how many meals per day you cook in the project stove and how many in baseline stove.</p> <p>VIII. Did you faced any challenges</p> | <table> <tr> <th>Name of User</th><th>Village</th><th>Device ID</th></tr> <tr> <td>Emily Wanjuhi Mutua</td><td>Kanjai</td><td>3965</td></tr> <tr> <td>Rahab Mumbi Mutua</td><td>Kanjai</td><td>3601</td></tr> <tr> <td>Damaris Kanini</td><td>Kanjai</td><td>2770</td></tr> <tr> <td>Ruth Gachambi Kinuthia</td><td>Kanjai</td><td>3822</td></tr> <tr> <td>Patience Wangari<br/>(Mary Njeri Ndungu's daughter)</td><td>Kanjai</td><td>4170</td></tr> <tr> <td>Hannah Nyakairu Kangere</td><td>Kanjai</td><td>2981</td></tr> <tr> <td>Jane Nyambura Mbugua</td><td>Gathieka</td><td>9145</td></tr> <tr> <td>Ann Njambi Gacheru</td><td>Gathieka</td><td>7483</td></tr> <tr> <td>Stella Wanjiru Amos</td><td>Gathieka</td><td>7866</td></tr> <tr> <td>Lydia Njoki Kamiri</td><td>Gathieka</td><td>9382</td></tr> <tr> <td>Gabriel Karanja<br/>(Peter Mwatha Mburu's son)</td><td>Kirwara</td><td>7064</td></tr> <tr> <td>Joanina Gathoni Gitau</td><td>Kirwara</td><td>7110</td></tr> <tr> <td>Catherine Wanjiku<br/>(Eunice Wathangi Mungai's house help)</td><td>Kirwara</td><td>7081</td></tr> <tr> <td>Margaret Wambui Wairire</td><td>Kirwara</td><td>6935</td></tr> <tr> <td>Faith Wambui Njegegu</td><td>Kirwara</td><td>6791</td></tr> </table> | Name of User | Village | Device ID | Emily Wanjuhi Mutua | Kanjai | 3965 | Rahab Mumbi Mutua | Kanjai | 3601 | Damaris Kanini | Kanjai | 2770 | Ruth Gachambi Kinuthia | Kanjai | 3822 | Patience Wangari<br>(Mary Njeri Ndungu's daughter) | Kanjai | 4170 | Hannah Nyakairu Kangere | Kanjai | 2981 | Jane Nyambura Mbugua | Gathieka | 9145 | Ann Njambi Gacheru | Gathieka | 7483 | Stella Wanjiru Amos | Gathieka | 7866 | Lydia Njoki Kamiri | Gathieka | 9382 | Gabriel Karanja<br>(Peter Mwatha Mburu's son) | Kirwara | 7064 | Joanina Gathoni Gitau | Kirwara | 7110 | Catherine Wanjiku<br>(Eunice Wathangi Mungai's house help) | Kirwara | 7081 | Margaret Wambui Wairire | Kirwara | 6935 | Faith Wambui Njegegu | Kirwara | 6791 | <p>End users</p> |
| Name of User                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Village                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Device ID    |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Emily Wanjuhi Mutua                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Kanjai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3965         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Rahab Mumbi Mutua                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Kanjai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3601         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Damaris Kanini                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Kanjai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2770         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Ruth Gachambi Kinuthia                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Kanjai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 3822         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Patience Wangari<br>(Mary Njeri Ndungu's daughter)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Kanjai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4170         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Hannah Nyakairu Kangere                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Kanjai                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 2981         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Jane Nyambura Mbugua                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Gathieka                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9145         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Ann Njambi Gacheru                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Gathieka                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 7483         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Stella Wanjiru Amos                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Gathieka                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 7866         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Lydia Njoki Kamiri                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Gathieka                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 9382         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Gabriel Karanja<br>(Peter Mwatha Mburu's son)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Kirwara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7064         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Joanina Gathoni Gitau                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Kirwara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7110         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Catherine Wanjiku<br>(Eunice Wathangi Mungai's house help)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Kirwara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 7081         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Margaret Wambui Wairire                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Kirwara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6935         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |
| Faith Wambui Njegegu                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Kirwara                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 6791         |         |           |                     |        |      |                   |        |      |                |        |      |                        |        |      |                                                    |        |      |                         |        |      |                      |          |      |                    |          |      |                     |          |      |                    |          |      |                                               |         |      |                       |         |      |                                                            |         |      |                         |         |      |                      |         |      |                  |

|       |                                                                                                     |                                                        |         |           |
|-------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------|-----------|
| IX.   | while operating the ICS?<br>If you discontinue the use of project stove then from when?             | Eunice Anyango Ochiel                                  | Guthuru | 1335<br>2 |
|       |                                                                                                     | David Njoroge<br>(Virginia Wanjiru Wainaina's husband) | Guthuru | 1245<br>5 |
|       |                                                                                                     | Jane Nnyambura Gacutha                                 | Guthuru | 1260<br>0 |
| X.    | Any employment generated by the stove manufacturer (To confirm the SDG)                             |                                                        |         |           |
| XI.   | Any training imparted by the stove manufacturer                                                     |                                                        |         |           |
| XII.  | The level of smoke in baseline and project smoke                                                    |                                                        |         |           |
| XIII. | Does the project use less time in cooking or high compare to baseline?                              |                                                        |         |           |
| XIV.  | What activities you do in case of time saving in project activity stove?                            |                                                        |         |           |
| XV.   | Have you received any employment.                                                                   |                                                        |         |           |
| XVI.  | Whether the project stove consume less firewood or higher firewood than baseline stove?             |                                                        |         |           |
| XVII. | How much monitory saving you do in case of fuel saving in project stove?<br>1) (To confirm the SDG) |                                                        |         |           |

## 1.9 Site Inspections

The VVB has conducted the on-site visit for the verification of the project activity. The on-site visit took place between 17-Dec-2024 & 18-Dec-2024 in Kenya. The following was carried out during the on-site visit:

- An assessment of the project design and technical specification, project location, implementation status and operation of the project activity as per the VCS PD and SD Vista PD;
- A review of information flows for generating, aggregating, and reporting the monitoring parameters, project technology, local stakeholder consultation and SDG monitoring plan.
- Interviews with relevant personnel to determine whether the operational and data collection procedures are implemented in accordance with the monitoring plan in the and SD Vista PD;/1/;
- A cross check between information provided in the VCS PD and SD Vista PD//1/ and data from other sources such as user/device database, survey records or similar data sources;
- A check of the project stoves (ICS) is working and observations of monitoring practices against the requirements of the VCS PD and SD Vista PD/1/, the applied methodology including applicable tool(s), and, where applicable, the applied standardized baseline.
- A review of calculations and assumptions made in determining the GHG data and emission reductions in conjunction with the SDG claimed.
- An identification of quality control and quality assurance procedures in place to prevent or identify and correct any errors or omissions in the reported monitoring parameters.
- The assessment team has verified sufficient appropriate audit evidence, to reduce audit risk to an acceptably low level as requisite to achieve reasonable level of assurance for the current verification.

## 1.10 Public Comments

The SD Vista PD was made available for 2 times on the VERRA registry on the following link:

<https://registry.terra.org/app/projectDetail/VCS/3197>

This project was open for public comment from 18/10/2024 to 17/11/2024 in the latest round with SD Vista PD and MR.

The details on procedure for feedback and grievance have been made public on website of Iceberg as the following, which is accessible to all stakeholders of the project:  
<http://www.icebergchina.com/ensnew/contents/304/95.html>

Additionally, it has been socialized and publicized to communities throughout the project location on local notice boards in Swahili as validated during the onsite audit.

### Public Comment:

Comments received by Verra during the public comment period 18 October 2024 to 17 November 2024

#### Comment 1

This project is a joke. They have done barely any research of the local context and compared to a KCJ, their stove is not any better. In the area they laid out, Kiambu/Thika are wealthy areas due to their proximity to Nairobi and most cook on charcoal, not wood, and their stove is for wood biomass so it's less relevant. It is not at all feasible to distribute the number they propose, 100k, in that area.

#### PP Reply:

The fuel for KCJ is charcoal<sup>2</sup>, which is mainly used in urban area. The purpose of the project is to replace the old low efficient baseline cookstoves in rural area of Kenya. According to public literature, Kenya has one of the largest rural populations that still rely on wood fuel as a primary source of energy for cooking<sup>3,4</sup>. So, we chose the Jiko Kisasa improved cookstove, which has a bigger chamber for firewood. We only distributed the project ICS to the household who use wood

---

<sup>2</sup> <https://cookswell.co.ke/product/kcj/>

<sup>3</sup>

[https://www.researchgate.net/publication/353357800\\_Barriers\\_to\\_the\\_Adoption\\_of\\_Improved\\_Cooking\\_Stoves\\_for\\_Rural\\_Resilience\\_and\\_Climate\\_Change\\_Adaptation\\_and\\_Mitigation\\_in\\_Kenya](https://www.researchgate.net/publication/353357800_Barriers_to_the_Adoption_of_Improved_Cooking_Stoves_for_Rural_Resilience_and_Climate_Change_Adaptation_and_Mitigation_in_Kenya)

<sup>4</sup> <https://www.sciencedirect.com/science/article/pii/S221462962100164X>

for fuel and has no improved cookstove yet. We believe there are a lot of families out there that need these improved cookstoves.

**Validation Remarks:**

It was validated by the validation team the project has undergone a detailed baseline survey under VCS and the results of baseline survey were validated as part of the VCS validation report. Moreover, the stoves referred by the commentator are charcoal stoves therefore comparing the charcoal with the firewood stoves is not reasonable. It was also validated by the validation team that the rural population is available there who can benefit with project stoves at free of cost.

**Comment 2**

The fNRB in the project is calculated as 0.9269. When dividing total biomass losses in Kenya between 2010 and 2022, by all possible causes, from land clearing to urbanization, over woodfuel use in wood equivalent for the same period, the fNRB values fall below 45%. The true value MUST be below 44 because you can't claim more degradation and deforestation than observed. Just like claiming that the earth is flat is hard to prove. We are in the same level of discussion here. You Verra know these numbers are insanely inflated, as you know the earth is not flat, and yet you are doing nothing to fix them (because you profit from overcrediting). You are simply exploiting the climate crisis. My only and last question would be: how can y'all sleep at night?

[https://www.linkedin.com/posts/adrian-ghilardi-03833b14a\\_for-those-interested-in-cookstove-projects-activity-7257086436200361984-SaMM?utm\\_source=share&utm\\_medium=member\\_desktop](https://www.linkedin.com/posts/adrian-ghilardi-03833b14a_for-those-interested-in-cookstove-projects-activity-7257086436200361984-SaMM?utm_source=share&utm_medium=member_desktop)

**PP Reply:**

According to "TOOL30: Calculation of the fraction of non-renewable biomass, version 3.0", equation below is used to calculate fNRB:

$$f_{NRB} = \frac{NRB}{NRB + RB}$$

Where:

|           |   |                                                                                                                               |
|-----------|---|-------------------------------------------------------------------------------------------------------------------------------|
| $f_{NRB}$ | = | Fraction of non-renewable biomass in the applicable area in the relevant period (fraction or %)                               |
| $NRB$     | = | Quantity of non-renewable biomass consumed in the applicable area in the relevant period (tonnes)                             |
| $RB$      | = | Quantity of renewable biomass that is available on a sustainable basis in the applicable area in the relevant period (tonnes) |

No relationship between parameters NRB or RB and biomass losses or woodfuel use. The calculations are inconsistent, and therefore the results should not be compared in this way. In addition, the  $f_{NRB}$  of the project has been revised to 0.89 based on updated data.

**Validation Remarks:**

$f_{NRB}$  is already approved as part of the VCS registration and it was validated then the  $f_{NRB}$  is less than other registered GHG projects.

**Comment 3**

I forgot to add my name and contact details in my previous email explaining that Kenya  $f_{NRB}$  can't go higher than 44%, most probably around 30% as MoFuSS estimates; and finally asking how could you sleep knowing the damage you are doing to the planet by registering these projects.

**PP Reply:**

We used TOOL30 (Version 3.0) to calculate  $f_{NRB}$  which was in line with the applied methodology VMR0006. Please refer to the calculation sheet we submitted this time. The VCS PDD was submitted for listing on July 2022, and completed the validation on May 2023. The Information note for Development of default values for fraction of non-renewable biomass published by UNFCCC on October 2023, therefore there was no comparison with this data. The reason why MoFuSS estimates lower than above projects maybe including:

In Para 24, Section 2.5, Page 9 of latest “Updated  $f_{NRB}$  Values for Woodfuel Interventions”, which was published by Ghilardi and Bailis using MoFuSS model<sup>5</sup>, it says “Note these datasets are all 10 or more years old. While this may miss some of the changes that have occurred in the last decade, this is useful for our approach because we typically begin our simulations using a base year ~10 years in the past and calibrate our models to observed changes that occurred over leading up to 2010”. But when we calculated the  $f_{NRB}$ , we used the latest data. This makes a difference in the outcome.

In addition, the related VCS project was registered on Feb. 2024 and the  $f_{NRB}$  value was confirmed at that time. It is not in the scope of this SD VISTA project.

Till now, we have distributed more than 26,000 ICSs in Kenya. Based on feedback from distribution sites, most people who received the stoves are happy. We think the project is at least meaningful and helpful to them.

**Validation Remarks:**

---

<sup>5</sup> [https://cdm.unfccc.int/Sunset\\_CMS\\_ControlledSlots/public\\_inputs/sunsetcms/storage/contents/stored-file-20240624161613578/Report\\_on\\_Updated\\_fNRB\\_Values\\_20%20June%202024.pdf](https://cdm.unfccc.int/Sunset_CMS_ControlledSlots/public_inputs/sunsetcms/storage/contents/stored-file-20240624161613578/Report_on_Updated_fNRB_Values_20%20June%202024.pdf)

f<sub>NRB</sub> is already approved as part of the VCS registration and it was validated then the f<sub>nr</sub>b is less than other registered GHG projects. The validation report/PRR form was validated to confirm the same. The 30% f<sub>nr</sub>b referred by the commentator is the default value which can be used irrespective of any geographical boundary and is an optional method not enforceable.

.

### 1.11 Resolution of Findings

4KES applies the risk-based approach aimed at focusing on high risk issues to the validation results whilst not omitting any part of the mandatory processes. A few discrepancies were found during the validation and the validation report was submitted to the project proponent, indicated under the titles corrective action requests (CARs) and clarification requests (CLs). CARs and CLs require the PP to take relevant actions. Criteria for judging items as CAR or CL are as follows:

#### **Corrective action request (CAR):**

- the project participants have made mistakes that will influence the ability of the project activity to achieve real SDG Impacts and measurable emission reductions
- the SD VISta Standard's requirements have not been met, or
- there is a risk that SDG impacts cannot be achieved, or the emission reductions cannot be monitored or calculated.

#### **Clarification request (CL):**

- Information is insufficient or not sufficiently clear to determine whether the applicable SD VISta requirements/4/ have been met.

FARs is to be raised to highlight issues related to project implementation that require review during the first verification of the project activity. FARs does not relate to SD VISta requirements for registration.

CARs and CLs are to be resolved or closed out if the PP modifies the project description, rectifies the PD or provides adequate additional explanations or evidence that satisfies the concerns. If this is not completed, the project activity cannot be recommended for registration under SD VISta registry.

The project description document was revised addressing the CARs & CLs issued by 4KES. After reviewing the revised and resubmitted project description; resolving the CARs & CLs raised and outstanding concerns, 4KES issues this final validation report and opinion.

00 FAR, 00 CAR and 09 CL were found during Validation. The list of CARs/CLs raised, and the response provided, the means of validation, reasons for their closure and references to correction in the PD are provided in Appendix 04 to this report. The revised PD with changes incorporated as per the issues raised were rechecked with the documentary evidence and found to complete.

## 1.12 Forward Action Requests

No FAR was raised.

# 2 VALIDATION FINDINGS

## 2.1 Summary of SDG Contributions

| Row number | Estimated Project Contribution by the End of Project Lifetime                                                                                                                                                                                                                                                                                                                                                                                                                | SDG Target | SDG Indicator                                                                                                                           | Net Impact on SDG Indicator      | Section Reference | Claim, Asset or Label | Validation Remarks                                                                                                                                                                                                   |
|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. 1)      | Improved cookstove is a basic service necessary to lead a healthy and productive life, including saving time and money for wood fuel at the household level. According to the baseline survey, about 2/3 of the households spent 100-2000KES (127KES≈1USD) per month to buy firewood (Project ID: VCS 3197). This The cost on buying firewood is will be reduced after the implementation of the project. The average monthly savings is 6 USD/month for ex-ante estimation. | 1.4        | Project-specific indicator: Average monthly savings due to reduction in expenditure on purchase fuel after introduction of project ICS. | Implement activities to increase | 3.2, #2           | Claim                 | Improved cookstove is a basic service necessary to lead a healthy and productive life, including saving time and money for wood fuel at the household level. The project proponent will distribute 100,000 ICSs, and |

|  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                               |
|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  | <p>the ICSs are produced in local factories. Hence the implementation of the project results in more job opportunities and higher income for residents.</p> <p>Since the SD vista was clubbed with VCS verification, the time and money saving was verified by interviewi</p> |
|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                                                                                                    |                                    |         |       |                                                                                                                                                                 |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------------------------------------------------|------------------------------------|---------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                                                                                                                                                                                                                                            |     |                                                                                                                    |                                    |         |       | ng the users. It was also verified as part of the surveys undertaken by the PP.                                                                                 |
| 2. | By using ICS, it reduces people's exposure to high PM2.5 and high CO due to higher efficiency of combustion leading to faster cooking and more complete combustion. It also reduce the burn risk, significant to children and toddlers due to enclosure of the fire in the combustion chamber. The percentage of households that reporting indoor air quality has improved since received the project ICSs is 100% for ex-ante estimation. | 3.9 | Project-specific indicator: Number of households indoor air quality improved since they received the project ICSs. | Implemented activities to increase | 3.2, #3 | Claim | Most of non-renewable biomass local people used for cooking is firewood, which generates high PM2.5 and high CO biomass smoke when incompletely burnt. By using |

|  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                               |
|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  | ICS, it reduces people's exposure to high PM2.5 and high CO due to higher efficiency of combustion leading to faster cooking and more complete combustion. It also reduces the burn risk, significant to children and toddlers due to enclosure of the fire in the combustion |
|--|--|--|--|--|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                                                                             |     |                                                                                     |                                  |         |       |                                                                                                                                                                                                                      |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-------------------------------------------------------------------------------------|----------------------------------|---------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                             |     |                                                                                     |                                  |         |       | chamber. The users of the cookstoves also confirmed that the reduction in smoke as compared to the baseline stoves. The 100% reduction is included for the ex-ante purpose. The parameter will be monitored ex post. |
| 3. | The implementation of project needs plenty of local people to participate in production, distribution or use steps, who get relevant skills and sustainable development and | 4.4 | Project-specific indicator: Number of employees provided skill development training | Implement activities to increase | 3.2, #5 | Claim | The project reduces the time spend on firewood                                                                                                                                                                       |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |  |  |  |  |                                                                                                                                                                                                                                                                                                  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>global citizenship education through training by project proponent and its local partners. In addition, End users are informally educated about how to use cookstoves and protect the environment when receiving ICSs. The project provides technical and vocational training to employees involved in ICS production and distribution (e.g., manufacturing, quality control, logistics). The annual number of employees trained is 20 for ex-ante estimation.</p> |  |  |  |  |  | <p>collection for children, especially for girls, which increases their time for education . The implementation of project needs plenty of local people to participate in production, distribution or use steps. They get relevant skills and sustainable development and global citizenship</p> |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                                      |     |                                                                                               |                                    |         |       |                                                                                                                                                                                                                                                                                                               |
|----|--------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------------------------------|------------------------------------|---------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                      |     |                                                                                               |                                    |         |       | p<br>education<br>through<br>training<br>by project<br>proponen<br>t. The<br>trainings<br>were<br>validated<br>by<br>reviewing<br>the<br>records<br>submitte<br>d to<br>validation<br>team as<br>well as by<br>interviewi<br>ng the<br>actual<br>beneficia<br>ries<br>during<br>the onsite<br>assessm<br>ent. |
| 4. | The project reduces women and girls' drudgery through reducing their time spent on collecting firewood and cooking. The average time | 5.4 | Project-specific indicator: Average time saving on cooking and fuel collection in the project | Implemented activities to Increase | 3.2, #3 | Claim | The project reduces women and                                                                                                                                                                                                                                                                                 |

|  |                                                                                                                      |  |                                                 |  |  |  |                                                                                                                                                                                                                                                                          |
|--|----------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>saving on cooking and collecting firewood by female in project scenario is 3 hour/day for ex-ante estimation.</p> |  | <p>scenario by female per household per day</p> |  |  |  | <p>children's drudgery through time savings in reducing time spent cutting, collecting, and carrying firewood from trees far removed from households and reduce time spent cooking over toxic smoky open fires. These tasks, if being undertaken without relief, are</p> |
|--|----------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                          |     |                                                                          |          |         |       |                                                                                                                                                                                                                                   |
|----|----------------------------------------------------------------------------------------------------------|-----|--------------------------------------------------------------------------|----------|---------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                          |     |                                                                          |          |         |       | a major cause of gender inequality . The PP has undertaken the survey as part of the SD Vista verification and the records were verified and the same were established while interviewing the users during the onsite assessment. |
| 5. | The project protects an important water related ecosystem-forest because the ICS reduces the consumption | 6.6 | Project-specific indicator: Total non-renewable woody biomass fuel saved | Increase | 4.2, #4 | Claim | Clean cooking technology                                                                                                                                                                                                          |

|  |                                                                                                                                                                                                                                                                                                                                 |  |  |  |  |  |                                                                                                                                                                                                                                                                              |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>of firewood, which is expected to reduce 108,435 tons non-renewable woody biomass from forest annually due to firewood collection in the area of Sagana River and Athi River where the current distribution of ICS has taken place</p> <p>It was estimated based on backward derivation of emission reductions.</p> <p>.</p> |  |  |  |  |  | <p>provides an essential tool to addressing energy poverty and ensuring sustainable energy security in approximately 100,000 Kenya households during the project lifecycle. It also reduces the smoke and GHG emissions during water boiling. The same was also verified</p> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                                                                                                                                                                                     |     |                                                                                          |                                  |         |       |                                                                                                                             |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|------------------------------------------------------------------------------------------|----------------------------------|---------|-------|-----------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                                                                                     |     |                                                                                          |                                  |         |       | as part of the VCS verification of project wherein the biomass saving was used to quantify the emission reduction .         |
| 6. | The ICS distributed to Household is a clean cooking technology. The project increases the proportion of population with primary reliance on clean fuels and technology in project area. The project is expected replace traditional baseline cookstoves with 100,000 ICSs in total. | 7.1 | Project-specific indicator: Number of households receiving project ICS and still in use. | Implement activities to increase | 3.2, #1 | Claim | The ICS distributed to Household is a clean cooking technology. The project will increase the proportion of population with |

|    |                                                                                                                                                                                                                             |     |                                                                       |                                  |         |       |                                                                                                                                                                                                          |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------------------------------------------------------------|----------------------------------|---------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                             |     |                                                                       |                                  |         |       | primary reliance on clean cooking technology in project area. The distribution of the ICS was validated by reviewing the database and also by visiting the actual benefits during the onsite assessment. |
| 7. | The ICS manufacturer which produces ICS is a local enterprise. It hires more workers to produce ICSs for the project. During the project crediting period, the project proponent is in charge of maintenance and monitoring | 8.5 | Project-specific indicator: Number of employees hired for the project | Implement activities to increase | 3.2, #6 | Claim | The factories which produce ICS are local enterprises                                                                                                                                                    |

|  |                                                                                                                                                                                    |  |  |  |  |  |                                                                                                                                                                                                                                                              |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>plan, which also needs to hire local people, including persons with disabilities and minority. It is estimated that the implementation project will employ 20 local people.</p> |  |  |  |  |  | <p>es. They hire more workers to produce ICSs for the project. During the project crediting period, the project proponent and its local partners are in charge of maintenance and monitoring plan, which creates working opportunities for local people.</p> |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                                                                                                                                                                                                                                   |     |                                                                           |                                  |         |       |                                                                                                                                                                    |
|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------|----------------------------------|---------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                                                                                                                                                                                   |     |                                                                           |                                  |         |       | The employment records were validated during the onsite assessment. The actual beneficiaries were also interviewed who got the employment as part of this project. |
| 8. | The local factories which produce ICS for the project are small-scale industries <sup>6</sup> , which expands production capacity to satisfy the needs. Thus, the upstream and downstream supply chain benefits from the project. The production capacity of ICS manufacturer has increased from 10200 devices per month to 16800 | 9.3 | Project-specific indicator: Production capacity increased for the project | Implement activities to increase | 3.2, #7 | Claim | The local factories which produce ICS for project are small-scale industries. They expand productio                                                                |

<sup>6</sup> <https://www.knbs.or.ke/wp-content/uploads/2023/09/2016-Micro-Small-And-Medium-Enterprises-Survey-Highlights-Of-Basic-Report.pdf>, Page 3, Kenya's official definition: Small enterprises - 10 to 49 employees.

|  |                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |  |  |                                                                                                                                                                                                                                                                     |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p>per month due to the implementation of the project.</p> <p>Beyond initial production capacity improvement, the project ensures sustained SDG impact through providing work training and improve the manufacturer's market development capabilities.</p> <p>During the project PP will training 20 employees/year in production and business skills after the distribution.</p> |  |  |  |  |  | <p>n capacity to satisfy the needs. Thus, the upstream and downstream supply chain benefit from the project. Many of the workers hired by the factories for the project were peasants before. So the project increases manufacturing employment. The employment</p> |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|    |                                                                                                                                                                        |      |                                                       |          |                         |                      |                                                                                                                                                                                   |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-------------------------------------------------------|----------|-------------------------|----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |                                                                                                                                                                        |      |                                                       |          |                         |                      | ent records were validated to confirm it, the historical production records validated and found that the ICS production increases after the investment by Iceberg in the factory. |
| 9. | The average annual GHG emission reduction from the project is expected to be 222,137 tCO <sub>2</sub> e due to less firewood combustion for cooking in the households. | 13.0 | Tonnes of greenhouse gas emissions avoided or removed | Increase | VCS project description | SD VISTA-labeled VCU | The average annual GHG emission reduction from the project is expected                                                                                                            |

|     |                                                                                                                                                                                                                                                            |      |                                                                          |                                    |         |       |                                                                                                                                                                     |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|--------------------------------------------------------------------------|------------------------------------|---------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|     |                                                                                                                                                                                                                                                            |      |                                                                          |                                    |         |       | to be 222,137 tCO <sub>2</sub> e due to less non-renewable firewood combustion for cooking and heating in the households. The ER sheet validated and found correct. |
| 10. | The project helps local people consume less firewood as the ICS has higher thermal efficiency and it results in a reduction of 108,435 tons non-renewable woody biomass from forest. It was estimated based on backward derivation of emission reductions. | 15.1 | Project-specific indicator: Total non-renewable woody biomass fuel saved | Implemented activities to increase | 4.2, #2 | Claim | The project helps local people consume less firewood as the ICS has higher thermal                                                                                  |

|  |  |  |  |  |  |  |                                                                                                                                                                                                                                                                            |
|--|--|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  |  |  |  |  |  |  | <p>efficiency and it results in a reduction of GHG emissions compared to the baseline scenario. It also helps reduce deforestation and protect biodiversity and natural habitats in Kenya. The ER sheet was validated to confirm the criteria, which has been approved</p> |
|--|--|--|--|--|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |  |  |  |  |  |  |                                           |
|--|--|--|--|--|--|--|-------------------------------------------|
|  |  |  |  |  |  |  | under the VCS validation of this project. |
|--|--|--|--|--|--|--|-------------------------------------------|

## 2.2 Project Design

### 2.2.1 Project Objectives

Guangzhou Iceberg Environmental Consulting Services Co., Ltd. has commissioned “4K Earth Science Private Limited” (4KES) to carry out the SD Vista Validation of the project - “Kenya Jiko Kisasa Improved Cookstove Program I”, with regard to the relevant requirements of SD VISta Standard Version 1.0/4/.

The project addresses the three pillars of sustainable development and the SDGs and will have the following objectives:

Improved cookstove is a basic service necessary to lead a healthy and productive life, including saving time and money for wood fuel at the household level. The project proponent will distribute 100,000 ICSs, and the ICSs are produced in local factories. The project has distributed 26,130 ICSs to households from 21/06/2022 to 20/06/2024, and 25,966 are still operating has been mentioned. So the implementation of the project results in more people with access to basic services. (SDI 1.4.1)

Most non-renewable biomass local people used for cooking is firewood, which generates high PM2.5 and high CO biomass smoke when inefficiently burnt. By using ICS, it reduces people’s exposure to high PM2.5 and high CO due to higher efficiency of combustion leading to faster cooking and more complete combustion. (SDI 3.9.1).

The project reduces the time spent on firewood collection for children, especially for girls. It increases their time for education. The implementation of the project needs plenty of local people to participate in production, distribution or use steps. They get relevant skills and sustainable development and global citizenship education through training by project proponent. (SDI 4.4.1).

The project reduces women and children’s drudgery through the time savings in cutting, collecting, and carrying firewood from trees far away from households as well as cooking over toxic smoky open fires. These tasks, if being undertaken without relief, are a major cause of gender inequality. (SDI 5.4.1).

The project protects an important water related ecosystem-forest through reducing deforestation by firewood collecting. (SDI 6.6.1). The project increases the proportion of population with primary reliance on clean fuels and technology in project area. (SDI 7.1.2).

The factory which produces ICS is a local enterprise. It hires more workers to produce ICSs for the project. During the project crediting period, the project proponent and its local partners are in charge of maintenance and monitoring plan, which also needs to hire local people, including people with disabilities and minorities. (SDI 8.5.1). The local factories are small-scale industries.

They expand production capacity to satisfy the needs of the project. Thus, the upstream and downstream supply chain benefits from the project. (SDI 9.3.1).

The average annual GHG emission reduction from the project is expected to be 222,137 tCO<sub>2</sub>e due to less firewood combustion for cooking in the households. (SDG 13).

The project helps local people consume less firewood as the ICS has higher thermal efficiency and it results in a reduction deforestation compared to the baseline scenario. (SDI 15.1.1).

The validation is seen as necessary to provide assurance to stakeholders of the quality of the project and its intended generation of emission reductions and compliance with the SDG Impacts over the project's crediting period without any double counting. Validation team confirms that the project has clearly stated its objectives corresponding to the SDGs.

### 2.2.2 Project Activities

The dissemination of ICS by 'Guangzhou Iceberg Environmental Consulting Services Co., Ltd.' introduces a simple technological intervention in the traditional cookstove to reduce fuelwood consumption, smoke emission, and positive impact on women's health and wellbeing. The Jiko Kisasa model ICS are designed to help in a significant reduction in the global greenhouse gas emissions. These stoves are high efficiency and work on all biomass fuels such as wood, dry dung, crop waste, coconut waste, bamboo etc. The stoves incorporate a designed air-induction mechanism and significantly reduce fuel consumption as well as smoke emissions. The lowered fuelwood requirement is especially beneficial women who do not have to breathe polluted air, and also do not have to spend inordinate amount of time in collecting firewood. The program goals include creating social and behavioral changes with respect of rural households' attitudes regarding fuelwood collection, consumption and conservation. This will help the rural communities over time to manage their time and health in a better way. The program has 2 major components: distribution of ICS to rural families, and creation of livelihood opportunities regarding this distribution for the rural families.

An indigenous project device under project activity will target rural households using low efficiency and higher GHG emitting stoves. Replacement of conventional firewood stoves with higher efficiency ICS models will be carried out in the targeted households. ICSs are more efficient than conventional firewood stoves as they reduce heat loss and improve heat transfer and combustion efficiency. Fuel efficient ICS models with improved heat transfer and combustion efficiency will be deployed, resulting in a decrease in fuel use in comparison to conventional pre-project stoves, while also reducing particulate matter and carbon emissions.

As confirmed through the on-site interview and through the documents/8/, the technology deployed under the project activity shall be thermally efficient single stove, improved cookstoves (in compliance with the methodological requirements) and having an average lifespan of 7 years. Jiko Kisasa stove has been tested for thermal efficiency of 27.2% as per water boiling test according to ISO 19867 test Sequence protocol and certified by third party (KIRDI Stove Testing

Centre). The efficiency of ICS has been estimated to be more than 2 times the efficiency of old cookstoves. The efficiency test report provided to assessment team was reviewed and it was concluded that the efficiency test/2/ was conducted in accordance with the procedure stipulated in the applied methodology VMR006, version 1.1/09/.

The project involves energy efficient cookstove distribution which falls under the category of efficiency improvements in thermal applications; therefore, it is eligible under the scope of the Program.

- 1) The individual households using ICS will sign an agreement with the PP will enter into contractual agreement with the beneficiaries by virtue of which, the end user will confirm use of cook stove as well as transfer the VER right to the Project Participant. The sample agreement /7/ was validated by the assessment team for the cook stoves and found in line. A record keeping system and unique identification of the ICS will be done by user's information collected through the Beneficiary Agreement and compiled in distribution records. This will include username, identification number and address/location of the user's house, stove unique serial code and distribution date. The record keeping system will ensure that each ICS can be traced to project to avoid double counting. The estimated total amount of emission reductions over the chosen 10-year "fixed crediting period" is 2,221,373 tCO<sub>2</sub>e. The estimated amount of emission reductions per annum are 222,137 tCO<sub>2</sub>e. The project activity falls under project category since the annual average GHG emission reductions are less than 300,000 tCO<sub>2</sub>e.
- 2) Each ICS distributed will have corresponding end user details (i.e. name, address etc.). Additionally, unique id shall be displayed on the stove itself to avoid double counting.

The project activity addresses the sustainable development objectives as mentioned in section 2.2.1 by:

#### Social Well Being

- The project will reduce the risk of mortality among children under the age of 5 due to acute lower respiratory illness and burns resulting from children falling into open cooking fires
- The project aims to reduce household air pollution which will lead to improved health conditions of women and children
- Under the project scenario due to ICS women will be able to save 2 to 5 hours daily.
- The clean burning Jiko Kisasa Cookstoves will benefit approximately 100,000 individuals.

#### Economic Well Being

The project aims to generate around 20-30 employment opportunities for manufacturing ICS, distribution of ICS and post-sale operation & maintenance of ICS. The information was validated during the onsite

audit as part of the HR records, moreover the SD Vista verification is clubbed with validation and information also verified as part of the SD Vitsa verification. After the implementation of the project, it has 7 full-time employee and 30 part-time employees, and 23 of them are women, 1 is with disabilities were employed.

- Under the project scenario due to ICS women will be able to save 2 to 5 hours daily and will have time to engage in other employment opportunity.

#### Environmental Well Being

- The project will supply fuel- efficient Jiko Kisasa Cookstoves to the residents and communities and will reduce the dependence on unavailable fossil fuel-based cookstoves
- The project will lead to reduction in household air pollution.
- The project will result in reducing approximately 2 million tCO<sub>2e</sub> of emission reduction.

Validation team has checked the project details with the submitted supportive documents and found it to be consistent.

The start date of the project is considered as 21/06/2022 which is the date of distribution of first ICS in the project activity.

The start date was validated by reviewing the project document named “Kenya ICS Donation and Carbon Transfer Agreement for Distribution in the start Date”, which shows details of households who received ICS on first day of the project, including location of the household and unique ID of ICS etc. Moreover, this was also validated by the database maintained by the project partner in their local office. Validation team reviewed the database in conjunction with the “ICS Donation and Carbon Transfer Agreement” agreement with the first beneficiary.

The project is not registered with any other GHG schemes except for VCS and is only claiming SD VISTA-labeled VCUs, validation team reviewed the websites of other GHG schemes to verify the same. Declaration to this effect is also submitted by the project participant/4/. The Project activity meets all local laws and regulation of Kenya. Validation team confirms that the description in the project description is accurate, complete, and provides an understanding of the nature of the project.

### 2.2.3 Implementation Schedule

The start date of the project is considered as 21-June-2022 which is the date of distribution of first ICS in the project activity. The project activity is envisaged to distribute all targeted ICS by 2024.

The start date was validated by reviewing the project document named “Kenya ICS Donation and Carbon Transfer Agreement for Distribution in the start Date”, which shows details of households

who received ICS on first day of the project, including location of the household and unique ID of ICS etc. Moreover, this was also validated by the database maintained by the project partner in their local office. Validation team reviewed the database in conjunction with the “ICS Donation and Carbon Transfer Agreement” agreement with the first beneficiary. The other key activities validated as below:

| Date                     | Milestone(s) in the Project's Development and Implementation                                                            | Validation Remarks                                                                                                                                                     |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 16/05/2022               | Stakeholder meeting in Kiambu County                                                                                    | Validated as part of the VCS validation and also validated as part of SD Vista. The same team of the VVB had undertaken the VCS validation and first VCS verification. |
| 19/05/2022               | Stakeholder meeting in Muranga County                                                                                   | Validated as part of the VCS validation and also validated as part of SD Vista. The same team of the VVB had undertaken the VCS validation and first VCS verification. |
| 25/05/2022 to 06/06/2022 | Baseline survey on key SDG indicators like health, gender equality, and energy use.                                     | Validated as part of the VCS validation and also validated as part of SD Vista. The same team of the VVB had undertaken the VCS validation and first VCS verification. |
| 03/05/2023 to 06/06/2023 | Fuel consumption survey                                                                                                 | Validated as part of the VCS validation and also validated as part of SD Vista. The same team of the VVB had undertaken the VCS validation and first VCS verification. |
| 01/09/2023 to 14/11/2023 | Monitoring survey on project's ongoing SDG impacts, including improved health, reduced women's labor, and fuel savings. | Validated as part of the VCS validation and also validated as part of SD Vista. The same team of the VVB had undertaken the VCS validation and first VCS verification. |
| 16/03/2023               | Complete the distribution of the existing 26,130 project ICSs.                                                          | Validated as part of the VCS validation and validated as part of SD Vista. The same team of the VVB had undertaken the VCS validation and first VCS verification.      |
| 27/02/2024               | Registered in VCS registry                                                                                              | Validated from the VERRA registry.                                                                                                                                     |
| 21-06-2022 to 20-06-2024 | First monitoring period, under VCS verification                                                                         | Validated as part of the VCS verification, same team of VVB had undertaken the VCS validation and first VCS verification.                                              |
| 18/10/2024 - 17/11/2024  | Public comment period of SD Vista                                                                                       | Validated from the VERRA registry.                                                                                                                                     |

### 2.2.4 Project Proponent and Other Entities Involved in the Project

The SD Vista VCS PD has described the project proponent as given below with the role/responsibilities in the project. Validation team confirmed the same during the on-site inspection and through the document review i.e. listing representation available on the VERRA registry and found it to be consistent.

|                     |                                                                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Organization Name   | Guangzhou Iceberg Environmental Consulting Services Co., Ltd.                                                                             |
| Role in the Project | Project proponent                                                                                                                         |
| Contact Person      | Ji BAO                                                                                                                                    |
| Title               | General Manager                                                                                                                           |
| Address             | No.106 Fengze East Road, Nansha District, Guangzhou, China                                                                                |
| Telephone           | +8613560420840                                                                                                                            |
| Email               | <a href="mailto:baoji@icebergchina.com">baoji@icebergchina.com</a> ; <a href="mailto:hanjin@icebergchina.com">hanjin@icebergchina.com</a> |

Guangzhou Iceberg Environmental Consulting Services Co., Ltd. is the Project proponent (PP), which is as per the submitted declaration<sup>7</sup> as the project activity has been developed by Guangzhou Iceberg Environmental Consulting Services Co., Ltd. Therefore, project proponent has sole right to use the generated Emission reductions.

### 2.2.5 Project Type

The project is a standalone energy efficiency improvement type project which distributes fuel-efficient cookstoves replacing the traditional cookstoves. The project is not a grouped project.

The project is categorised under type/category as below:

- a) Sectoral scope: 03 - Energy demand

---

<sup>7</sup> signed by the authorized representative of the PP.

b) Type: II – Energy efficiency improvement projects

The project is not a grouped project.

### 2.2.6 Project Location

The project will be implemented across Kenya and will cover the national boundary of Kenya. The project boundary is defined by the following GPS coordinates and is found to be consistent. Further, project GPS coordinates as provided in the VCS PD and which are presented below, have been verified through the means of google earth software.

Geo-coordinates for Kenya:

| <i>Orientation</i> | <i>Latitude</i> | <i>Longitude</i> |
|--------------------|-----------------|------------------|
| Eastmost           | 3°48'58" N      | 41°53'59" E      |
| Westmost           | 1°03'35" S      | 33°55'46" E      |
| Southmost          | 4°40'33"S       | 39°19'32" E      |
| Northmost          | 4°15'41" N      | 35°23'57" E      |

### 2.2.7 Baseline Scenario

Over the past few decades, Kenya's macroeconomic has steadily posted strong growth mostly from road, rail, air and water transport infrastructure projects. However, its key development challenges still include poverty, inequality, transparency and accountability, climate change, continued weak private sector investment and the vulnerability of the economy to internal and external shocks. Kenya ranks poorly on the Fragile States Index at number 33 out of 179 countries in 2021, which placed in the high warning category<sup>8</sup>.

Kenya is famed for its scenic landscapes and vast wildlife preserves, including lions, elephants, cheetahs, rhinoceroses, and hippopotamuses. Kenya's western provinces, marked by lakes and rivers, are forested, while a small portion of the north is desert and semidesert. The country's diverse wildlife and panoramic geography draw large numbers of European and North American visitors, and tourism is the second-largest source of foreign exchange revenue following agriculture<sup>9</sup>. Agriculture is the largest sector: tea and coffee are traditional cash crops, while fresh flowers are a fast-growing export.

A significant population of other wild animals, reptiles, and birds can be found in the national parks and game reserves in the country. The annual animal migration occurs between June and

<sup>8</sup> <https://fragilestatesindex.org/country-data/>

<sup>9</sup> de Blij, Harm. The World Today: Concepts and Regions in Geography 4th edition. Wiley Publishing: Hoboken, NJ

September, with millions of animals taking part, attracting valuable foreign tourism. Two million wildebeest migrate a distance of 2,900 kilometres from the Serengeti in neighbouring Tanzania to the Masai Mara<sup>10</sup> in Kenya, in a constant clockwise fashion, searching for food and water supplies. This Serengeti Migration of the wildebeest is listed among the Seven Natural Wonders of Africa<sup>11</sup>.

Kenya is very vulnerable to climate change with current projections suggesting that its temperature will rise up to 2.5°C between 2000 and 2050, while rainfall will become more intense and less predictable. Even the slightest increase in frequency of droughts will present major challenges for food security and water availability, especially in Kenya's Arid and Semi-Arid Lands<sup>12</sup>.

The validation team independently checked the baseline from the third-party literature and found as per analyses in the Africa Energy Outlook 2019 /23/ show, the lack of access to clean cooking remains very acute in sub-Saharan Africa with access increasing only slightly from 15% in 2015 to 17% in 2018. Since 2015, only 25 million people have gained access to clean cooking in the region, meaning that the number of people without access increased to over 900 million in 2018 as population growth outpaced provision efforts. Sub-Saharan Africa is the only region where the number of those without access continues to rise significantly, highlighting the urgent need for action.

Most of the population in sub-Saharan Africa thus rely on gathering biomass for cooking, particularly in rural areas, which dramatically damages health and impairs productivity improvements. Almost 490,000 premature deaths per year are related to household air pollution from the lack of access to clean cooking facilities, with women and children being among the worst affected. Forest degradation, sometimes leading to deforestation, is another serious consequence of the unsustainable harvesting of fuelwood. Regarding the way of use of this energy, a large proportion of households depend on traditional cookers named "03 stones or triangle iron or crude clay/mud constructions", which remains the most common practice. This trend remains true for Kenya as well, which is the condition prior to the project initiation.

- *Baseline Scenario in Kenya*

Over 90% of the rural population and around 75% of all Kenyan households still cook with wood or charcoal<sup>13</sup>. The project proponent has conducted a baseline survey from 25/05/2022 to 06/06/2022 among 120 households from 6 villages, which shows that 96.67% of surveyed households used three-stone fire and 3.33% used open fire before the project implemented. All

---

<sup>10</sup> Bashir, Hanif. "Masai Mara Safari - The Migration | Tour Packages".

<sup>11</sup> Pflanz, Mike (13 June 2010). "New road threatens Africa's 'wonder of the world' wildebeest migration". Daily Telegraph. ISSN 0307-1235.

<sup>12</sup> <https://reliefweb.int/report/kenya/climate-change-profile-kenya>

<sup>13</sup> [https://ambitiontoaction.net/wp-content/uploads/2021/07/A2A\\_Kenya\\_CleanCookingStudy\\_July2021.pdf#:~:text=Even%20though%20Kenya%20has%20made%20significant%20progress%20over,petroleum%20gas%20%28LPG%29%20as%20their%20primary%20cooking%20fuel.](https://ambitiontoaction.net/wp-content/uploads/2021/07/A2A_Kenya_CleanCookingStudy_July2021.pdf#:~:text=Even%20though%20Kenya%20has%20made%20significant%20progress%20over,petroleum%20gas%20%28LPG%29%20as%20their%20primary%20cooking%20fuel.)

of the households used firewood for cooking. The baseline scenario is the continued use of non-renewable wood fuel (firewood) by the target population to meet similar thermal energy needs as provided by project cookstoves in absence of project activity.

The baseline survey results were validated by the validation team by reviewing the baseline survey undertaken by the PP before the project implementation. The survey results were further reconfirmed during the onsite assessment wherein the households were interviewed and found the baseline was three stone fire stoves.

PP had undertaken multi-stage sampling was applied in the baseline survey to determine  $\eta_{old}$ , the only parameter requires to be determined by baseline survey for ER calculation according to the applied methodology. According to Equation 16 in Guideline for sampling and surveys for project activities and programmes of activities (Version 04.0) as well as the baseline survey, since  $\eta_{old} = 0.1$  for all the surveyed households,  $SDB=SDW=0$ . Therefore, when the number of villages that were sampled is 6, 90/10 confidence/precision was achieved in the baseline survey. (because when  $SDB=SDW=0$ , the right side of Equation 16 is 0. So when  $c=6$ , 90/10 confidence/precision was achieved)

#### **Project compliance with applicable laws, statutes and other regulatory frameworks**

There is no mandatory legal requirement for installation of cookstoves in households/institutions of Kenya.

Kenya's national energy policy<sup>14</sup> mentions as one of the prioritized actions in the energy sector the development and distribution of 4 million improved biomass stoves by 2022. Kenya's National Climate Change Action Plan 2018-2022<sup>15</sup>, provides some more details related to the development and distribution of those improved biomass cookstoves. As per the National Climate Change Action Plan it becomes clear that the distribution of 4 million improved biomass stoves is an objective and a proposed priority mitigation action, however the distribution and use of improved biomass cookstoves is not enforced by any government law, policy or regulation, hence there is no obligation for households to use improved cookstoves. Hence, though a government objective has been defined, it is not guaranteed whether this objective will be achieved and if so, to what extent. The NDC of Kenya<sup>16</sup> does not mention any specific objectives regarding improved cookstoves.

---

<sup>14</sup> Ministry of Energy of the Republic of Kenya, National Energy Policy, October 2018

([https://kplc.co.ke/img/full/BL4PdOqKtxFT\\_National%20Energy%20Policy%20October%20202018.pdf](https://kplc.co.ke/img/full/BL4PdOqKtxFT_National%20Energy%20Policy%20October%20202018.pdf))

<sup>15</sup> Ministry of environment and Forestry, National Climate Change Action Plan 2018-2022, Volume 3 : Mitigation Technical Analysis Report, 2018

[https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8737\\_vol3.pdf](https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8737_vol3.pdf)

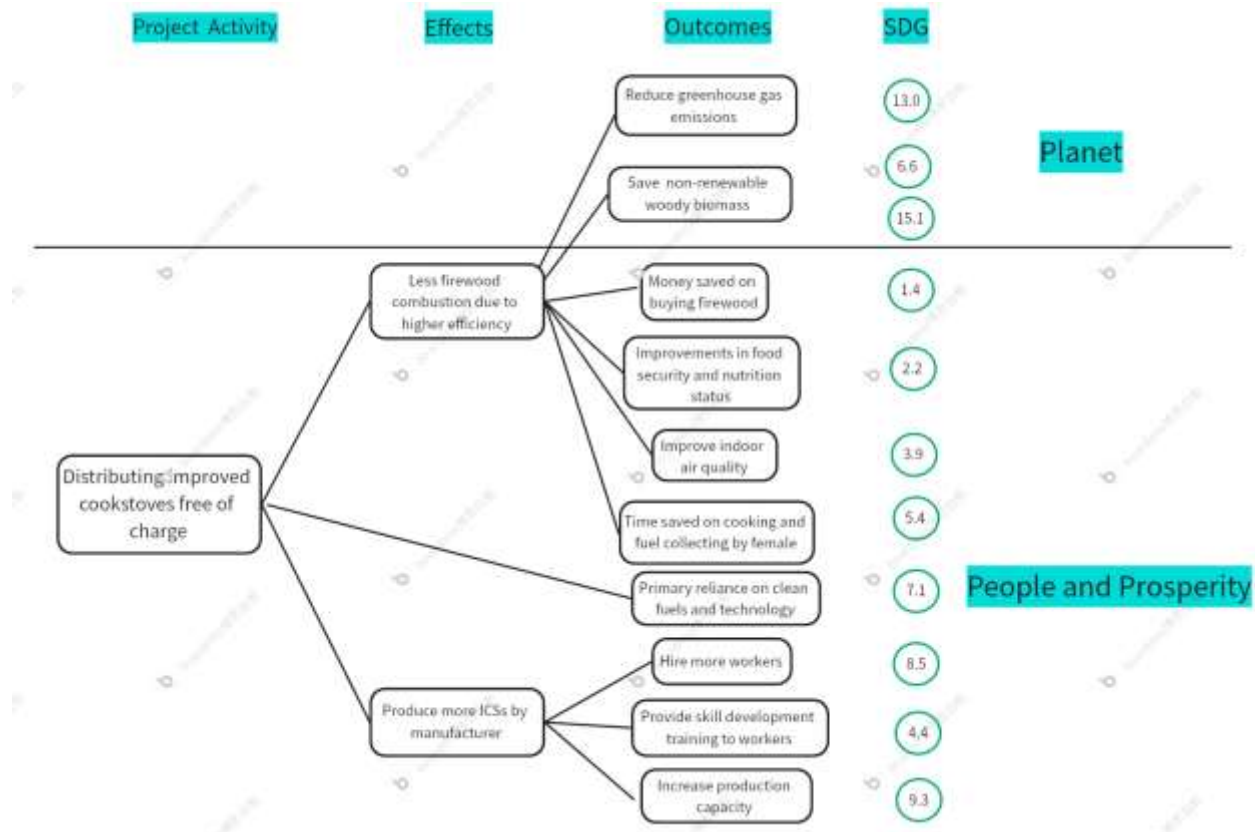
<sup>16</sup> [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya\\_NDC\\_20150723.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf)

Based on the on-site interview discussion and through the sectoral expertise, validation team confirms that the Baseline scenario presented in the SD Vista PD is an accurate description of the social, economic, and natural capital conditions at the start of the project.

Findings: No findings were raised.

## 2.2.8 Causal Chain(s)

The validation team has assessed the casual chains mentioned by the Project participant during the on-site interview. The installation of improved cookstoves in all households generates a net positive impact with respect to all stakeholders, especially women, who are the primary users of cookstoves.



The validation team has conducted an on-site inspection and found the above-mentioned benefits appropriate. All effects, outcomes are linked with the SDGs claimed by the project and validated in section 2.1 of the validation report.

## 2.2.9 Threats to the Project

Validation team has checked the identified threats to the expected sustainable development benefits during the project lifetime and found that all the identified threats are comprehensive and the measures to mitigate these threats are reasonable.

| Threats identified      | Description of threat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Conclusion                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Natural-induced threats | <p>1. Threat: More and more difficult to collect firewood for stove due to deforestation and degradation</p> <p>Solution: Due to low income of end-users, they tend to use free firewood for stove instead of other fuel. The project ICSs distributed to them have reduced the consumption of the firewood.</p> <p>The project directly reduces deforestation by decreasing the demand for woody biomass through the distribution of improved cookstoves (ICS) with higher thermal efficiency (27.2%). By replacing traditional inefficient three-stone fires or open fires, the ICS significantly lowers firewood consumption per household. This reduction in demand alleviates pressure on local forests.</p> <p>2. Threat: Natural disasters such as droughts, floods, or extreme weather events in Kenya may force households (HHs) to temporarily or permanently relocate. This could disrupt ICS usage, lead to loss or damage of stoves, and reduce the project's long-term benefits.</p> <p>Solution: Prioritize replacement of lost/damaged ICSs for affected households through collaboration with</p> | <p>As confirmed by the validation team during the on-site interview, the ICS will be distributed free of cost and will result in low firewood consumption and contribute in managing the deforestation. In case of the threat identified as part of Natural disasters such as droughts, floods, or extreme weather events in Kenya, PP will replace, repair the project devices at the earliest.</p> |

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                        |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                       | local authorities and disaster response agencies.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                        |
| Human-induced threats | <p>1. Threat: The households may not want to accept the ICS</p> <p>Solution: Iceberg and its local partners do research on the reason why some local households do not want to use the ICSs if it happens. First of all, the end-user households should be chosen carefully to avoid this problem. Only the poor households who do not have similar cookstoves are chosen to receive our donation. Through the training, they can easily understand the benefits of the ICS, such as the reduction of air pollution and cost on wood fuel. The households accepting the ICS share their experiences in the training to encourage higher usage rate. Iceberg and its local partners continuously improve the training as well as other measures to increase the acceptance of the ICS.</p> <p>2. Threat: ICS damage or malfunction reduces long-term usage</p> | Validation team assessed that all threats identified are realistic and comprehensive all solutions provided under each threat identified are assessed implementable. . |

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>Solution: The manufacturer provides 1-year warranty and free repair services. The project proponent plans to distribute new ICSs to replace the old ones from the sixth year of the crediting period. Since the lifetime of the ICSs is seven years, they can be still used for 2-3 years after the end of the crediting period.</p> <p>3. Threat: Unsustainable forest harvesting persists despite reduced demand.</p> <p>Solution: During the distribution of ICS, reinforce end-users' awareness of fuel conservation through explanation to emphasize the correlation of "reduced logging = forest protection = long-term benefits".</p> <p>4. Threat: Inequitable distribution of ICSs, marginalizing remote communities.</p> <p>Solution: Prioritize underserved areas in distribution plans. Partner with local partners to ensure inclusive outreach and transparent beneficiary selection.</p> |  |
|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|  | <p>5. Threat: Cultural resistance to abandoning traditional cooking methods.</p> <p>Solution: Tailor training sessions to address cultural preferences, involve women in demonstrations, and highlight alignment with local values (e.g., time savings for childcare).</p> <p>6. Threat: Dependency on carbon credit income; market failure risks long-term sustainability.</p> <p>Solution: Build local capacity for stove production and maintenance to create self-sustaining markets.</p> |  |
|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|

### 2.2.10 Benefit Permanence

Through the dissemination of improved cookstoves, the project activity targets the cooking habits of households, enabling the users to reduce their fuel requirements, cooking time and also, improve their health conditions and increase the employment opportunities available to them by employing the locals for distribution, marketing, monitoring and maintenance activities. As confirmed during the on-site interview, awareness campaigns and trainings/6/ will be carried out which will further educate the stakeholders on the benefits of the improved cookstove and thereby ensuring continued use of ICS in future to achieve environmental and socio-economic benefits. These benefits include improved health through reduction in indoor air pollution, saving time on unpaid chores, economic development by employment and sales opportunities, and reducing the income expenditure on fuelwood.

The project involves distributing ICS to local people free of charge only. The question was explicitly asked by the verification team during the interviews with the users of the project. The users/beneficiaries confirmed that the ICS they received under the VCS project are free of cost.

The project will distribute approximately 100,000 to households, which are produced in local factories. Hence the implementation of the project needs plenty of local people to participate in production, distribution or use steps, which results in more job opportunity. It trains skilled workers for Kenya industry, which benefits both themselves and the country even after the project activities have ceased. The project will have long-term positive influences on the health of end-users, especially the women and girls who mainly undertake the cooking in the households through the improvement of air condition. The time saved for education from cooking and firewood collection have permanent positive influences on the children, especially the girls who are mainly in charge of these two tasks. The forest saved by the project through the reduction of non-renewable biomass consumption protects the environment and biodiversity for a long time. In addition, the project proponent plans to distribute new ICSs to replace the old ones from the sixth year of the crediting period. Since the lifetime of the ICSs is seven years, they can be still used for 2-3 years after the end of the crediting period. If the operation of the project can achieve the expectation of the project proponent, it plans to implement more ICS projects in Kenya.

PP will also carry out regular visits to households and different villages and informed the beneficiaries about ways to extend the life of the ICS technology, including information about timely maintenance, how to clean stoves to ensure proper airflow, and what cooking techniques can be used to protect and preserve stove components. Iceberg's efforts to provide replacement and free maintenance wherever needed is expected to increase demand of Jiko Kisasa stoves among households across the project area.

The validation team has conducted on-site interview and confirmed that the above-mentioned benefits are appropriate.

## 2.3 Stakeholder Engagement

### 2.3.1 Stakeholder Identification

The process used to identify stakeholders likely impacted by the project shows below:

1. Initial Scoping and Community Engagement:

Conduct preliminary research to identify target communities and hold initial meetings with local leaders for preliminary feedback.

2. Stakeholder Mapping:

Identify key groups including households, community organizations, local businesses, government agencies, and NGOs, ensuring vulnerable groups are considered.

3. Detailed Stakeholder Analysis:

Perform social and economic impact assessments to evaluate how different groups will be affected.

#### 4. Documentation and Communication:

Document all findings and clearly communicate project objectives and potential impacts using various channels.

Then the following stakeholders have been identified:

- (a) The ICS end-users
- (b) Stove manufacturer
- (c) Local authorities
- (d) Local NGOs

The validation team has conducted on-site interviews to check the level of involvement by the stakeholders with the project and found that the stakeholder identification in the project is convincing. The same was also verified from the local stakeholder consultation records.

Stakeholder consultation meeting was held separately on 16-May-2022 in Kiambu County and on 19-May-2022 in Muranga County. These locations were chosen as they are representative of the diverse regions within Kenya and provide a good cross-section of the target population. Kiambu County is located in the central region and has a mix of urban and rural areas<sup>17</sup>, while Muranga County is predominantly rural<sup>18</sup>, validation team visited both the areas as part of the VCS validation/verification as well as part of SD Vista validation. The attended stakeholders including Villager representatives and village leaders from the following villages: Kiambu County, Nyaga Location, Ngewa village, Kanjai village, Giathieko village. Muranga County, Mugumoini Location, Nguthuro village, Manyungu village and Matutoini village, the Chief and Assistant Chief of Kiambu county, the Chief and Assistant Chief of Muranga county, the representative of local NGO- JAMBO CAPITAL INITIATIVE (JCI). 59 villagers, 1 from stove manufacturer, 1 from NGO, and 7 representatives of local authorities have attended the meetings. The attendance sheet was validated and also some of the attendees were interviewed during the onsite assessment of the VCS/SD Vista validation.

This four-step identification process ensured that all groups potentially affected by the project were included, with particular attention to vulnerable and marginalized populations. The government officials who were part of the stakeholder consultation were interviewed during the onsite assessment to confirm the same. This fulfils the requirements of Paragraph 2.2.1 and 2.2.2 of SD VISTA Standard Version 1.0.

### 2.3.2 Stakeholder Description

---

<sup>17</sup> <https://kiambu.go.ke/kiambu-county/>

<sup>18</sup> <https://muranga.go.ke/>

Validation team confirms that all the stakeholders and stakeholder groups that are included/may be included in the project were found appropriate as verified during the interview.

| Stakeholder groups<br>(Direct/Indirect affected by<br>project activity) | Relevance to the project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Justification by the<br>validation team                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Users of ICS (Direct)                                                   | These communities are organized in a traditional manner with more literate among the younger generations and with most elderly as engaged in farming or animal husbandry activities. Due to lack of educational and employment opportunities, social transformation is not easy. Unsubsidized ICS are generally inaccessible to the local rural population. As a result, locals welcome all interventions that bring improved economic productivity that might help alleviate poverty in various ways. Beneficiaries' interest is in saving their time and resources, improving their health and promoting economic stability. | <p>The validation team confirms that the stakeholder group included in the project is described appropriately in the project description of the SD-Vista PD/1/ and hence acceptable.</p> <p>The attended stakeholders including: Villager representatives and village leaders from the following villages: Ngewa village, Kanjai village, Giathieko village, Nguthuro village, Manyungu village and Matutoini village, the Chief attended the meeting.</p> <p>The acknowledged invitation letter and attendance sheet to this effect was validated.</p> |
| ICS manufacturer                                                        | The PP will procure the ICS from manufacturer of the same, as per user requirement the ICS to be designed or modified. The ICS manufacturer are one of the relevant stakeholder and will be consulted for any changes or providing details for safe and effective usage of ICS to be distributed.                                                                                                                                                                                                                                                                                                                              | The validation team confirms that the stakeholder group included in the project is described appropriately in the project description of the SD-Vista PD/01/ and hence acceptable.                                                                                                                                                                                                                                                                                                                                                                      |

|                   |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Local Authorities | The support from local government is very crucial for the implementation of the project. It provides indispensable information and authorization for the project. It also help the project implementers to collect feedback from end-users. | <p>The validation team confirms that the stakeholder group included in the project is described appropriately in the project description of the SD-Vista PD/01/ and hence acceptable.</p> <p>Assistant Chief of Kiambu county, the Chief and Assistant Chief of Muranga county, the acknowledged invitation letter to this effect were validated along with the attendance sheet.</p> |
| Local NGOs        | The NGO has deep knowledge of the community, ensuring the project meets real needs and is culturally appropriate. The partnership will strengthen the NGO's capacity and visibility, enhancing its role in community development.           | <p>The validation team confirms that the stakeholder group included in the project is described appropriately in the project description of the SD-Vista PD/01/ and hence acceptable.</p> <p>The representative of local NGO- JAMBO CAPITAL INITIATIVE (JCI). The acknowledged invitation letter and attendance sheet to this effect was validated.</p>                               |

### 2.3.3 Stakeholder Consultation

The Local stakeholder consultations were conducted by the PP in accordance with the requirements of VCS. The local stakeholder consultation meetings were held with participants representing rural Kenya with an objective of gathering comments and concerns of the stakeholders on the proposed VCS project titled "Kenya Jiko Kisasa Improved Cookstove Program I" implemented by 'Guangzhou Iceberg Environmental Consulting Services Co., Ltd/22/. The

project will be implemented in different counties of Kenya. The dates and attendance list of the various meetings that have been conducted are as follows:

The physical consultation was conducted on 16/05/2022 in Kiambu County and on 19/05/2022 in Murang'a County. Various inviting methods were applied for the stakeholder consultation meeting. For the convenience of stakeholders, the invitations were in both English and Swahili. The invitation was sent to villagers through broadcast in villages to make sure everyone can understand. Some local people were invited by phone. For local officers and entrepreneurs, invitation letters were sent to them as formal invitations. National government officials, local and international NGOs were invited by email. The validation team met with the government authorities who were part of the local stakeholder consultation process along with the other attendees. It was informed by the government authorities that the LSC was undertaken at the office of the Chief (government officer) and the adequate information was provided to the attendees.

The audit team has checked the stakeholder-related documentation-invitations, summary provided to participants and feedback by the local community. The VVB has also conducted interviews with some of the stakeholders during the on-site visit and confirmed on the local stakeholder consultation meeting. No negative comment was received.

PP has maintained a register as a part of on-going communication with local stakeholders and end users are informed about grievance register. PP shall encourage the stakeholders to provide feedback/grievance as part of continuous ongoing stakeholder communication. The stakeholders shall be communicated through the house visits. The project proponent/local partners have the responsibility to take grievances regarding the project activity and same will be considered during operation of project activity. Thus, ongoing communication of stakeholders is followed through grievance mechanism. The VVB confirms that the local stakeholder consultations have been done in accordance with VCS Standard, v4.7 requirements in conjunction with SD Vista standard, v 1.0.

This four-step identification process ensured that all groups potentially affected by the project were included, with particular attention to vulnerable and marginalized populations. This fulfils the requirements of Paragraph 2.2.1 and 2.2.2 of SD VISTA Standard Version 1.0. The identified groups were participated in the meeting and the same was confirmed by interviewing the government official during the onsite assessment of VCS validation. Mr. James Gitau Kimani Chief, Ngewa County (Government Officer and attendee of local stakeholder meeting) was interviewed on 20/04/2023 during the VCS validation.

The validation team has checked the supportive documents, i.e. Stakeholder meeting photos, email sent, attendance sheet, feedback forms etc. to confirm the stakeholder meeting. Review of the Stakeholder meeting minutes shows that people were supportive to the project activity and expressed no negative comments on the project activity. As part of the validation, 4KES confirmed through document review that the stakeholders were invited in a transparent manner.

Findings: No findings were raised.

### 2.3.4 Continued Consultation and Adaptive Management

It has been confirmed that to have a continuing communication and consultation between the project proponents and stakeholder groups, the project proponents shall take regular feedback and inputs from stakeholders and adapt management accordingly. The Jiko Kisasa cookstove has been designed in continuous consultations with women, and other direct users of cookstoves. Local field staffs will conduct stakeholder feedback meetings within their respective zones and in case of grievances, additional meetings will be conducted, and requests of the stakeholders will be considered by the PP to resolve those issues.

PP has maintained a register as a part of on-going communication with local stakeholders and end users are informed about grievance register. PP shall encourage the stakeholders to provide feedback/grievance as part of continuous ongoing stakeholder communication. The stakeholders shall be communicated through the house visits. The project proponent/local partners have the responsibility to take grievances regarding the project activity and same will be considered during operation of project activity. Thus, ongoing communication of stakeholders is followed through grievance mechanism.

The project proponent has provided different measures to communicate and consult with stakeholders during this monitoring period:

1. Put a hard copy of an opinion book in each village to record any incidences or occurrences.
2. A email address that could be used to complain any problems concerning the project.
3. Ensure that a close collaboration is groomed and maintained between the representatives of JCI and Iceberg with the users and the village elders.

### 2.3.5 Anti-Discrimination

As confirmed during on-site interview, the validation team confirms that the project does not and will not discriminate against individuals and employment of staffs is not based on gender, race, religion, sexual orientation or on any other basis. The project is aligned to Kenya's strategy for elimination of all discrimination. Kenya is also party to the "Convention on the Elimination of All Forms of Discrimination against Women" and the project has aligned its labour policies with the same.

No discriminations have been reported to occur in the operational period among the employees. Awareness and training regarding prevention of sexual harassment are continuously provided to the ground team members.

Training records were verified, and it was concluded based on the training records, interview of the employees that the project proponent works as the laws of land. The HR manager is responsible for the inter complaints, and no such cases identified during the monitoring period.

### 2.3.6 Worker Training

During the on-site interview, PP has confirmed that the implementation of project activities will include measures to minimize risks to worker safety/06/. In all cases, workers will be informed of risks and trained in best work practices to reduce them. Capacity building and worker training will be essential elements in the project operation. Training and capacity building efforts will be designed in collaboration with the communities to ensure that they address current community concerns and prioritize community needs. Training will be provided to the employees involved in assembling, distribution and maintenance operation of ICS. These trainings will be accessible to all levels of project employees, with emphasis on employees recruited from stakeholder villages. Since the project has started implementation, the training records were made available to the validation team, by reviewing the training records, it was concluded that the training were adequately imparted. The attendees of training were also interviewed to confirm the same.

### 2.3.7 Equal Work Opportunities

As confirmed during on-site interviews, the project has equal opportunity for women, men or any vulnerable/ marginalized community to contribute both in volunteer and working positions. The project proponent has a stipulated HR policy that takes into account participation by all forms of demographic. Further, the projects designed are implemented for equal participation by any gender, nationality, ethnicity, religion and race.

### 2.3.8 Workers' Rights

As confirmed during the on-site interviews, the workers get into a contract with PP, wherein his/her rights and obligations are stated. Kenya also has several labour laws that prohibit discrimination and child labour, that aim to guarantee fair and humane working conditions, that provide social security, minimum wage, right to organize, form trade unions and enforce collective bargaining. Kenya also has numerous rigid regulations on employer on retrenchment and layoffs, requirement of government approval for change in labour in companies even if these are because of economic conditions. Additionally, Kenya has ratified six ILO conventions. They are as follows:

- Abolition of Forced Labour convention (No. 105)
- Forced Labour convention (No. 29)
- Equal Remuneration convention (No. 100)
- Minimum age Convention (No. 138)
- Discrimination (employment occupation) convention (No. 111)
- Worst Forms of Child Labour Convention (No. 182)

Iceberg and its local partners have a labour contract with each worker. Before the workers sign it, the contracts have been explained explicitly to make sure that they could understand their rights and obligations. The contract terms conform with Kenya's Employment Act, and uphold the principles and rights of, work addressed in the Core Labour Conventions of the International Labour Organization (ILO). And it also complies with national and local labour laws . Trainings have been held to workers, covering workers' rights under international standards and Kenyan national labour laws. The training specifically addressed:

Key Rights: Freedom of association, elimination of forced labour and child labour, and non-discrimination.

Specific Protections: Equal opportunity, equal pay for equal work, and policies against sexual harassment.

Safe Working Conditions: Protocols for a safe and healthy work environment.

The training outcome confirms that participants successfully understood their rights and relevant laws. The training records were validated and the training recipient were interviewed to conform the effectiveness of training imparted.

### 2.3.9 Occupational Safety Assessment

The project follows all relevant local and national laws. Project activity would ensure occupational safety through provision of standard operating procedures to all the workers (in local languages), further awareness trainings shall be scheduled, and use of personal protective equipment shall be ensured/06/. The factory was visited by the validation team, and it was validated that the adequate safety gears were provided to the workers viz the gloves, masks, inter alia.

### 2.3.10 Feedback and Grievance Redress Procedure

Iceberg and its local partners have already established grievance mechanism in the project area, which has been explained to the stakeholders during stakeholder meeting and the project implementation progress. The stakeholders or anyone who had not previously been identified but affected by the project can express any complaint.

They have put opinion books in villages so that stakeholders can write down their grievances.

The details on procedure for feedback and grievance have been made public on website of Iceberg as the following, which is accessible to all stakeholders of the project:

<http://www.icebergchina.com/ensnew/contents/304/95.html>

People can complaint to local leaders or JCI directly by calling, cell phone message, email and opinion books. They can contact Iceberg by calling and email too. JCI reports the feedback to Iceberg periodically.

The village leaders oversee reporting the problems stated in the books. The representative of local partner will check the opinion books quarterly to see the problems reported and find solutions with users. They could also report problems to their village leaders, who will transfer these opinions to Iceberg and local partner. The grievance procedure was first introduced and explained in detail during the initial stakeholder consultation meetings. During the distribution of cookstoves, JCI field staff verbally reiterated the grievance procedure to the end users too.

Grievance can be submitted through any of the channels above. JCI staff will formally acknowledge receipt of the grievance within 20 working days and log it in a central grievance register. Iceberg, in cooperation with JCI, will investigate the grievance. The target timeframe for

resolution is within 15 working days from the date of acknowledgement. For complex issues that require more time, the complainant will be informed of the delay and the revised timeline. Once a decision is reached, a clear response will be provided to the complainant using the most appropriate method (e.g., a written entry in the opinion book, a phone call, or an email), explaining the outcome and any actions taken. If the complainant is not satisfied with the resolution, they can appeal the decision within 10 working days by contacting Iceberg's General Manager directly via email or phone. The appeal will be reviewed, and a final decision will be made within a further 10 working days.

The validation team interviewed the top management of Iceberg and reviewed the cited grievance mechanism, the same was found well implemented as verified during the VCS verification process.

The Validation team confirms that feedback and grievance redress procedure can address issues that may arise during project planning and implementation.

#### 2.3.11 Feedback and Grievance Redress Procedure Accessibility

As confirmed through the on-site interviews, details on procedure for grievance/feedback will be made public on website of the project participant and local representative as applicable, which will be accessible to all project stakeholders. It will also be socialized and publicized to communities throughout the project zone on local panchayat notice boards.

#### 2.3.12 Stakeholder Access to Project Documentation

The project details were explained, and stakeholders were requested to give their feedback on any concern related to project. The project documentation will be uploaded on VERRA website and the same has been informed to stakeholders. The details on project have also been shared with them during stakeholder consultation. Notices will be also placed on the panchayat notice boards within all villages about the availability of any summary or important project documentation and announcements will be included within local newspapers wherever possible. The Practice followed by project proponent was found OK.

#### 2.3.13 Information to Stakeholders on Validation and Verification Process

The detailed process for registration under GHG programme has been explained to the stakeholders during local stakeholder consultation. Furthermore, the users will be consulted to provide the data for monitoring parameter, during surveys/12/ designed to collect data for monitoring the cookstove use, and its benefits.

### 2.4 Project Management

#### 2.4.1 Avoidance of Corruption

Based on the on-site discussion with the project employees, the validation team confirms that the PP has policies in place to inform management and employees about the avoidance of corruption, code of conduct, and business ethics. These policies are applied by all project staff, including company management, to ensure that the organization is run in accordance with all legal requirements and is held to the highest standards of operation.

#### 2.4.2 Statutory and Customary Rights

The validation team confirms that the project activity involves distribution of improved cookstoves to individual households and it will not involve any land acquisition.

#### 2.4.3 Recognition of Property Rights

The validation team confirms that the project activity involves distribution of improved cookstoves to individual households and it will not involve any land acquisition.

#### 2.4.4 Free, Prior and Informed Consent

The validation team confirms that the project activity involves distribution of improved cookstoves to individual households and it will not involve any land acquisition.

#### 2.4.5 Restitution and/or Compensation for Affected Resources

The validation team confirms that the project activity involves distribution of improved cookstoves to individual households and it will not involve any land acquisition.

#### 2.4.6 Property Rights Removal/Relocation of Property Rights Holders

The validation team confirms that the project activity involves distribution of improved cookstoves to individual households and it will not involve any property right removal/relocation of property rights holders.

#### 2.4.7 Identification of Illegal Activities

The validation team confirms that the project activity involves distribution of improved cookstoves to individual households. The distribution of the ICS will be monitored and recorded by the Project Participant and no illegal activities have been identified in project implementation and operation.

#### 2.4.8 Ongoing Conflicts or Disputes

The validation team confirms that there is no ongoing conflict related to the planned project activity.

#### 2.4.9 National and Local Laws and Regulations

Kenya's national energy policy<sup>19</sup> mentions as one of the prioritized actions in the energy sector the development and distribution of 4 million improved biomass stoves by 2022. Kenya's National Climate Change Action Plan 2018-2022<sup>20</sup>, provides some more details related to the development and distribution of those improved biomass cookstoves. As per the National Climate Change Action Plan it becomes clear that the distribution of 4 million improved biomass stoves is an objective and a proposed priority mitigation action, however the distribution and use of improved biomass cookstoves is not enforced by any government law, policy or regulation, hence there is no obligation for households to use improved cookstoves. Hence, though a government objective has been defined, it is not guaranteed whether this objective will be achieved in reality and if so, to what extent. The NDC of Kenya<sup>21</sup> does not mention any specific objectives in regard to improved cookstoves.

Through the review of related policies and validation team's sectoral expertise, it is confirmed that there is no mandated government programme or policy in host country (Kenya) ensuring the distribution of domestic fuel-efficient cookstoves. The government promotes the use of improved ICS, however it's not mandatory. Also, PP has declared voluntary participation in the VCS project, and all actions taken as part of it, are voluntary and coordinated project as it is not mandated by any law, statute or other regulatory framework.

There is no specific concern made on improved cookstoves project from the above laws and regulations.

#### 2.4.10 Project Ownership

The ownership of each plant has been verified by the validation team through the following documents and have been found consistent:

- Declaration
- Sample beneficiary agreement

#### 2.4.11 Grouped Projects

---

<sup>19</sup> Ministry of Energy of the Republic of Kenya, National Energy Policy, October 2018

([https://kplc.co.ke/img/full/BL4PdOqKtxFT\\_National%20Energy%20Policy%20October%20%202018.pdf](https://kplc.co.ke/img/full/BL4PdOqKtxFT_National%20Energy%20Policy%20October%20%202018.pdf))

<sup>20</sup> Ministry of environment and Forestry, National Climate Change Action Plan 2018-2022, Volume 3 : Mitigation Technical Analysis Report, 2018

[https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8737\\_vol3.pdf](https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8737_vol3.pdf)

<sup>21</sup> [https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya\\_NDC\\_20150723.pdf](https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf)

N/A as a project is not a grouped project.

## 3 BENEFITS FOR PEOPLE AND PROSPERITY

### 3.1.1 Condition of Stakeholders at Project Start

#### (a) The ICS end-users

**Social:** The important agricultural sector of Kenya is one of the least developed and largely inefficient, employing more than 40 percent of the total population and 70 percent of the rural population<sup>22</sup>. However, only 29% of Kenyans have access to improved sanitation<sup>23</sup>. The under-five mortality rate is 43 per 1000 live birth<sup>24</sup>. The poverty headcount ration at 2.15 USD a day has increased from 29.4% to 36.1% from 2015 to 2023<sup>25</sup>.

**Economic:** The unemployment has increased from 2.8% to 5.7% from 2015 to 2023<sup>26</sup>, doubled in the last decade

**Culture:** The life level of the local residents was low. Most of them still use low efficiency traditional three-shone open fire at project start. They spend plenty of time on cutting, collecting, and carrying firewood from trees far away from households and exposed to toxic smoke during cooking, especially for women and children. There is no significant change in this element in the past decade.

---

<sup>22</sup> <https://www.usaid.gov/kenya/agriculture-and-food-security>

<sup>23</sup> <https://www.unicef.org/kenya/water-sanitation-and-hygiene>

<sup>24</sup> <https://www.unicef.org/kenya/health>

<sup>25</sup> <https://data.worldbank.org/country/kenya?view=chart>

<sup>26</sup> <https://data.worldbank.org/country/kenya?view=chart>



Figure: The photo of a woman who is cooking

#### **(b) Stove manufacturer and distributor and its employees**

**Economic:** The stove manufacturer and distributor is a small-scale enterprise. It does not have many manufacturing equipment and employees. The investment for the implementation of the project helps them obtain enough investment to purchase more equipment and hire more employees, which contributes to the development of stove industry in Kenya. There is no significant change in this element in the past decade.

**Social:** The efficient and durable designs are more popular with users. This choice of technology reflects the local community's quest and expectations for energy efficiency and durability. There is no significant change in this element in the past decade.

**Culture:** The thermal efficiency of stoves the manufacturer produced needs to be measured by a water boiling test to ensure that they are efficient. This constant focus on performance is part of the manufacturer's corporate culture. There is no significant change in this element in the past decade.

#### **(c) Local authorities**

**Social:** Local authorities face significant challenges in the provision of social services. Residents in many areas are unable to meet their basic needs owing to the lack of modern energy infrastructure. There is no significant change in this element in the past decade.

**Economic:** Local authorities have limited financial resources and rely mainly on agricultural income. However, due to inefficient production and poor market channels, agricultural revenues are difficult to meet public expenditure needs. This economic situation limits local government investment in infrastructure development, social services and economic development projects. There is no significant change in this element in the past decade.

**Culture:** Kenya is home to over 40 ethnic groups, each with distinct languages and customs. Local authorities often reflect the cultural values and traditions of these communities.

#### **(d) NGO**

**Social:** The project will empower women, who are primarily responsible for cooking, by reducing their time spent collecting firewood and improving their health, promoting gender equality. There is no significant change in this element in the past decade.

**Economic:** The project will create jobs in NGO. There is no significant change in this element in the past decade.

**Culture:** NGO will work closely with communities to understand their needs and preferences, and adapting the project accordingly.

**Diversity and the interactions:**

The ICS end-users vary widely in terms of family size, education levels, and gender roles. Women often play a central role in cooking and are thus primary users of cookstoves. The implementation of project creates plenty job opportunities for local people. Households rely on local authorities for support, while local authorities act as intermediaries between households and project implementers. Local authorities interact with all these groups to provide regulatory support and technical assistance.

Local officers welcome the project because the implementation of project improves the living standard and economic situation within project boundary.

Based on its sectoral expertise, the validation team confirms that PP has correctly identified the condition of stakeholders are the start of the project based on the baseline socioeconomic and cultural survey data provided by the PP through the various third party literatures/12/, in the targeted areas of the project implementation. The validation team was also able to conduct stakeholder interviews as the project and confirmed that the information provided by the PP in the SD Vista PD is correct and represents the actual scenario.

### 3.1.2 Expected Stakeholder Impacts

The Expected stakeholder impacts are given below.

| Impact                                                                 | Type of impact           | Affected stakeholders | Validation opinion                                                                                                                                                                            |
|------------------------------------------------------------------------|--------------------------|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of households receiving project ICS and still in use (Impact 1) | Positive, actual, direct | ICS Users             | During the on-site interviews, it was confirmed that the project envisages the distribution of 100,000 improved cookstoves that are thermally efficient single stove, improved cookstoves (in |

|                                                                                                                       |                          |                                                           |                                                                                                                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                       |                          |                                                           | compliance with the methodological requirements) /02/ and having an average lifespan of 7 years. Therefore, expected positive impacts are like to occur as the technology deployed under the project activity shall be thermally efficient (in compliance with the methodological requirements) and hence, reduce the fuel consumption.                                                             |
| Average monthly savings due to reduction in expenditure on purchase fuel after introduction of project ICS (Impact 2) | Positive, actual, direct | ICS end-users                                             | The cost of buying firewood is will be reduced after the implementation of the project. The validation team confirmed the same as part of the VCS verification (both SD Vits and VCS verification site visit was clubbed) wherein it was categorically verified during the surveys undertaken by the VVB, that the quantity of firewood usage has been reduced and resulted in the monitory saving. |
| Percentage of households reporting indoor air quality improved since they received the                                | Positive, actual, direct | The person in charge of cooking (most of them are women). | During the on-site interviews, it was confirmed that the project envisages the distribution of 100,000 improved cookstoves that are                                                                                                                                                                                                                                                                 |

|                                                                                                                          |                                               |                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|--------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| project ICSs<br>(Impact 3)                                                                                               |                                               |                      | <p>thermally efficient single stove,</p> <p>Most of non-renewable biomass local people used for cooking is firewood, which generates high PM2.5 and high CO biomass smoke when incompletely burnt. By using ICS, it reduces people's exposure to high PM2.5 and high CO due to higher efficiency of combustion leading to faster cooking and more complete combustion. It also reduces the burn risk, significant to children and toddlers due to enclosure of the fire in the combustion chamber.</p> |
| Average time saving on cooking and fuel collection in the project scenario by female per household per day<br>(Impact 4) | The impact is the positive, direct, estimated | Female ICS end-users | <p>Through the review of technological specifications, it is confirmed that the ICS reduces the consumption of fuel and therefore, save time in both cooking and fuel collection. This further increases the productive time that can be utilized in learning activities, income generation &amp; even rest and recreation. Therefore, positive impacts are like to occur since the project lead to saving 2-5 hours daily of the women as</p>                                                         |

|                                                                       |                          |                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------------------------------------------------------|--------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       |                          |                                                                 | there is reduction in time spent on collecting fuels and cooking.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Number of employees provided skill development training<br>(Impact 5) | Positive, actual, direct | Employees from stove manufacturer and distributor, and from NGO | As confirmed during the on-site interview, dissemination of ICS will provide employment opportunities to locals for assembling, operation and maintenance activities and trainings will be imparted. Therefore, expected positive impacts are like to occur in developing the skills of the locals.                                                                                                                                                                                                                                                       |
| Number of employees hired for the project<br>(Impact 6)               | Positive, actual, direct | Stove manufacturer and distributor, and NGO                     | <p>It hires more workers to produce ICSs for the project. During the project crediting period, the project proponent and its local partner, which is also an NGO, are in charge of maintenance and monitoring plan, which also needs to hire local people.</p> <p>As confirmed during the on-site interview, dissemination of ICS will provide employment opportunities to locals for assembling, operation and maintenance activities and employment. Therefore, expected positive impacts are like to occur in developing the skills of the locals.</p> |

|                                                          |                          |                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------|--------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Production capacity increased for the project (Impact 7) | Positive, actual, direct | Stove manufacturer and distributor | <p>The project plans to distribute 100,000 ICSs to end users across the country. It's a huge number. The local ICS manufacturer and distributor is a small enterprise before the implementation of the project. Our collaborating manufacturer expands production capacity to satisfy the needs of the project. Thus, the upstream and downstream supply chain benefits from the project.</p> <p>The factories which produce ICS are local enterprises. They hire more workers to produce ICSs for the project. During the project crediting period, the project proponent and its local partners are in charge of maintenance and monitoring plan, which creates working opportunities for local people.</p> |
|----------------------------------------------------------|--------------------------|------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 3.1.3 Mitigation of Negative Impacts on Stakeholders

Based on the on-site inspection interview, Validation team confirm that there is no negative impacts (due to project activity) on the stakeholders. The audit team has checked the stakeholder-related documentation viz invitations, summaries provided to participants and feedback by the local community. The VVB has also conducted interviews with some of the stakeholders during the on-site visit and confirmed at the local stakeholder consultation meeting. No negative comment was received.

### 3.1.3 Stakeholder Monitoring Plan

As confirmed during the on-site interview, monitoring plan includes collection of data through interviews, surveys/12/, direct observations, group discussions, and other employment, financial, and health records. Local field staff will conduct stakeholder feedback meetings within their respective zones and will collect primary information through regular visits and interviews with the households. They will be tasked with monitoring the changes after installation of improved cookstoves. Field team managers will conduct group discussions, and other interviews regarding the same. The data from these interactions will be compiled into reports and forwarded to the senior analysts. The data submitted by PP will be analyzed by VVB at the time of verification. The following parameters will be part of the Stakeholder Monitoring Plan.

| Parameter                                                                                                   | Monitor approach                                           | Purpose                    | Affected Stakeholder Group(s) | Frequency         |
|-------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|----------------------------|-------------------------------|-------------------|
| Number of households receiving project ICS and still in use                                                 | Monitored by ICS distribution database and project survey. | Determination of Impact #1 | ICS end-users                 | At least biennial |
| Average monthly savings due to reduction in expenditure on purchase fuel after introduction of project ICS. | Monitored in project survey through questionnaire          | Determination of Impact #2 | ICS end-users                 | At least biennial |
| Percentage of households reporting improvements in food security and nutrition status                       | Monitored in project survey through questionnaire          | Determination of Impact #3 | ICS end-users                 | At least biennial |
| Percentage of households reporting indoor air quality has improved since they received the project ICSs.    | Monitored in project survey through questionnaire          | Determination of Impact #4 | ICS end-users                 | At least biennial |
| Average time saving on cooking and fuel collection in the project scenario by female per household per day. | Monitored in project survey through questionnaire          | Determination of Impact #5 | ICS end-users                 | At least biennial |

### 3.1.4 Net Positive Stakeholder Wellbeing Impacts

The positive stakeholder impacts of the project activity are given below:

#### **Sustainable development contributions**

The project contributes to the following Sustainable Development benefits:

As the project leads to emission reductions and hence contributes to SDG13. Further It contributes to the SDG 7, since it distributes 100,000 high-efficiency, clean burning 'Jiko Kisasa' Cookstoves in Kenya. As air pollution is reduced, so it addresses the SDG 3. As it also reduces the proportion of time rural women spend on unpaid domestic work related to collection of firewood, and cooking meals on inefficient traditional cookstoves, so it contributes to SDG 5.

### **Goal 1: No poverty**

#### **Indicator 1.1.1: Proportion of the population living below the international poverty line by sex, age, employment status and geographic location (urban/rural)**

Improved cookstove is a basic service necessary to lead a healthy and productive life, including saving time and money for wood fuel at the household level. The project proponent will distribute 100,000 ICSs, and the ICSs are produced in local factories. Hence the implementation of the project results in more job opportunities and higher income for local residents.

### **Goal 3: Good health and well-being**

#### **Indicator 3.9.1: Mortality rate attributed to household and ambient air pollution.**

Most of non-renewable biomass local people used for cooking is firewood, which generates high PM2.5 and high CO biomass smoke when incompletely burnt. By using ICS, it reduces people's exposure to high PM2.5 and high CO due to higher efficiency of combustion leading to faster cooking and more complete combustion. It also reduces the burn risk, significant to children and toddlers due to enclosure of the fire in the combustion chamber.

### **Goal 4: Quality education**

#### **Indicator 4.3.1: Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex.**

The project reduces the time spend on firewood collection for children, especially for girls, which increases their time for education. The implementation of project needs plenty of local people to participate in production, distribution or use steps. They get relevant skills and sustainable development and global citizenship education through training by project proponent.

### **Goal 5: Gender equality**

#### **Indicator 5.4.1: Proportion of time spent on unpaid domestic and care work, by sex, age, and location.**

The project reduces women and children's drudgery through time savings in reducing time spent cutting, collecting, and carrying firewood from trees far removed from households and reduce time spent cooking over toxic smoky open fires. These tasks, if being undertaken without relief, are a major cause of gender inequality.

**Goal 6: Clean water and sanitation****Indicator 6.6.1: Change in the extent of water-related ecosystems over time**

Clean cooking technology provides an essential tool to addressing energy poverty and ensuring sustainable energy security in approximately 100,000 Kenya households during the project lifecycle. It also reduces the smoke and GHG emissions during water boiling.

**Goal 7: Affordable and clean energy****Indicator 7.1.2: Proportion of population with primary reliance on clean fuels and technology**

The ICS distributed to Household is a clean cooking technology. The project will increase the proportion of population with primary reliance on clean cooking technology in project area.

**Goal 8: Decent work and economic growth****Indicator 8.3.1: Proportion of informal employment in total employment, by sector and sex.**

The factories which produce ICS are local enterprises. They hire more workers to produce ICSs for the project. During the project crediting period, the project proponent and its local partners are in charge of maintenance and monitoring plan, which creates working opportunities for local people.

**Goal 9: Industry, Innovation, and Infrastructure****Indicator 9.3.1: Proportion of small-scale industries in total industry value added**

The local factories which produce ICS for project are small-scale industries. They expand production capacity to satisfy the needs. Thus, the upstream and downstream supply chain benefit from the project. Many of the workers hired by the factories for the project were peasants before. So the project increases manufacturing employment.

**Goal 13: Climate action****Indicator 13.2.2: Total greenhouse gas emissions per year**

The average annual GHG emission reduction from the project is expected to be 222,137 tCO<sub>2e</sub> due to less non-renewable firewood combustion for cooking and heating in the households.

**Goal 15: Life on land****Indicator 15.1.1: Forest area as a proportion of total land area**

The project helps local people consume less firewood as the ICS has higher thermal efficiency and it results in a reduction of GHG emissions compared to the baseline scenario. It also helps reduce deforestation and protect biodiversity and natural habitats in Kenya.

Additional information relevant to the project, including: Leakage management for AFOLU projects and commercially sensitive information

The project adopts a net gross adjustment factor of 95% to account for leakage and there is no commercially sensitive information has been excluded from the public version of the project description.

The estimated average annual GHG emission reduction from the project is 222,137 tCO<sub>2e</sub>, and the total GHG emission reduction estimated for the whole crediting period from the project activity is 2,221,373 tCO<sub>2e</sub>.

The validation team based on the on-site interviews, confirms that the project will create employment for the local stakeholders, which shall be confirmed at the time of verification. Further, the anticipated net impacts of the project activities are likely to be positive for each stakeholders group.

## 4 BENEFITS FOR THE PLANET

### 4.1.1 Condition of Natural Capital and Ecosystem Services at Project Start

Kenya is renowned for its remarkable diversity of landscapes, animals and cultures. Its colourful landscapes range from the north Chalbi Desert to the snowy peaks of Mount Kenya, from the white beaches of the Indian Ocean to the shores of Lake Victoria, from the rolling plains of the Masai Mara to the valley floor of the Great Rift Valley, which is a UNESCO World Heritage Site<sup>27</sup>. The topography, soils, hydrology, plants, animals work with people of each eco-climatic zone create unique local ecosystems, lowland and mountain forests, wooded and open grasslands, semi-arid scrubland, dry woodlands, inland aquatic, as well as coastal and marine ecosystems. Kenya, ranks among the world's richest biodiversity nations and hosts over 35 000 species, including more than 7000 plant species and many endemic, rare, endangered and threatened species<sup>28</sup>. The 'big five' – elephant, rhino, buffalo, lion and leopard, can all be found in Kenya along with a huge variety of other species.

Kenyans from all walks of life rely on ecosystem services to sustain their daily lives and well-being. These services include wild and cultivated foods, medicinal plants used by 80% of Kenyans, soil erosion control, crop pollination and cultural services such as spiritual kayas in

---

<sup>27</sup> <https://whc.unesco.org/en/statesparties/ke>

<sup>28</sup> [https://www.york.ac.uk/media/environment/images/kite/colincm/Natural-Capital-Kenya\\_PBN0.3\\_Business-Community.pdf](https://www.york.ac.uk/media/environment/images/kite/colincm/Natural-Capital-Kenya_PBN0.3_Business-Community.pdf)

coastal Mjikenda, outdoor recreation and access to nature. Beyond the service sector, agriculture, forestry, and fishing account for over a quarter of Kenya's gross domestic product<sup>29</sup>.

Forests play an important role in supporting the livelihoods of many communities in both rural and urban areas. As in other parts of the world, Kenya's forests are considered a valuable asset because of their role in providing a variety of ecosystem services. However, the continued demand for forest resources has led to substantial changes such as deforestation, conversion of formerly forested areas to cropland and pasture, illegal water extraction sites, introduction of exotic trees and grasses on native vegetation, and expansion of urban and peri-urban areas<sup>30</sup>.

In rural areas of Kenya, over 95% of the population uses solid fuels for cooking<sup>31</sup>. The project activity reduces wood collection and deforestation within the local area through higher fuel efficiency.

According to Global Forest Resources Assessment 2010 Report of Kenya by Food and Agriculture Organization of the United Nations<sup>32</sup>, the area of forests of Kenya in 1990, 2000, 2005 and 2010 respectively is  $3708 \times 10^3$ ,  $3582 \times 10^3$ ,  $3522 \times 10^3$  and  $3467 \times 10^3$  hectares, it has decreased 6.5% from 1990 to 2010.

Validation team reviewed the links and reports provided by the PP as above and also confirmed that the project will result in deforestation.

#### 4.1.2 Expected Impacts on Natural Capital and Ecosystem Services

| Impact #1                                            | Tonnes of greenhouse gas emissions avoided or removed                                                                                                                              | Validation Remarks                                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of Impact                                       | Positive, actual, direct                                                                                                                                                           | The average annual GHG emission reduction from the project is expected to be 222,137 tCO <sub>2</sub> e due to less firewood combustion for cooking and heating in the households. The VCS PD and the corresponding approved ER sheet was validated, and it was concluded that the expected ERs are correctly calculated and reported. |
| Affected Natural Capital and/or Ecosystem Service(s) | GHG concentration of atmosphere, climate change                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                        |
| Resulting Change in Condition                        | The average annual GHG emission reduction from the project is expected to be 222,137 tCO <sub>2</sub> e due to less firewood combustion for cooking and heating in the households. |                                                                                                                                                                                                                                                                                                                                        |

<sup>29</sup> <https://www.awf.org/country/kenya>

<sup>30</sup> <https://doi.org/10.1080/21513732.2018.1529708>

<sup>31</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7446120/>

<sup>32</sup> <https://www.fao.org/forest-resources-assessment/past-assessments/fra-2010/country-reports/en/>

|                                                             |                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Impact #2</b>                                            | Avoided deforestation due to consume less firewood of ICS                                                                                                                                                              | Validation Remarks                                                                                                                                                                                                                                                                                                  |
| <b>Type of Impact</b>                                       | Positive, actual, direct                                                                                                                                                                                               | The project will save 108,435 t non-renewable biomass every year and it will result in a significant reduction of deforestation. The SDG has been also claimed as SDG#15 and the calculation based on the firewood quantity and the fnrb has been adequately calculated. The same has been also part of the VCS PD. |
| <b>Affected Natural Capital and/or Ecosystem Service(s)</b> | Forest area, biodiversity, and water and soil, etc.                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                     |
| <b>Resulting Change in Condition</b>                        | The project helps local people consume less firewood as the ICS has higher thermal efficiency. It will save 108,435 t non-renewable biomass every year and it will result in a significant reduction of deforestation. |                                                                                                                                                                                                                                                                                                                     |

#### 4.1.3 Mitigation of Negative Impacts on Natural Capital and Ecosystem Services

##### Sampling method

To monitor the impact on natural capital and ecosystem services, the following parameters need to be monitored, determined by multi-stage sampling method as per “Standard sampling and surveys for CDM project activities and POAs (Ver9.0)” and “Guideline for sampling and surveys for CDM project and POA (Ver 4.0)”:

| Parameter                                    | Monitor approach                                                                    | Purpose                           | Affected Stakeholder Group(s) | Frequency |
|----------------------------------------------|-------------------------------------------------------------------------------------|-----------------------------------|-------------------------------|-----------|
| Tonnes of greenhouse gas emissions avoided   | Monitored by ICS distribution database, project survey and fuel consumption survey. | Determination of Impact #1 and #2 | ICS end-users                 | Biennial  |
| Total non-renewable woody biomass fuel saved | Monitored by ICS distribution database, project survey and fuel consumption survey. | Determination of Impact #1 and #2 | ICS end-users                 | Biennial  |

The above data is collected through survey and fuel consumption test, which is the responsibility of the local partners. Iceberg trains its local partners about the monitoring plan and supervise their work. The data may be cross checked by a third-party. The end-user households where the survey and test are conducted through multi-stage random sampling. The data from test and

survey is recorded, analyzed and reported by Iceberg and its local partners. The monitoring and reporting will be conducted each time when verification of SD-VISta is conducted.

VVB validated that the approach is aligned with the sampling of VCS project approved, therefore this complies with the requirements approved under VCS project.

#### 4.1.4 Natural Capital and Ecosystem Services Monitoring Plan

By replacing traditional low efficient three-stone fires with high efficiency improved cookstove in households, the project increases energy efficiency resulting in less fire wood combustion, thus generate net GHG reductions. The average annual GHG emission reduction from the project is expected to be 2,221,373 tCO<sub>2</sub>e. The crediting period is expected to be 10 years. Hence the total GHG emission reduction is 2,352,153 tCO<sub>2</sub>e. The project saves 108,435 t non-renewable biomass every year and it result in a significant reduction of deforestation.

The average annual GHG emission reduction from the project is expected to be 222,137 tCO<sub>2</sub>e due to less firewood combustion for cooking and heating in the households. The VCS PD and the corresponding approved ER sheet was validated, and it was concluded that the expected ERs are correctly calculated and reported.

#### 4.1.5 Net Positive Natural Capital and Ecosystem Services Impacts

By replacing open cooking fires with ICS technology and performing energy efficiency improvements in existing biomass-fired cookstoves, the project reduces energy demand in the form of wood fuel use, thus generating net GHG reductions. The project generates an estimated 2,221,373 tCO<sub>2</sub>e GHG emission reductions over the ten-year project crediting period. Therefore, the validation team confirms that the project is involved in climate change mitigation which may be referred to VCS project ID 3197.

## 5 VALIDATION CONCLUSION

Guangzhou Iceberg Environmental Consulting Services Co., Ltd. has commissioned 4K Earth Science Private Limited to do VCS validation of the project activity: “Kenya Jiko Kisasa Improved Cookstove Program I” having VCS ID 3197 with regard to the relevant requirements of SD VISTA Standard Version 1.0.

The proposed project activity seeks to increase access of households and communities to improved cookstoves by disseminating high thermal efficiency and low greenhouse gas emitting cooking stoves known as Improved Cook Stoves (ICS) to the rural households of Kenya. The improved cook stoves through replacement of inefficient traditional cook stove will contribute towards reduction of greenhouse gas emission resulting in the reduction of firewood consumption leading to climate change mitigation in a sustainable manner.

A risk-based approach has been followed to perform the validation of the project in terms of SDG targets. During the validation 00 Corrective Action Requests (CAR) and 09 Clarification Requests (CL) were raised and successfully closed out.

The validation is based on the SD VISTA PD, proof of title, proof of right, additional documents related to SDG impacts; the subsequent background investigation, follow-up interviews and supporting documents made available to the validation team by project proponent.

Validation confirms that the project complies with the validation criteria for project set out in the Sustainable Development Verified Impact Standard and the SD VISTA Program Guide.

As a result of the validation, the validation team confirms that:

- The project fulfils criteria of SD VISTA Standard Version 1.0/4/.
- The project is in line with all relevant SD VISTA requirements/10/.
- The project SDGs are sufficiently justified in the PD.

No restrictions or uncertainties were identified related to the validation.

Date: 11/01/2026

Chandrakala R



Managing Director  
4K Earth Science Private Limited.

## APPENDIX 1: ABBREVIATIONS

|        |                                                       |
|--------|-------------------------------------------------------|
| AMS    | Approved Methodology for Small-scale                  |
| BE     | Baseline Emissions                                    |
| CAR    | Corrective Action Request                             |
| CDM    | Clean Development Mechanism                           |
| CL     | Clarification request                                 |
| COP    | Conference of Parties                                 |
| DNA    | Designated National Authority                         |
| DR     | Document Review                                       |
| EB     | Executive Board                                       |
| EF     | Emission Factor                                       |
| ERs    | Emission Reductions                                   |
| FAR    | Forward Action Request                                |
| GHG    | Greenhouse gas(es)                                    |
| IPCC   | Intergovernmental Panel on Climate Change             |
| KP     | Kyoto Protocol                                        |
| LSC    | Local Stakeholder Consultation                        |
| LE     | Leakage Emissions                                     |
| ISO    | International Organization for Standardization        |
| MoV    | Means of Verification                                 |
| MP     | Monitoring Plan                                       |
| OM     | Operating Margin                                      |
| PA     | Project Activity                                      |
| PD     | Project Design                                        |
| PE     | Project Emissions                                     |
| PP     | Project Participant                                   |
| PS     | Project Standard                                      |
| PCP    | Project Cycle Procedure                               |
| QA/QC  | Quality Assurance/Quality Control                     |
| SD     | Sustainable Development                               |
| T&C    | Technical & Certification                             |
| UNFCCC | United Nations Framework Convention on Climate Change |
| VER    | Verified Emission Reduction                           |
| VVB    | Validation & Verification Body                        |
| VVS    | Validation & Verification Standard                    |

## APPENDIX 2: REFERENCES

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | <ul style="list-style-type: none"> <li>VCS PD for “Kenya Jiko Kisasa Improved Cookstove Program I”, version 6.0 dated 04/10/2023 (Final)</li> <li>SD Vista PD “Kenya Jiko Kisasa Improved Cookstove Program I”, Version 4 dated 17-March-2025</li> <li>SD Vista PD “Kenya Jiko Kisasa Improved Cookstove Program I”, Version 5 dated 16-June-2025</li> <li>SD Vista PD “Kenya Jiko Kisasa Improved Cookstove Program I”, Version 6 dated 13-Aug-2025</li> <li>SD Vista PD “Kenya Jiko Kisasa Improved Cookstove Program I”, Version 7 dated 27-Nov-2025</li> <li>SD Vista PD “Kenya Jiko Kisasa Improved Cookstove Program I”, Version 8 dated 06Jan-2026</li> </ul> |
| 2  | Emission Reduction Calculation Excel sheet (ex-ante) corresponding to final VCS PD<br>Fnrb spreadsheet corresponding to final version of final VCS PD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 3  | VCS Program Guide: Version 4.4 dated 29-August-2023<br>VCS Standard: Version 4.7 dated 16-April-2024<br>VCS Validation and Verification Manual; Version 3.2 dated 19-October-2016<br>VCS Program Definitions: Version 4.4 dated 29-August-2023                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4  | Sustainable Development Verified Impact Standard, v 1.0 dated 22 January 2019                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5  | <ul style="list-style-type: none"> <li>VCS approved methodology: VMR0006: “Methodology for Installation of High Efficiency Firewood Cookstoves”, Version 1.1</li> <li>CDM approved methodology: Baseline and Monitoring Methodology “AMS-II.G”, “Energy efficiency measures in thermal applications of non-renewable biomass”, version 11 &amp; version 13</li> </ul>                                                                                                                                                                                                                                                                                                |
| 6  | UNFCCC: Guidelines for Sampling and Surveys for CDM Project activities and Programme of Activities, Ver. 4.0 (EB86, Annex 4)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 7  | UNFCCC: Standard for Sampling and surveys for CDM project activities and programmes of activities, Version 09.0                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 8  | TOOL30: Calculation of the fraction of non-renewable biomass”; Version-03, EB 108, Annex 11<br><a href="https://cdm.unfccc.int/Reference/tools/index.html">https://cdm.unfccc.int/Reference/tools/index.html</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 9  | VERRA: Project search: <a href="https://registry.terra.org/app/projectDetail/VCS/3197">https://registry.terra.org/app/projectDetail/VCS/3197</a><br>CDM project standard for project activities, version 03.0<br>CDM validation and verification standard, version 03.0                                                                                                                                                                                                                                                                                                                                                                                              |
| 10 | VERRA: <a href="https://registry.terra.org/app/projectDetail/VCS/3197">https://registry.terra.org/app/projectDetail/VCS/3197</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 11 | VERRA Rules and Requirements: <a href="https://terra.org/programs/verified-carbon-standard/vcs-program-details/#rules-and-requirements">https://terra.org/programs/verified-carbon-standard/vcs-program-details/#rules-and-requirements</a>                                                                                                                                                                                                                                                                                                                                                                                                                          |

|    |                                                                                                                                                                                                                                                                                                                               |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 12 | VCS: VCS Project Description template, VCS Version 4.2 of 21/12/2022                                                                                                                                                                                                                                                          |
| 13 | Carbon Waiver End-user Agreement to transfer the carbon emission reduction ownership rights from end-user to project implementer (sample)                                                                                                                                                                                     |
| 14 | Evidence of start date (Beneficiary Agreement with the first household)                                                                                                                                                                                                                                                       |
| 15 | Distribution agreement with the implementation partner                                                                                                                                                                                                                                                                        |
| 16 | Baseline survey Report                                                                                                                                                                                                                                                                                                        |
| 17 | <ul style="list-style-type: none"> <li>– Technical specifications (including thermal efficiency, lifetime) of the ICS stoves distributed in the project activity</li> <li>– Test Report from KIRDI Stove Testing Centre dated 28th Jan 2022</li> </ul>                                                                        |
| 18 | Baseline Survey Forms                                                                                                                                                                                                                                                                                                         |
| 19 | Fraction of Non-renewable Biomass Excel sheet, version 03 (Approved by VERRA)                                                                                                                                                                                                                                                 |
| 20 | Project Installation Database/Sale Database                                                                                                                                                                                                                                                                                   |
| 21 | Declaration to comply with various requirements under VERRA<br>Declaration form on avoidance of double counting of the project activity dated 17/04/2023                                                                                                                                                                      |
| 22 | Supporting documents for the local stakeholder consultation (individual Invitations, photographs, attendance sheets etc.)<br>Local Stakeholder Consultation report, Acknowledgement of LSC invitation letters, Attendance sheet.                                                                                              |
| 23 | Africa Energy Outlook 2019<br><a href="https://www.iea.org/reports/africa-energy-outlook-2019">https://www.iea.org/reports/africa-energy-outlook-2019</a>                                                                                                                                                                     |
| 24 | Ministry of Energy of the Republic of Kenya, National Energy Policy, October 2018<br>( <a href="https://kplc.co.ke/img/full/BL4PdOqKtxFT_National%20Energy%20Policy%20October%20%202018.pdf">https://kplc.co.ke/img/full/BL4PdOqKtxFT_National%20Energy%20Policy%20October%20%202018.pdf</a> )                                |
| 25 | Ministry of Environment and Forestry, National Climate Change Action Plan 2018-2022, Volume 3 : Mitigation Technical Analysis Report, 2018<br><a href="https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8737_vol3.pdf">https://www.lse.ac.uk/GranthamInstitute/wp-content/uploads/2018/10/8737_vol3.pdf</a> |
| 26 | Weblink for Kenya NDC<br><a href="https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf">https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Kenya%20First/Kenya_NDC_20150723.pdf</a>                                                                                      |
| 27 | Energy Use in Kenya<br><a href="https://journals.sagepub.com/doi/abs/10.1177/014459878900700205">https://journals.sagepub.com/doi/abs/10.1177/014459878900700205</a>                                                                                                                                                          |
| 28 | IEA (International Energy Agency) report in 2019<br><a href="https://www.iea.org/articles/kenya-energy-outlook">https://www.iea.org/articles/kenya-energy-outlook</a>                                                                                                                                                         |
| 29 | 2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 1 Introduction<br>2006 IPCC Guidelines for National Greenhouse Gas Inventories; Volume 2 Energy, Chapter 2 Stationary Combustion                                                                                                       |
| 30 | Biomass Energy Use in Kenya<br><a href="https://iied.org/sites/default/files/pdfs/migrate/G02985.pdf">https://iied.org/sites/default/files/pdfs/migrate/G02985.pdf</a>                                                                                                                                                        |

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 31 | FAO Forest Resource Assessment, 2010<br><a href="http://www.fao.org/docrep/013/i1757e/i1757e.pdf">http://www.fao.org/docrep/013/i1757e/i1757e.pdf</a>                                                                                                                                                                                                                                                                                                                                                                                                               |
| 32 | Kenyan households wood or charcoal Consumption<br><a href="https://ambitiontoaction.net/wp-content/uploads/2021/07/A2A_Kenya_CleanCookingStudy_July2021.pdf#:~:text=Even%20th ough%20Kenya%20has%20made%20significant%20progress%20over,petroleum%20gas%20%28LPG%29%20as%20their%20primary%20cooking%20fuel.">https://ambitiontoaction.net/wp-content/uploads/2021/07/A2A_Kenya_CleanCookingStudy_July2021.pdf#:~:text=Even%20th ough%20Kenya%20has%20made%20significant%20progress%20over,petroleum%20gas%20%28LPG%29%20as%20their%20primary%20cooking%20fuel.</a> |
| 33 | IPCC. <i>Guidelines for national greenhouse gas inventories</i> . (IGES, 2006)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 35 | Global Forest Resources Assessment 2010 (FAO)<br><i>Global Forest Resources Assessment 2015 (FAO)</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 36 | <ul style="list-style-type: none"> <li>- Data recording of Monitoring Survey-Kenya</li> <li>- Result of Monitoring Survey-Kenya</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                          |
| 37 | <ul style="list-style-type: none"> <li>- Statement about outcomes of SDGs (Declaration by the Implementing partner on employments generated)</li> <li>- contracts of employees</li> <li>- Salary slip</li> <li>- Training Records for year 2022, 2023 &amp; 2024</li> <li>- Safety Policy</li> <li>- HR Policy</li> <li>- Scan copies of opinion books</li> <li>- Policy on Avoidance of Corruption, Code of Conduct, and Business Ethics-JCI</li> </ul>                                                                                                            |

# APPENDIX 3: COMPETENCE OF TEAM MEMBERS AND TECHNICAL REVIEWERS

| <u><b>Certificate of Competence</b></u>            |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------|-----------------------------|----------------------------------------|-----------------------------|-----------------|
| <b>Name</b>                                        | <input checked="" type="checkbox"/> Mr.<br><input type="checkbox"/> Ms.                                                                      | <b>Sanjay Kandari</b>  |                |                             |                                        |                             |                 |
| <b>Qualification Procedure</b>                     | Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects. |                        |                |                             |                                        |                             |                 |
| <b>Appointed to work as:</b>                       |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
|                                                    | <b>Validator/<br/>Verifier</b>                                                                                                               | <b>Team<br/>Leader</b> | <b>Trainee</b> | <b>Technical<br/>Expert</b> | <b>Technical<br/>Reviewer</b>          | <b>Financial<br/>Expert</b> | <b>Approver</b> |
| <i>Appointed</i>                                   | Yes                                                                                                                                          | Yes                    | No             | Yes                         | Yes                                    | No                          | No              |
| <i>Appointed Date</i>                              | 30-07-2025                                                                                                                                   |                        |                |                             |                                        |                             |                 |
| <b>Authorized to work as Technical Expert for:</b> |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
| <b>Authorized<br/>Technical Area</b>               | <b>Sectoral Scope</b>                                                                                                                        |                        | <b>TA Code</b> |                             | <b>Technical Area within the scope</b> |                             |                 |
|                                                    | 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                          |                             |                 |
|                                                    | Agriculture                                                                                                                                  |                        | 15.1           |                             | Agriculture                            |                             |                 |
|                                                    | Waste handling and disposal                                                                                                                  |                        | 13.1           |                             | Solid waste and wastewater             |                             |                 |
|                                                    | Waste handling and disposal                                                                                                                  |                        | 13.2           |                             | Manure                                 |                             |                 |

|                                                |             |
|------------------------------------------------|-------------|
| <b>Authorized to work as Local Expert for:</b> |             |
| Country/Countries                              | India       |
| <br>                                           |             |
| <b>Compliance check by:</b>                    | Anand S. R. |

|                                                    |                                                                                                                                               |                          |         |                     |                                 |                     |          |
|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|---------|---------------------|---------------------------------|---------------------|----------|
| <b><u>Certificate of Competence</u></b>            |                                                                                                                                               |                          |         |                     |                                 |                     |          |
| <b>Name</b>                                        | <input checked="" type="checkbox"/> Mr.<br><input type="checkbox"/> Ms.                                                                       | Martin Luther King Okore |         |                     |                                 |                     |          |
| <b>Qualification Procedure</b>                     | Fulfils the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects. |                          |         |                     |                                 |                     |          |
| <b>Appointed to work as:</b>                       |                                                                                                                                               |                          |         |                     |                                 |                     |          |
|                                                    | Validator/<br>Verifier                                                                                                                        | Team<br>Leader           | Trainee | Technical<br>Expert | Technical<br>Reviewer           | Financial<br>Expert | Approver |
| Appointed                                          | No                                                                                                                                            | No                       | No      | No                  | No                              | No                  | No       |
| Appointed Date                                     | 30-07-2025                                                                                                                                    |                          |         |                     |                                 |                     |          |
| <br>                                               |                                                                                                                                               |                          |         |                     |                                 |                     |          |
| <b>Authorized to work as Technical Expert for:</b> |                                                                                                                                               |                          |         |                     |                                 |                     |          |
| Authorized<br>Technical Area                       | Sectoral Scope                                                                                                                                |                          | TA Code |                     | Technical Area within the scope |                     |          |
|                                                    | -                                                                                                                                             |                          | -       |                     | -                               |                     |          |
| <br>                                               |                                                                                                                                               |                          |         |                     |                                 |                     |          |
| <b>Authorized to work as Local Expert for:</b>     |                                                                                                                                               |                          |         |                     |                                 |                     |          |
| Country/Countries                                  | Kenya                                                                                                                                         |                          |         |                     |                                 |                     |          |
| <br>                                               |                                                                                                                                               |                          |         |                     |                                 |                     |          |
| <b>Compliance check by:</b>                        | Anand S. R                                                                                                                                    |                          |         |                     |                                 |                     |          |

| <b><u>Certificate of Competence</u></b>            |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|------------------------|----------------|-----------------------------|----------------------------------------|-----------------------------|-----------------|
| <b>Name</b>                                        | <input checked="" type="checkbox"/> Mr.<br><input type="checkbox"/> Ms.                                                                      | <b>Stalin S</b>        |                |                             |                                        |                             |                 |
| <b>Qualification Procedure</b>                     | Fulfil the requirement as per the appointment of personnel procedure of 4KES for Validation and Verification of CDM/VCS/GS/GCC/GHG Projects. |                        |                |                             |                                        |                             |                 |
| <b>Appointed to work as:</b>                       |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
|                                                    | <b>Validator/<br/>Verifier</b>                                                                                                               | <b>Team<br/>Leader</b> | <b>Trainee</b> | <b>Technical<br/>Expert</b> | <b>Technical<br/>Reviewer</b>          | <b>Financial<br/>Expert</b> | <b>Approver</b> |
| <i>Appointed</i>                                   | Yes                                                                                                                                          | Yes                    | No             | Yes                         | Yes                                    | Yes                         | Yes             |
| <i>Appointed Date</i>                              | 30-07-2025                                                                                                                                   |                        |                |                             |                                        |                             |                 |
| <b>Authorized to work as Technical Expert for:</b> |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
| <b>Authorized<br/>Technical Area</b>               | <b>Sectoral Scope</b>                                                                                                                        |                        | <b>TA Code</b> |                             | <b>Technical Area within the scope</b> |                             |                 |
|                                                    | Energy industries (renewable - / non-renewable sources)                                                                                      |                        | 1.1            |                             | Thermal energy generation              |                             |                 |
|                                                    | Energy industries (renewable - / non-renewable sources)                                                                                      |                        | 1.2            |                             | Renewables                             |                             |                 |
|                                                    | Energy demand                                                                                                                                |                        | 3.1            |                             | Energy Demand                          |                             |                 |
|                                                    | Waste handling and disposal                                                                                                                  |                        | 13.1           |                             | Solid waste and wastewater             |                             |                 |
|                                                    | Waste handling and disposal                                                                                                                  |                        | 13.2           |                             | Manure                                 |                             |                 |
| <b>Authorized to work as Local Expert for:</b>     |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
| <i>Country/Countries</i>                           | India                                                                                                                                        |                        |                |                             |                                        |                             |                 |
| <b><u>Compliance check by:</u></b>                 |                                                                                                                                              |                        |                |                             |                                        |                             |                 |
|                                                    |                                                                                                                                              |                        |                | Anand S. R.                 |                                        |                             |                 |

# APPENDIX 4: CLARIFICATION REQUESTS, CORRECTIVE ACTION REQUESTS AND FORWARD ACTION REQUESTS

Table 1. CL from this validation

| CL ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 01 | Section no. | Cover Page | Date: 10/02/2025        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|------------|-------------------------|
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |             |            |                         |
| <ol style="list-style-type: none"> <li>1. Assessor details shall be filled at the cover page of the SD Vista, PD please.</li> <li>2. The consistent fonts and the font colours shall be used for the SD Vista PD.</li> <li>3. Expected Future Assessment Schedule shall be provided, please refer the SD Vista PD filling guideline below noting that the combined validation and verification has been opted by the PP:<br/> <i>"Where known, provide the expected schedule for initial verification, or, if using project design evaluation, validation or project implementation evaluation."</i> </li> </ol> |    |             |            |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |             |            | <b>Date: 17/03/2025</b> |
| <ol style="list-style-type: none"> <li>1. The details of the assessor has been added in the revised SD Vista PD.</li> <li>2. The inconsistent fonts and the font colours have been revised in the revised SD Vista PD.</li> <li>3. The future verification is expected in 2026. The information has been added in the revised SD Vista PD.</li> </ol>                                                                                                                                                                                                                                                            |    |             |            |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |             |            |                         |
| Revised SD Vista PD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |             |            |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |    |             |            | <b>Date: 01/04/2025</b> |
| <ol style="list-style-type: none"> <li>1. Assessor cattails have been included in the updated SD Vista PD and found correct.</li> <li>2. The consistent fonts and the font colours have been used for the SD Vista PD.</li> <li>3. The future verification is expected in 2026. The information has been added in the revised SD Vista PD.</li> </ol> <p>Findings are closed based on the corrections verified against the findings (1-3).</p>                                                                                                                                                                   |    |             |            |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |             |   |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|---|------------------|
| CL ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 02 | Section no. | 1 | Date: 10/02/2025 |
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |             |   |                  |
| <ol style="list-style-type: none"> <li>1. Under table 1 of SD Vista PD, the baseline survey details are not clear to the third-party readers as the survey details have been may be linked with the VCS project ID, to provide a transparent information about this project.</li> <li>2. The indicator corresponding to SDG 1 is not aligned with the monitoring parameter, the indicator is in terms of the proportion however the monitored parameter is in absolute numbers. PP shall clarify.</li> <li>3. PP shall clarify how the SDG indicator corresponding to SDG 2 indicator 2.1.1 Prevalence of undernourishment is an indicator with respect to the Chosen SDG#02 target “<b>2.1</b> By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round”. Explicitly it is not clear how the efficiency improvement (measure of project activity) is linked with undernourishment.</li> <li>4. For the SDG#03 it is not clear whether the efficiency change form baseline will result in the PM2.5 and high CO as claimed, this correlation shall be substantiated with the verifiable evidence.</li> <li>5. For the SDG#09 validation, the PP shall provide the production capacity in the baseline and the project scenario.</li> <li>6. For validation of SDG#09 PP stated that the factory classification is in small scale. Requesting PP to provide any government approval to validate this? Or this may be clarified with other relevant document applicable to host country Kenya?</li> <li>7. For the validation of SDG#08, some employment contract, salary slips shall be provided for the validation?</li> <li>8. The SDG#13 expected value is not consistent with the VCS project approved and the VCS PD available on the VCS registry. The number is 222, 137 tCO<sub>2</sub>e in the approved VCS PD.</li> </ol> |    |             |   |                  |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |    |             |   | Date: 17/03/2025 |
| <ol style="list-style-type: none"> <li>1. The link of the VCS project ID has been added in the revised SD Vista PD.</li> <li>2. The original indicator was not appropriate. According to the SD Vista PD template, we change it to “Project-specific indicator: Number of households receiving project ICS, which is a basic service”. Thus, the monitoring number is aligned with the indicator.</li> <li>3. We've added clarification, cited a public literature, a study done in Kenya shows that the scarcity of wood fuel resulted in changes in cooking habits whereby households opted to cook composite meals as opposed to single meals, further, cooking food that takes less time is preferred. Such foods, however, often have low nutritional value, which compromised the</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |             |   |                  |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <p>nutritional status of especially the children under five and also the elderly<sup>33</sup>. The efficiency improvement results in less wood fuel needs, which reduces the undernourishment.</p> <p>4. For indoor air quality, we have 2 questions in our monitoring survey questionnaire:</p> <p>Question 9: Has the project cookstove improved indoor air quality from the date you received it till now?</p> <p>Question 10: Has the usage of the project cookstove reduced air quality related diseases, like cough or trachitis, from the date you received it till now?</p> <p>The result of the survey shows that 100% surveyed households reporting the indoor air quality has improved since they received the project ICSs. It is verifiable evidence. Please refer to submitted document “2_Data recording of Monitoring Survey-Kenya” and “5_Result of Monitoring Survey-1st MP-Kenya”.</p> <p>5. The clarification has been added in revised SD Vista PD “The production capacity of ICS manufacturer has increased from 10200 devices per month to 16800 per month due to the implementation of the project”.</p> <p>6. According to the report published by Kenya National Bureau Statistics, the Kenya’s official definition where MSMEs are defined according to employment size<sup>34</sup>.</p> <ul style="list-style-type: none"> <li>• Micro-enterprises - less than 10 employees;</li> <li>• Small enterprises - 10 to 49 employees</li> <li>• Medium sized enterprises -50 and 99 employee</li> </ul> <p>The project ICS manufacturer has 7 full-time employees and 30 part-time employees. Thus, it is a small scale enterprise. The relevant document link has been added as footnote 3 in Section 1 of the revised SD Vista PD.</p> <p>7. Please refer to submitted documents “15_Labour contracts” and “16_Salary slip”.</p> <p>8. The number has been corrected in the whole revised SD Vista PD.</p> |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |
| <p>2_Data recording of Monitoring Survey-Kenya</p> <p>5_Result of Monitoring Survey-1st MP-Kenya</p> <p>15_Labour contracts</p> <p>16_Salary slip</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Date: 01/04/2025</b> |

<sup>33</sup> <https://www.sciencedirect.com/science/article/pii/S2468227620301551#bib0021>

<sup>34</sup> <https://www.knbs.or.ke/wp-content/uploads/2023/09/2016-Micro-Small-And-Medium-Enterprises-Survey-Highlights-Of-Basic-Report.pdf> , Page 3

1. The link of the VCS project ID has been added in the revised SD Vista PD. The revised SD Vista PD assessed correctly referred for baseline with the approved VCS PD. Finding is closed now.
2. PP clarified that the original indicator was not appropriate. According to the SD Vista PD template, PP change it to “Project-specific indicator: Number of households receiving project ICS, which is a basic service”. Thus, the monitoring number is aligned with the indicator. The clarification is accepted. Finding is closed now.
3. PP added clarification and cited a public literature, a study done in Kenya shows that the scarcity of wood fuel resulted in changes in cooking habits whereby households opted to cook composite meals as opposed to single meals, further, cooking food that takes less time is preferred. Such foods, however, often have low nutritional value, which compromised the nutritional status of especially the children under five and also the elderly<sup>35</sup>. The efficiency improvement results in less wood fuel needs, which reduces the undernourishment. The information was validated correctly referring the given sources. Finding is closed.
4. For indoor air quality, PP clarified following 2 questions in their monitoring survey questionnaire:  
  
 Question 9: Has the project cookstove improved indoor air quality from the date you received it till now?  
  
 Question 10: Has the usage of the project cookstove reduced air quality related diseases, like cough or tracheitis, from the date you received it till now?  
  
 The justification is accepted, finding is closed.
5. The clarification has been added in revised SD Vista PD “The production capacity of ICS manufacturer has increased from 10200 devices per month to 16800 per month due to the implementation of the project”. The same was validated during the onsite assessment, finding is closed now.
6. PP clarified that according to the report published by Kenya National Bureau Statistics, the Kenya’s official definition where MSMEs are defined according to employment size<sup>36</sup>.
  - Micro-enterprises - less than 10 employees.
  - Small enterprises - 10 to 49 employees
  - Medium sized enterprises -50 and 99 employees
 The project ICS manufacturer has 7 full-time employees and 30 part-time employees. Thus, it is a small scale enterprise. The relevant document link has been added as footnote 3 in Section 1 of the revised SD Vista PD. The finding is closed after review of the link shared and the corrections undertaken in the SD Vista PD.
7. PP submitted documents “15\_Labour contracts” and “16\_Salary slip”, the evidence assessed correct. Finding is closed now.

<sup>35</sup> <https://www.sciencedirect.com/science/article/pii/S2468227620301551#bib0021>

<sup>36</sup> <https://www.knbs.or.ke/wp-content/uploads/2023/09/2016-Micro-Small-And-Medium-Enterprises-Survey-Highlights-Of-Basic-Report.pdf>, Page 3

8. The number has been corrected in the whole revised SD Vista PD, the revision has been assessed correct. Finding is closed now.

| CL ID                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 03 | Section no. | 2.1.8 | Date: 10/02/2025        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|-------|-------------------------|
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |             |       |                         |
| Since the SD Vista is linked with the VCS project which has been already approved therefore the linkage for the baseline shall be provided by refereeing the VCS ID, VCS PD inter alia. Otherwise, may be stated in detail in SD Vista PD as the baseline survey methodology is not provided in detail in the SD Vitta PD.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |    |             |       |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |    |             |       | <b>Date: 17/03/2025</b> |
| <p>The linkage of the project and the implementation of baseline survey has been added at the end of Section 2.1.8 of the revised SD Vista PD. The detail is shown below:</p> <p><i>The project proponent has conducted a baseline survey from 25/05/2022 to 06/06/2022 among 120 households from 6 villages, which shows that 96.67% of surveyed households used three-stone fire and 3.33% used open fire before the project implemented. All of the households used firewood for cooking. The baseline scenario is the continued use of non-renewable wood fuel (firewood) by the target population to meet similar thermal energy needs as provided by project cookstoves in absence of project activity. Please refer to registered VCS Project 3197 for the detail of baseline scenario of the project<sup>37</sup>.</i></p> |    |             |       |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |             |       |                         |
| 17_Registered PD-VCS 3197                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |             |       |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |             |       | <b>Date: 01/04/2025</b> |
| The PD has linked the baseline with the VCS project 3197, finding is closed as the linkage was assessed correct.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |             |       |                         |

| CL ID                                                                                                                                                                                 | 04 | Section no. | 2.1.10 | Date: 10/02/2025 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-------------|--------|------------------|
| <b>Description of CL</b>                                                                                                                                                              |    |             |        |                  |
| This threat mentioned to the project as COVID-19, which is no more valid at the time of validation therefore this shall be revisited based on the actual threats post COVID scenario. |    |             |        |                  |

<sup>37</sup> <https://registry.verra.org/app/projectDetail/VCS/3197>

|                                                                                    |                         |
|------------------------------------------------------------------------------------|-------------------------|
| <b>Project participant response</b>                                                | <b>Date: 17/03/2025</b> |
| It is no more a threat, so we deleted it in the revised SD Vista PD.               |                         |
| <b>Documentation provided by project participant</b>                               |                         |
| Revised SD Vista DD                                                                |                         |
| <b>VVB assessment</b>                                                              | <b>Date: 01/04/2025</b> |
| Finding is closed as the COVID-19 threat has been excluded. Finding is closed now. |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |                    |       |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|-------|-------------------------|
| <b>CL ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 05 | <b>Section no.</b> | 2.2.1 | <b>Date: 10/02/2025</b> |
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    |                    |       |                         |
| <ol style="list-style-type: none"> <li>1. PP has stated that research was undertaken for the stakeholder identification however it is not clearly explained the outcome of the research including the research methodology, duration of research inter alia.</li> <li>2. Dates of local stakeholder invitation letter shall be provided in section 2.2.1 of SD Vista PD.</li> <li>3. When the emails were sent to the government officials, NGOs, the dates shall be referred and the evidence to validate the same shall be provided to the VVB.</li> </ol>                                                                                                                                                                                  |    |                    |       |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |    |                    |       | <b>Date: 17/03/2025</b> |
| <ol style="list-style-type: none"> <li>1. The have been added as below:<br/> Research methodology: <ul style="list-style-type: none"> <li>• A preliminary picture of the socio-economic, cultural, and environmental context of the target communities.</li> <li>• Identification of key challenges and opportunities in the project area (e.g., poverty, lack of infrastructure, environmental concerns).</li> </ul> The outcome of the background understanding of the project has been discussed in Section 2.1.8 above.<br/> Preliminary stakeholder List: <ul style="list-style-type: none"> <li>• ICS end-users.</li> <li>• Stove manufacturer.</li> <li>• Stove distributor.</li> <li>• Government authorities.</li> </ul> </li> </ol> |    |                    |       |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <ul style="list-style-type: none"> <li>Non-governmental organizations (NGOs).</li> <li>Identification of vulnerable groups (e.g., women, children, elderly, disabled) who may require special attention.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <p>2. The dates of local stakeholder invitation letters have been added in Section 2.2.3 of the revised SD Vista PD.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |
| <p>3. For national and local officers and entrepreneurs, invitation letters were sent to them as formal invitation on 14/05/2022. The invitations have been posted in PD. Local NGO is our partner and was invited in person in preparation for the meeting.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                         |
| Revised SD Vista DD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>Date: 01/04/2025</b> |
| <ol style="list-style-type: none"> <li>The stakeholder identification survey methodology has been indicated by the PP in the revised document submitted to VVB, the same has been assessed correct. Finding is closed now.</li> <li>The dates of local stakeholder invitation letters have been added in Section 2.2.3 of the revised SD Vista PD and assessed correct. The same has been verified with the supporting documents and validated during the onsite assessment too. Finding is closed now.</li> <li>PP clarified that for national and local officers and entrepreneurs, invitation letters were sent to them as formal invitation on 14/05/2022. The invitations have been posted in PD. Local NGO is our partner and was invited in person in preparation for the meeting. The clarification is accepted and the representative attendees were interviewed during the onsite assessment by the validation team. Finding is closed now.</li> </ol> |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |    |                    |       |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|-------|-------------------------|
| <b>CL ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 06 | <b>Section no.</b> | 2.2.5 | <b>Date: 10/02/2025</b> |
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |    |                    |       |                         |
| <ol style="list-style-type: none"> <li>Whether Iceberg or it's local partners have organizational 'Anti-Discrimination' Policy implemented. How the employees were trained/educated about the 'Anti-Discrimination'. Clarify in the SD Vista document.</li> <li>Training records and dates of some of the trainings shall also be provided to VVB as the project is undergoing the joint validation and verification as mentioned under the section 2.2.5.</li> </ol> |    |                    |       |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                    |       | <b>Date: 17/03/2025</b> |
| <ol style="list-style-type: none"> <li>Iceberg has a Non-Discrimination Policy, and has made a presentation to staff and partners. Vocational training for employees also included this component. The clarification has been added in the revised SD Vista PD. The evidences have been submitted as documents "7_Non-</li> </ol>                                                                                                                                     |    |                    |       |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <p>Discrimination Policy” and “18_Training records_2022”, “19_Training records_2023”, “20_Training records_2024”.</p> <p>2. Three trainings about project implementation have been provided to staff, respectively on 30/11/2022, 10/05/2023 and 16/04/2024. Please refer to submitted as documents “18_Training records_2022”, “19_Training records_2023” and “20_Training records_2024” for details.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                         |
| <p>7_Non-Discrimination Policy</p> <p>18_Training records_2022</p> <p>19_Training records_2023</p> <p>20_Training records_2024</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Date: 01/04/2025</b> |
| <p>1. PP clarified that Iceberg has a Non-Discrimination Policy, and has made a presentation to staff and partners. Vocational training for employees also included this component. The clarification has been added in the revised SD Vista PD. The evidence has been submitted as documents labelled “7_Non-Discrimination Policy” and “18_Training records_2022”, “19_Training records_2023”, “20_Training records_2024”. The documents have been assessed reasonably addressing the requirements, finding is closed now.</p> <p>2. PP clarified that three trainings about project implementation have been provided to staff, respectively on 30/11/2022, 10/05/2023 and 16/04/2024. Evidence submitted as documents labelled as “18_Training records_2022”, “19_Training records_2023” and “20_Training records_2024” for details. The training records validated correct and the some of the attendees were interviewed during the onsite assessment. Finding is closed now.</p> |                         |

|                                                                                                                                                                                                         |    |                    |       |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|-------|-------------------------|
| <b>CL ID</b>                                                                                                                                                                                            | 07 | <b>Section no.</b> | 2.2.9 | <b>Date: 10/02/2025</b> |
| <b>Description of CL</b>                                                                                                                                                                                |    |                    |       |                         |
| <p>Are there any measures implemented at the factory level to mitigate the Occupational Safety risks of the labours involved in the cookstove manufacturing, evidence shall be provided to the VVB.</p> |    |                    |       |                         |
| <b>Project participant response</b>                                                                                                                                                                     |    |                    |       | <b>Date: 17/03/2025</b> |
| <p>The factory has safety policy to mitigate the occupational safety risks in the cookstove producing for workers, and also provided training to staff about work safety.</p>                           |    |                    |       |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                    |    |                    |       |                         |

|                                                                                                                                                                                                                                                                                                                                                                 |                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 18_Training records_2022                                                                                                                                                                                                                                                                                                                                        |                         |
| 19_Training records_2023                                                                                                                                                                                                                                                                                                                                        |                         |
| 20_Training records_2024                                                                                                                                                                                                                                                                                                                                        |                         |
| 21_Safety Policy                                                                                                                                                                                                                                                                                                                                                |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                           | <b>Date: 01/04/2025</b> |
| PP clarified that the ICS factory has safety policy to mitigate the occupational safety risks in the cookstove producing for workers and also provided training to staff about work safety. The copy of policy has been submitted and validated, the same was validated during the onsite assessment by interviewing the top management. Finding is closed now, |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |    |                    |               |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|---------------|-------------------------|
| <b>CL ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 08 | <b>Section no.</b> | 2.2.12. 2.1.1 | <b>Date: 10/02/2025</b> |
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |    |                    |               |                         |
| <ol style="list-style-type: none"> <li>Under section 2.2.12 it has been mentioned that the full project documentation has been uploaded on VERRA website and the same ones have been publicized on the Iceberg website during the whole crediting period of the project as the following linkage. It is not clear t how the uneducated users will be able to access it, PP shall clarify whether any briefing or information shared with the category of stakeholders cited.</li> <li>In section 2.3.1 it has been stated that Iceberg has rules and regulations about the avoidance of corruption, code of conduct, and business ethics. PP shall clarify whether this is documented as HR policy or in other form? The evidence of the same shall be provided to VVB. Further PP shall also clarify how this will be applicable to the local implementor in Kenya.</li> </ol> |    |                    |               |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |    |                    |               | <b>Date: 17/03/2025</b> |
| <ol style="list-style-type: none"> <li>It is difficult for ordinary uneducated users have access to these documents, but village leaders are more educated and they can basically have access to these documents. The village leaders have conveyed the project status to the villagers in a timely manner and encouraged them to give active feedback through the opinion book.</li> <li>It has been made into the Iceberg's HR policy. Please refer to submitted document "23_HR Policy". The implementor in Kenya is the suppliers of project ICS, the HR policy also applies to staff work with it. And it has a policy on avoidance of corruption, code of conduct, and business ethics too. Please refer to submitted document 24.</li> </ol>                                                                                                                             |    |                    |               |                         |
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |    |                    |               |                         |
| 23_HR Policy                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |    |                    |               |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| 24_Policy on Avoidance of Corruption, Code of Conduct, and Business Ethics-JCI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                         |
| <b>VWB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>Date:</b> 01/04/2025 |
| <p>1. PP clarified that it is difficult for ordinary uneducated users have access to these documents, but village leaders are more educated, and they can basically have access to these documents. The argument assessed reasonable by the validation team. PP clarified that the village leaders have conveyed the project status to the villagers in a timely manner and encouraged them to give active feedback through the opinion book. The same was assessed consistent with the information validated as part of onsite assessment. Finding is closed now.</p> <p>2. PP clarified that it has been made into the Iceberg's HR policy. Please refer to submitted document "23_HR Policy". The implementor in Kenya is the suppliers of project ICS, the HR policy also applies to staff work with it. And it has a policy on avoidance of corruption, code of conduct, and business ethics too. PP submitted document 24 as HR policy. The HR policy assessed adequately covering the issues raised by the validation team. Finding is closed now.</p> |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |    |                    |     |                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--------------------|-----|-------------------------|
| <b>CL ID</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 09 | <b>Section no.</b> | 3.1 | <b>Date:</b> 10/02/2025 |
| <b>Description of CL</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |    |                    |     |                         |
| <p>Under stakeholder monitoring plan it has been stated that:</p> <p>During each time of the project verification, Iceberg and/or local partners conduct a multi-stage random sampling survey on the implementation of the project, including all the effects identified in the project's causal chain related to stakeholder well-being.</p> <p>The project is undergoing the combined verification therefore the details of the verification visit undertaken by the PP shall be provided.</p>                                                                                                                                                                                                                                                                                                                                                                  |    |                    |     |                         |
| <b>Project participant response</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |    |                    |     | <b>Date:</b> 17/03/2025 |
| <p>The details of the first monitoring survey have been added in Section 3.3 of the revised SD Vista PD:</p> <p><i>The start date of the project is 21/06/2022. According to the applied methodology, the fuel consumption survey has to be done in first year of implementation. The project Fuel Consumption Survey was conducted by local staff from 03/05/2023 to 06/06/2023, thus it has met the requirement. The Project Survey, which including Usage Survey was conducted from 01/09/2023 to 14/11/2023. Please refer to the submitted spreadsheet "2_Data recording of Monitoring Survey" for details. Multi-stage sampling was applied in the Monitoring Survey during this monitoring period. 8 villages were randomly chosen in the first stage of the sampling process. Then 20 households were randomly chosen from each of the 8 villages.</i></p> |    |                    |     |                         |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                         |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|
| <b>Documentation provided by project participant</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                         |
| revised SD Vista PD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                         |
| <b>VVB assessment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Date:</b> 01/04/2025 |
| <p>The information of first monitoring survey has been included as below in the updated SD Vista PD:</p> <p>The start date of the project is 21/06/2022. According to the applied methodology, the fuel consumption survey has to be done in first year of implementation. The project Fuel Consumption Survey was conducted by local staff from 03/05/2023 to 06/06/2023, thus it has met the requirement. The Project Survey, which including Usage Survey was conducted from 01/09/2023 to 14/11/2023. Please refer to the submitted spreadsheet “2_Data recording of Monitoring Survey” for details. Multi-stage sampling was applied in the Monitoring Survey during this monitoring period. 8 villages were randomly chosen in the first stage of the sampling process. Then 20 households were randomly chosen from each of the 8 villages.</p> <p>The survey information has been validated correct as the same was verified as part of the vCS verification of this project.</p> |                         |

Table 2. CAR from this validation

|                                                      |           |                    |  |              |
|------------------------------------------------------|-----------|--------------------|--|--------------|
| <b>CAR-ID</b>                                        | <b>XX</b> | <b>Section no.</b> |  | <b>Date:</b> |
| <b>Description of CAR</b>                            |           |                    |  |              |
|                                                      |           |                    |  |              |
| <b>Project participant response</b>                  |           |                    |  | <b>Date:</b> |
|                                                      |           |                    |  |              |
| <b>Documentation provided by project participant</b> |           |                    |  |              |
|                                                      |           |                    |  |              |
| <b>VVB assessment</b>                                |           |                    |  | <b>Date:</b> |
|                                                      |           |                    |  |              |

**Table 3.FAR from this validation**

No FAR raised during this validation.

| FAR ID                                        | xx | Section no. |  | Date: DD/MM/YYYY |
|-----------------------------------------------|----|-------------|--|------------------|
| Description of CAR                            |    |             |  |                  |
| NA                                            |    |             |  |                  |
| Project participant response                  |    |             |  | Date: DD/MM/YYYY |
|                                               |    |             |  |                  |
| Documentation provided by project participant |    |             |  |                  |
|                                               |    |             |  |                  |
| VVB assessment                                |    |             |  | Date: DD/MM/YYYY |
|                                               |    |             |  |                  |