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Gold Standard Validation Report

E+CARBON, INC.

VALIDATION OF THE GS VER PROJECT:

**IMPROVED HOUSEHOLD CHARCOAL STOVES IN
MALI**

REPORT NO. 1232168-GS v1

AUGUST 24, 2009

TÜV SÜD Industrie Service GmbH
Carbon Management Service
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Subject: Validation of a GS-VER Project				
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Project Participant: E+Carbon, Inc. 383 Franklin St Bookmfield, NJ 07003		Project Site(s): Greater Bamako, Mali		
Project Title: Improved Household Charcoal Stoves in Mali				
Applied Methodology / Version: Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes version 01.			Scope(s): 1	
First PDD Version: Date of issuance: 23-09-2008 Version No.: 2.2 Starting Date of GSP 30-09-2008		Final PDD version: Date of issuance: 01-06-2009 Version No.: 2.6		
Estimated Annual Emission Reduction:		72 112 tCO_{2e}		
Assessment Team Leader: Martin Schroeder		Further Assessment Team Members: Robert Mitterwallner Cyprian Fusi		
Summary of the Validation Opinion:				
<input checked="" type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. In our opinion, the project meets all relevant Gold Standard requirements. Hence TÜV SÜD will recommend the project for registration by the Gold Standard. <input type="checkbox"/> The review of the project design documentation and the subsequent follow-up interviews have not provided TÜV SÜD with sufficient evidence to determine the fulfilment of all stated criteria. Hence TÜV SÜD will not recommend the project for registration by the Gold Standard and will inform the project participants and the Gold Standard on this decision.				



Abbreviations

AM	Approved Methodology
CAR	Corrective Action Request
CDM	Clean Development Mechanism
CDM EB	CDM Executive Board
CER	Certified Emission Reduction
CR / CL	Clarification Request
DNA	Designated National Authority
DOE	Designated Operational Entity
EF	Emission Factor
EIA / EA	Environmental Impact Assessment / Environmental Assessment
ER	Emission Reduction
ERPA	Emission Reductions Purchase Agreement
FAR	Forward Action Request
GHG	Greenhouse Gas(es)
GS	Gold Standard
GS-TAC	Gold Standard Technical Advisory Committee
IPCC	Intergovernmental Panel on Climate Change
IRL	Information Reference List
IRR	Internal Rate of Return
KP	Kyoto Protocol
MP	Monitoring Plan
NRB	Non-Renewability fraction of Biomass
NGO	Non Governmental Organisation
PDD	Project Design Document
PP	Project Participant
SDM	Sustainable Development Matrix
TÜV SÜD	TÜV SÜD Industrie Service GmbH
VER	Verified Emission Reductions/Voluntary Emission Reduction
UNFCCC	United Nations Framework Convention on Climate Change
VVM	Validation and Verification Manual



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1 INTRODUCTION

1.1 Objective

The validation objective is an independent assessment by a Third Party (Designated Operational Entity = DOE) of a proposed project activity against all defined criteria set for the registration under the Gold Standard (GS). Validation is part of the GS project cycle and results in a conclusion by the executing DOE whether a project activity is valid and should be submitted for registration to the Gold Standard Technical Advisory Committee (GS-TAC). The ultimate decision on the registration of a proposed project activity rests with the GS-TAC.

The project activity covered by this validation report has been submitted under the project title:
“Improved Household Charcoal Stoves in Mali”

1.2 Scope

The scope of any assessment is defined by the underlying legislation, regulation and guidance given by relevant entities or authorities. In the case of GS project activities the scope is set by:

- The Gold Standard Technical Advisory Committee (GS-TAC)
- Guidance and decisions provided by GS-TAC
- The Kyoto Protocol, in particular § 12 and modalities and procedures for the CDM
- CDM and/or GS-VER approved Baselines and Monitoring methodologies (including GHG inventories)
- Decisions and specific guidance by the CDM-EB published under <http://cdm.unfccc.int>
- Management systems and auditing methods
- Environmental issues relevant to the sectoral scope applied for
- Applicable environmental, social impacts, and aspects of CDM project activity
- Sector specific technologies and their applications
- Current technical and operational knowledge of the specific sectoral scope and information on best practice

The validation is not meant to provide any consulting towards the project participant (PP). However, stated requests for clarifications, corrective actions, and/or forward actions may provide input for improvement of the project design.

Once TÜV SÜD receives a first PDD version, it is made publicly available at TÜV SÜD's webpage to start a Global Stakeholder Consultation Process (GSP). In special circumstances (e.g. certain conditions may warrant the repetition of the GSP), a request to revise the PDD will be necessary. The original PDD and the modified PDD will form the basis for the final evaluation. Information on both PDD's is presented on page 1.

The purpose of a validation report is its use during the registration process as part of the GS project cycle. Therefore, TÜV SÜD cannot be held liable by any party for decisions made, or not made, based on the validation opinion, which will go beyond that purpose.

2 METHODOLOGY

The project assessment applies standard auditing techniques to assess the correctness of the information provided by the project participants. The assessment is based on:

- GS Validation and Verification Manual for VER projects as defined for GS version 01.
- The “Clean Development Mechanism Validation and Verification Manual” version 01.

The process begins with the appointment of the validation or audit team covering the technical and/or sectoral scope(s) and relevant host country experience for evaluating the GS project activity. Once the project is made available for the stakeholder consultation process, members of the team carry out the desk review, follow-up interviews, resolution of issues identified, and finally preparation of the validation report. The prepared validation report and other supporting documents then undergo an internal quality control at TÜV SÜD Certification Body (CB) - “Climate and Energy” - before submission to the GS TAC.

In order to ensure transparency, assumptions are clearly and explicitly stated; background materials are clearly referenced. TÜV SÜD developed methodology-specific checklists and customised protocol for the project. The protocol shows, in a transparent manner, criteria (requirements), the discussion of each criterion by the assessment team, and the results from validating the identified criteria. The validation protocol serves the following purposes:

It organizes details and clarifies the requirements a GS project is expected to meet;

It ensures a transparent validation process where the auditor has to document how a particular requirement has been validated, as well as the results of the validation and any adjustments, if any, made to the project design.

The validation protocol consists of three tables. The different columns in these tables are described in the figure below.

Validation Protocol Table 1: Conformity of Project activity and PDD				
Checklist Topic / Question	Reference	Comments	PDD in GSP	Final PDD
<i>The checklist is organised in sections following the arrangement of the applied PDD version. Each section is then further sub-divided. The lowest level constitutes a checklist question / criterion.</i>	<i>Gives reference to documents where the answer to the checklist question or item is found in case the comment refers to documents other than the PDD.</i>	<i>The section is used to elaborate and discuss the checklist question and/or the conformance to the question. It is further used to explain the conclusions reached. In some cases sub-checklist are applied indicating yes/no decisions on the compliance with the stated criterion. Any Request has to be substantiated within this column</i>	<i>Conclusions are presented based on the assessment of the first PDD version. This is either acceptable based on evidence provided (☑), or a Corrective Action Request (CAR) due to non-compliance with the checklist question (See below). Clarification Request (CR) is used when the validation team has identified a need for further clarification. Forward action request to highlight issues related to project implementation that require review during the first verification.</i>	<i>Conclusions are presented in the same manner based on the assessment of the final PDD version and further documents including assumptions presented in the documentation.</i>



Validation Protocol Table 2: Resolution of Corrective Action and Clarification Requests			
Clarifications and corrective action requests	Ref. to table 1	Summary of project owner response	Validation team conclusion
<i>If the conclusions from table 1 are either a Corrective Action, a Clarification or a Forward action Request, these should be listed in this section.</i>	<i>Reference to the checklist question number in Table 1 where the issue is explained.</i>	<i>The responses given by the client or other project participants during the communications with the validation team should be summarised in this section.</i>	<i>This section should summarise the discussion on and revision to project documentation together with the validation team's responses and final conclusions. The conclusions should be reflected in Table 1, under "Final PDD".</i>

In case of a denial of the project activity more detailed information on this decision will be presented in table 3.

Validation Protocol Table 3: Unresolved Corrective Action and Clarification Requests		
Clarifications and corrective action requests	Id. of CAR/CR 1	Explanation of the Conclusion for Denial
<i>If the final conclusions from table 2 results in a denial the referenced request should be listed in this section.</i>	<i>Identifier of the Request.</i>	<i>This section should present a detail explanation, why the project is finally considered not to be in compliance with a criterion with a clear reference to the requirement which is not complied with.</i>

The completed validation protocol is enclosed in Annex 1 to this report.

2.1 Appointment of the Assessment Team

According to the technical scopes and experiences in the sectoral or national business environment TÜV SÜD has nominated an audit team in accordance with the appointment rules set by TÜV SÜD Certification Body "Climate and Energy". The composition of an assessment team has to be approved by the Certification Body (CB) to assure that the required skills are covered by the team. TÜV SÜD CB operates four qualification levels for team members that are assigned by formal appointment rules:

- Assessment Team Leader (ATL)
- Greenhouse Gas Auditor (GHG-A)
- Greenhouse Gas Auditor Trainee (T)
- Experts (E)

It is required that the sectoral scope linked to the methodology has to be covered by the assessment team.

The following table shows the validation team and their qualifications as appointed by TÜV SÜD CB.

Name	Qualification	Coverage of technical scope	Coverage of sectoral expertise	Host country experience
Martin Schröder	ATL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Robert Mitterwallner	GHG-A	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cyprian Fusi	GHG-T	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Martin Schröder is appointed as Assessment Team Leader and GHG-Auditor by the certification body "climate and energy". He holds a Masters Degree in forestry and passed successfully internal training schemes in the field of auditing as well as the technical features of landfill and energy related projects. Before entering the company, he worked in the field of development projects in the Amazon Region and managed forestry based carbon offset projects.

Robert Mitterwallner is a GHG-Auditor with a background as auditor for environmental management systems (according to ISO 14001), as expert in environmental permit procedures for industrial plants and as expert for environmental impact studies assessment. He is located at TÜV SÜD Industrie Service in Munich since 1990. He has received training in the JI determination as well as CDM validation process and applied successfully as GHG Auditor for the scopes energy industries, manufacturing industries, chemical industries, transport, mining/mineral production, metal production, solvent use and waste handling / disposal.

Cyprian Fusi (an African) is a GHG auditor (Trainee) with the "Carbon Management Service" in Munich - the head office of TÜV SÜD Industrie Service GmbH, Germany. He holds a Dipl.-Ing (M.Sc) degree in electrical engineering with a speciality in Radio Frequency / Microwave (RF/MW) engineering. Mr. Fusi has worked previously with Siemens AG Berlin, Volkswagen Hannover, Fraunhofer Institute IZM Berlin, Ferdinand Braun Institute for High Frequency Techniques Berlin and Microelectronics for Multimedia Berlin. He has received training in the CDM/JI validation and verification processes and has participated in several CDM/JI project audits and workshops.

2.2 Review of Documents

The first version of the PDD was submitted to the DOE in September 2008. The first PDD version submitted by the PP and additional background documents related to the project design and baseline have been reviewed to verify the correctness, credibility, and interpretation of the presented information. Furthermore, a cross-check between information provided and information from other sources (if available) has been done as initial step of the validation process. A complete list of all documents and proofs reviewed is attached as annex 2 to this report (Information Reference List).

2.3 Follow-up Interviews

From 02-04 October 2008 TÜV SÜD conducted interviews during the on-site visit with project stakeholders to confirm relevant information, and to resolve issues identified in the first document review. The following table provides a list of all persons interviewed in this context. An expanded list including some end users interviewed is provided in annex 2.

Name	Organisation
Ousmane Samassekou (Mr.)	General Manager, Katene Kadji, Mali
Mariam Tienou (Mme.)	Surveyor contracted by Berkeley Monitoring Group
Kouloutan Coulibaly (Mr.)	Direction Nationale de la Conservation de la Nature, Mali
Birama Diabaté (Mr.)	Direction Nationale de la Conservation de la Nature, Mali
Doumbia Diakaridia (Mr.)	Salesman (Retailer) Katene Kadji, Mali
Sylla Bamahame (Mr.)	Salesman (Retailer) Katene Kadji, Mali

2.4 Further Cross-Check

During the validation process the team makes reference to available information related to similar projects or technologies as the GS project activity. The documentation has also been reviewed against the “Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes” V01 applied to confirm the appropriateness of formulae and correctness of calculations.

2.5 Resolution of Clarification and Corrective Action Requests

The objective of this phase of the validation is to resolve the requests for corrective actions, clarifications, and any other outstanding issues which needed to be clarified before TÜV SÜD’s conclusion on the project design. The CARs and CRs raised by TÜV SÜD were resolved during communication between the client and TÜV SÜD. To guarantee the transparency of the validation process the concerns raised and responses that were provided are documented in more detail in table 2 of the validation protocol provided in annex 1. In total, 21 CARs and 15 CRs were raised. After three loops of deliberations with the project participants, the audit team was able to close out all remaining issues of concern. The details of the discussions that transpired between the PP and the audit and finally culminated in the validation opinion can be followed in table 2 of the validation protocol provided in annex 1 of this report. This process led to the revision of the PDD.

The final PDD version submitted in June 2009 (IRL No. 37) serves as the basis for the final assessment presented here. Changes are not considered to be significant with respect to the qualification of the project as a GS project.

2.6 Internal Quality Control

As final step of a validation activity the final documentation, which includes the validation report and the validation protocol, has to undergo an internal quality control at the CB “Climate and Energy”. This means that each report has to be approved either by the head of the CB or the deputy. In situations where either the Head of the CB or his/her Deputy is part of the assessment team approval can only be given by either of them not serving on the audit team for the project.

After confirmation by PP, the validation report and relevant documents are submitted to the GS TAC through the DOE access to the GS registry.

3 GENERAL VALIDATION FINDINGS

The assessment work and the main results are described below in accordance with the VVM reporting requirements. The reference documents indicated in this section and in the validation protocol are provided in Annex 2 (Information Reference List).

3.1 Participation

Project participants are:

- E+Carbon, Inc., USA
- Katene Kadji, Mali

The participants have confirmed their voluntary participation in the GS project activity (IRL No. 4). The Host Party to the project activity is Mali.

3.2 Project Design Document (PDD)

The PDD is compliant with relevant form and guidance as provided by GS. The most recent version of the PDD form was used.

TÜV SÜD considers that the guidelines for the completion of the PDD in their most recent version have been followed. Relevant information was provided by the participants in the applicable PDD sections A.3. Completeness was assessed through the checklist included in Annex 1 of this report.

3.3 Project Description

The following description of the project as per PDD was verified during the on-site visit:

The project activity takes place at end users' kitchens in Greater Bamako region in Mali. The project boundary here is defined as the domestic kitchens of the project population using Katene SEWA stoves.

The objective of the project is to provide efficient charcoal stoves for cooking to people in Greater Bamako region. The target area, as defined in the methodology being applied, is Katene's current distribution network, but will gradually expand to cover major towns and market centers in all regions of Mali, including Timbouctou, Kidal, Gao, Mopti, Segou, Sikasso, Koulikoro, and Kayes. Wood fuel and charcoal consumption can be substantially reduced as a result of implementing the project. The savings in charcoal and wood fuel consumption would then be converted into emission reduction according to the GS Methodology "Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes."

Prior to the start of the project activity, stoves were subsidized by grants funding (IRL No. 23, 24 and 26) that are no longer available. At unsubsidized prices, purchasing a SEWA stove accounts for several percent of annual incomes and the ability for the end users to save this amount of money to purchase the stove is extremely limited. Katene is currently selling stoves below cost price with the hope of realizing additional revenues from the sales of VERs in order to remain viable. That is, some carbon revenues would act as a direct subsidy so that efficient stoves are cost competitive with their inefficient business-as-usual counterparts. Carbon finance will lower the price of stoves so that a broader spectrum of Malian society can afford them.

In order to convince the people about the long term benefits of the efficient stoves, workshops and publicity programs are planned. The project is owned and managed by Katene Kadji but is being developed by an American organisation called E+Carbon, Inc. - a subsidiary of a non profit organisation called E+Co.

The information presented in the PDD on the technical design is consistent with the actual planning and implementation of the project activity as confirmed through:

- Review of data and information (see annex 2). This was verified with other sources if available.
- An on-site visit has been performed and relevant stakeholder and personnel with knowledge of the project were interviewed. If doubts arose further investigations and additional interviews were conducted.
- Finally, information related to similar projects or technologies as the VER and/or CDM project activity have been used (if available) to confirm the accuracy and completeness of the project description.

In conclusion, TÜV SÜD confirms that the project description, as included to the PDD, is sufficiently accurate and complete in order to comply with the requirements of the GS-VER.

3.4 Baseline and Monitoring Methodology

3.4.1 Applicability of the Selected Methodology

Compliance with each applicability criterion as listed in the applied baseline and monitoring methodology “Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes” version 01 has been demonstrated.

The assessment was carried out for each applicability criterion and included, among others, the compliance check of the local project setting with the applicability conditions in regard to baseline setting and eligible project measures. This assessment also included the review of secondary sources, which attest that applicability conditions are complied with.

The Methodology specific checklist (validation protocol), included in Annex 1, documents the assessment process, which also includes the steps taken. The results of the compliance check, as well as the relevant evidences, are detailed in Annex 1.

TÜV SÜD confirms that the chosen baseline and monitoring methodology is applicable to the project activity.

Emission sources, which are not addressed by the applied methodology, and are expected to contribute more than 1% of the overall expected average annual emission reductions according to Appendix A of the GSv1 VVM, have not been identified.

3.4.2 Project Boundary

The project boundary was assessed during the physical site inspection, interviews, and on other evidences on the design of the project received.

The project boundary here is defined as the domestic kitchens of the project population using Katene SEWA stoves in Mali. This was also confirmed during the on-site visit. The target area, as defined according to the methodology being applied, is Katene’s current distribution network, but will gradually expand to cover major towns and market centers in all regions of Mali, including Timbuctou, Kidal, Gao, Mopti, Segou, Sikasso, Koulikoro, and Kayes.

TÜV SÜD can therefore confirm that the identified boundary, the target area, the selected sources, and gases as documented in the PDD are justified for this project activity.

3.4.3 Baseline Identification

The PDD defines the following baseline scenario:

The baseline scenario has been determined as the continuous use of non-renewable biomass at unsustainable rate in inefficient stoves and inefficient traditional cooking regime in the next 10 years. This was established according to the applied methodology through surveys and tests to estimate and quantify baseline conditions in homes which are not using the improved stove. Monitoring of the emissions in the project scenario and the baseline scenario will be done according to option2 (as described in the applied methodology) due to evolving baseline as described in the PDD.

Since the baseline CO₂ emission is due mainly to the consumption of non-renewable biomass, and the project technology emits less CO₂, the project activity leads to additional emission reductions.

The information presented in the PDD has been validated during the desk review of the PDD and any document provided by the project participant. Further confirmation is based on the on-site visit and further information obtained from similar projects and/or technologies. The sources referenced in the PDD have been quoted correctly. The information was verified against credible sources, such as:

- IPCC data on climate change (2006 IPCC Guidelines for National Greenhouse Gas Inventories)
- Similar projects found at GS website undergoing validation

- FAO (FAOSTAT-Forestry Database, 2005, <http://faostat.fao.org>).

TÜV SÜD has determined that no reasonable alternative scenario has been excluded.

Based on the validated assumptions on calculations TÜV SÜD considers that the identified baseline scenario is reasonable.

Taking the definition of the baseline scenario into account, TÜV SÜD confirms that all relevant GS requirements, including relevant and/or sectoral policies and circumstances, have been identified correctly. A verifiable description of the baseline scenario has been included in the PDD.

TÜV SÜD confirms that:

1. All the assumptions and data used by the project participants are listed in the PDD, including their references and sources;
2. All documentation used is relevant for establishing the baseline scenario and correctly quoted and interpreted in the PDD;
3. Assumptions and data used in the identification of the baseline scenario are justified appropriately, supported by evidence, and can be deemed reasonable;
4. Relevant national and/or sectoral policies and circumstances are considered and listed in the PDD
5. The approved baseline methodology has been correctly applied to identify the most reasonable baseline scenario, and the identified baseline scenario reasonably represents what would have occurred in the absence of the proposed GS project activity.

3.4.4 Algorithm and/or Formulae used to Determine Emission Reductions

TÜV SÜD has assessed the calculations of project emissions, baseline emissions, leakage, and emission reductions. Corresponding calculations were carried out based on calculation spreadsheets. The parameters and equations presented in the PDD, as well as other applicable documents, have been compared with the information and requirements presented in the methodology and other applicable tools. The equation comparison has been made considering all the formulae presented in the calculation files “Mali PDD ER Projections.xls” - CEIHD Household Energy Carbon Calculator (IRL No. 39).

The assumptions and data used to determine the emission reductions are listed in the PDD and all the sources have been checked and confirmed.

Based on the information reviewed it can be confirmed that the sources used are correctly quoted and interpreted in the PDD. The values presented in the PDD are considered reasonable based on the documentation and references reviewed as well as on the result of the interviews.

The baseline methodology has been correctly applied according to requirements.

The estimate of the baseline emissions can be confirmed to be the same as that which have been replicated by the audit team using the information provided.

Detailed information on the verification of the parameters used in the equations can be found in Annex 1. The algorithms for the determination of the baseline, project, and leakage emissions are discussed in the subsequent sections of this report.

3.4.4.1 Baseline Emissions

Project and baseline emissions have been calculated using the excel workbook “Mali PDD ER Projections.xls” (IRL No. 39) known as “CEIHD Household Energy Carbon Calculator” (CHECC). This a detailed excel model developed by the Center for Entrepreneurship in International Health and Development (CEIHD) that estimates emission reductions of carbon dioxide, methane and nitrous oxide from improved cook stoves. Fuel savings figures from the KPT were used as inputs into this model to estimate potential emission reductions. PDD annex 2 summarizes the input data and assumptions that were used in this model.

3.4.5 Project Emissions

Generally, the project emissions are calculated with Approach 1 (measurement of all fuels mix) according to the methodology. This has been estimated using the excel workbook “Mali PDD ER Projections.xls” (IRL No. 39). The approach and the equations used to calculate project emissions are consistent with the applied methodology.

3.4.6 Leakage

No significant leakage emissions have been identified for this project activity. However, the dissemination of efficient stoves may lead to the so-called ‘bounce effect’ - which is the increased use of wood/charcoal outside the project boundary. To make sure that the dissemination of efficient stoves does not have a significant impact on the local charcoal and wood fuel usage, every two year PPs will conduct a survey with market participants to look if the saved wood and charcoal is being used for other purposes.

3.4.7 Emission Reductions

In summary, the estimate of the baseline emissions; project emissions, leakages and the resulting emission reductions, can be considered to be appropriate. As demanded by the GS pre-feasibility assessment report, the Kitchen Survey and Kitchen Tests & Statistical Analyses in the PDD have been conducted by a third party. The statistical evaluation is deemed to be appropriate regarding the requirements of the methodology.

3.5 Additionality

Apart from demonstrating that the project would lead to reduction of GHG emissions, it also has to be demonstrated that the reductions are additional to those that would have occurred in the absence of the propose project activity. According to the methodology “The project proponent must show that the project could not or would not take place without the presence of carbon finance. Possible reasons may be that the initial investment, or the on-going costs for marketing, distribution, quality control and manufacture, are not affordable to the target project population in the form of high stove prices.”

Steps 1 through 4 of the UNFCCC “Tool for the demonstration and assessment of additionality” version 5 have been used to demonstrate that the emission reductions due to the project activity are additional to any that would have occurred in the absence of the project activity. The approach in the PDD has been assessed mainly based on a document review, where following relevant documents have been reviewed:

- Carbon Monitoring Report on the Sewa Improved Charcoal Stoves of Katene Kadji, Mali (IRL No. 22)
- Prefeasibility Assessment Cook-stoves Mali Final.pdf (IRL No. 38).
- Annual Report Katene Kadji 2005 & 2006 (IRL No. 17)

On site the additionality of the project was discussed principally with the project operator – Mr. Ousmane Samassekou (IRL No. 4). Further documents reviewed on-site can be found below in Annex 2 (IRL).

Finally, the data, rationales, assumptions, justifications, and documentation provided have been verified using local and/or country knowledge or experience as well as sectoral and financial expertise. This information was also confirmed through the following documentation and/or sources:

- Investment law of Mali (IRL No. 7)
- Final report on fuel wood energy in Bamako (IRL No. 20)
- Forestry Department FAO <ftp://ftp.fao.org/docrep/fao/009/j5838e/j5838e00.pdf> (IRL No. 41)

- Katene financial audit report.pdf (Rapport d'audit de rentabilité Période: 2004 à 2008) (IRL No. 34)

Based on this validation steps it can be confirmed that the documentation assessed is appropriate to prove that the project activity is additional.

For more information about GS conservative approach check see chapter 4.3 of this report.

3.5.1 Prior Consideration of Finances from Carbon Credits

The starting date of the project activity is 27th November 2007, determined by the date when ERPA contracts and also the Letter of Agreement between E+Carbon and Katene Kadji were signed (IRL No. 40 was also considered). This is considered as the date when 'real action' began according to the CDM glossary of terms. In order to confirm this information the assessment team has reviewed the following documents:

- Emission Reduction Purchase Agreement between E+Carbon & Katene Kadji (IRL No. 16),
- ERPA Amendment dated 01.02.2008 (IRL No. 21)

Furthermore, the assessment team verified this information (project starting date) with a GS official during a telephone discussion.

The original documents presented have been reviewed and verified based on interviews with the project owner Ousmane Samassekou (IRL No. 4) and the project developer Erik Wuster. Therefore the documents can be considered appropriate to confirm prior consideration of VER income.

3.5.2 Identifications of Alternatives

The output of the project is emission reductions through the dissemination of fuel-efficient charcoal stoves in Mali.

The list of alternatives to supply the above mentioned results, which are also presented in the PDD, includes the project activity undertaken without being registered as GS VER project. The remaining alternatives presented do include all plausible scenarios taking into account the local and sectoral situations for the mentioned results. The list of alternatives is therefore considered complete.

3.5.3 Investment Analysis

The PP uses the barrier analysis to demonstrate additionality of the project activity.

3.5.4 Barrier Analysis

The project participants have used (also) the barrier analysis in order to demonstrate the additional-ity of the project. The presented barriers are:

- Financial barrier
- Investment barrier
- Knowledge barrier
- Prevailing practice

The investment barrier has been assessed against the grants from AMADER (IRL No. 26) and GTZ (IRL No.30) and also the independent financial audit of Katene's finances (IRL No. 34). The result of this assessment clearly shows that the barrier presented in the PDD can be considered real.

This barrier would prevent the project activity but would not prevent the baseline of the project. This is confirmed through the documentation review, interviews, and the local and/or country and sectoral expertise of the assessment team. For instance, PP has contracted a private Mali based financial accountant called Nicolas Kouvahey to audit Katene (IRL No. 34). The results of the audit state that "the net result of Katene Kadji in the last five years is a deficit. The country expert on the audit team

can confirm that such unprofitable endeavours are common practices in many sub-Saharan countries. Most even go as far as taking loans and pumping into the business just to keep it afloat out of shame of closing down completely and staying without any occupation.

As highlighted in the UNFCCC additionality tool, credible investment barriers include evidence that “similar activities have only been implemented with grants or other non-commercial finance terms.” Katene was able to survive in the past thanks to financial support from AMADER (IRL No. 23) and GTZ (IRL No. 24). While support from GTZ allowed Katene to purchase certain manufacturing equipment, it was AMADER’s subsidy program that allowed the sale of stoves to reach a larger number of the target population. The goal of the AMADER grant was to make the price of stove affordable to the target population – the low income Malian households. AMADER’s program is, however, no longer available since October 31, 2007 (IRL No. 26) and no foreseeable plans exist to reinstate this program. In the absence of an AMADER subsidy program, and no GTZ grant (IRL No.30) investment and the on-going costs for marketing, distribution, quality control and manufacture, are not affordable to the target project population in the form of high stove prices. At the onset of this project activity (without grants), Katene chose to keep prices artificially low and sell below cost to maintain sales levels in hopes that income from VER sales would soon fill the gap. Continuous production (though to a lesser extent compared to the era with grants) and selling below cost has been made possible by the fact that the project owner has been diverting funds from some of his other businesses to the stoves business in order just to remain afloat. Without this unsustainable and uneconomical practice, Katene would have grounded and gone out of business completely. In other words, sales would have dropped to zero. In fact, an independent audit (IRL No. 34) of Katene’s accounts revealed that the business has been operated at a loss since 2004 (even including the period with grants)! Income from the sales of VERs would be expected to improve the state of the business to a level which could be sustainable. The audit team therefore concluded that the evidences presented are credible enough to support the assumptions.

Even with a commercial loan, which is difficult to come by in Mali due to the nature of the business and the conditions to obtain a loan in Mali, the business would still not be viable and sustainable.

Based on the validation of the barriers presented above, the assessment team can confirm, with reasonable certainty, that the barriers are credible and correctly presented to demonstrate the additionality of the project

3.5.5 Common Practice Analysis

The region for the common practice analysis has been defined by the PP as Mali. However, project activities with similar technology can be found in different countries in the region, where different situations can appear. As a result, the region can be defined by taking into account similar technologies as well as similar industry types.

The assessment team has reviewed the approach presented in the PDD and can confirm that relevant parameters such as location, infrastructure, economical situation, and development have been taken into account in order to define the region to be used for the common practice. Extreme poverty and deforestation are the most important factors determining the implementation of efficient stoves projects. Therefore, the presented region can be considered appropriate for the common practice analysis.

The assessment team also reviewed official sources such as Gold Standard website. Information from this site reveals that similar projects are being implemented in Ghana, Madagascar and Uganda. All these projects are seeking registration at Gold Standard in order to be viable.

Therefore, it can be confirmed that the proposed GS VER project activity is not a common practice in the defined region.

3.6 Monitoring Plan

The monitoring plan presented in the PDD complies with the requirements of the applicable methodology. The assessment team has verified all parameters in the monitoring plan against the requirements of the methodology; no relevant deviations have been found.

The procedures have been reviewed by the assessment team through document review and interviews with the relevant personnel. This information, together with a physical inspection, allows the assessment team to confirm that the proposed monitoring plan is feasible, and within the project design. The major parameters to be monitored have been discussed with the PPs. Especially the non-renewability of biomass (NRB), data management, and the quality assurance and quality control procedures to be implemented in the context of the project. The major parameter affecting the baseline is the non-renewability fraction of biomass (NRB). Since sales of stoves will expand in the future to include other towns and city centers, this would lead to new fuel wood harvest areas. New baseline assessments will therefore be necessary to accurately account for the target area as it expands, as outlined in the monitoring section in the PDD. Since the non-renewable biomass baseline is monitored over time and can vary, the fuel collection area can also change as fuel collection habits change in Mali and as Katene's target area expands. This justifies the PP's decision to go with the evolving baseline scenario.

Therefore, we find that the PP's will be able to implement the monitoring plan and the emission reductions achieved can be reported ex-post and verified.

4 GOLD STANDARD CRITERIA

4.1 Project Type Eligibility Screen

Project Type:

The assessed project belongs to the category End User Energy Efficiency Improvement

Host Country:

Mali, being a signatory to the Kyoto Protocol is considered an eligible Host Country.

Project Size:

Project size is **72 112 tCO₂e** per year and therefore belongs to the GS category of large scale projects. It involves a domestic energy efficiency technology that uses more efficient stoves with less GHG emission for domestic cooking thereby displacing less efficient stoves with more GHG emissions.

4.2 Further GS Requirements on Additionality

4.2.1 Previous Public Announcement Check

GS requires that there is no previous public announcement of the project activity even as a normal project without VER components.

The project, in its current design (with the involvement of E+Carbon), has not previously been announced to go ahead as a normal project (even not as a voluntary offset project), prior to any payment being made for the implementation of the project. However, the project owner has been in the biomass stove business since 1997 but in a completely different kind of business scenario involving grants and other forms of support. This prompted GS to conduct a pre-feasibility assessment of the project in order to determine its eligibility. This was confirmed on 25th July 2008 with the issuance of the pre-feasibility assessment report by GS (IRL No. 38). Katene made plans in 2007 to secure carbon finance with a view to a major expansion effort that would allow the SEWA stove to be sold at affordable prices to low income households. The discussions and negotiations between the carbon credit buyer E+Carbon, Inc and project owner Katene intensified in late 2007. These discussions

were concluded with the signing of an Emission Revisions Purchase Agreement (ERPA) between E+Carbon and Katene on 27.12.2007 (IRL No. 16 & 21).

4.2.2 ODA Additionality Test

Gold Standard requires an official declaration from the project proponent that no ODA would be diverted to purchase VERs issuing from this project.

According to a confidential excerpt from E+Carbon's sales contract for all VERs generated (IRL No. 36), no ODA funds are used for purchasing VER credits. All VERs are bought by E+Carbon Inc. The relevant excerpt from this confidential contract shows that E+Carbon would sell all VERs generated from this project to a private sector investment bank (Name of bank withheld due to confidentiality). This proves therefore, that there is no agreement with any country's government to purchase the VER offsets using ODA funds.

4.3 Conservative Approach Check

According to Gold Standard version 1 requirements, it must be assessed whether a sufficiently conservative baseline scenario is chosen based on the baseline report and by consulting a local expert if necessary. The latter is demonstrated by the Assessment report "Carbon Monitoring Report on the Sewa Improved Charcoal Stoves of Katene Kadji, Mali" prepared in August 2008 by a 3rd party called Berkeley Air Monitoring Group and is included in the PDD in annex 6.

The PDD demonstrates that the most conservative baseline scenario has been chosen, and that all assumptions and parameters comply with the conservativeness criteria. To show how the calculation of emission reductions has been carried out in a conservative manner, the following examples are given:

- Table A.2 in the PDD projects the expected volume of sales of SEWA improved charcoal stoves (assuming stoves are installed at a consistent rate through the year) and projects annual offsets based on the conservative assumptions that 20% of the stoves sold cease to be used each year, charcoal is 59% non-renewable, and approximately 219kg of charcoal are saved annually per household using an improved SEWA stove
- The most conservative estimate of the percentage of non-renewability of the fuel wood providing the energy used in Bamako is 47%. The figures provided for wood harvest are underestimated. Demand for wood has been growing rapidly in previous years and will continue to grow through the project period. Urban growth is very pronounced, and demand for construction timber is rising. General population growth is 2.7% per year, and the demand for charcoal is estimated to increase, in part, due to urbanization. The figures quoted from recent studies reflect conditions in the past few years, and many of them need to be updated such that the non-renewable quantity at the start of the project is greater than estimated here.
- Very large family sizes (greater than 19) were excluded from the KPT so as to be conservative with overall fuel savings estimates and to avoid performing the KPT in these less common situations where multiple families share cooking stoves and food, making it difficult to track and weigh the charcoal associated with one household's charcoal stove.
- The first approach for calculating charcoal savings for Super Grand, Small and Tea stoves yielded more conservative results for the Small and Tea stoves, and was therefore adopted.
- Along with charcoal use, fuelwood use was measured in all daily fuelwood-using households. Average fuelwood savings were 0.56 kg/HH-day, with a p-value of 0.34. In order to be conservative, three households with very high, outlying daily fuel wood savings were removed from the analysis.
- The daily fuelwood savings adjustment factors will be applied to Average and Grand stoves (those on which the fuelwood KPT was based) and Super Grand stoves, but, in order to be conservative, it will not be applied to Small and Tea stoves.

- The fuelwood savings of the grand stove (from KPT) were used for the super grand without applying any adjustments, even though the super grand stove is significantly larger and likely has higher savings. This was also done to maintain a conservative approach

The audit team concludes that all relevant parameters for the baseline assessment as documented in the PDD have been chosen following the general principle of conservativeness.

4.4 Technology Transfer and/or Technology Innovation

The stoves are manufactured in Mali. The project is based on pilot work by Katene Kadji. Katene was established in 1995 and has been selling improved biomass cook stoves in Mali since 1997. It is owned and managed by a Mali based Ousmane Samassekou, an educated entrepreneur who has started other businesses in Bamako, Mali. He also employs and trains individuals from the locality in the manufacture of efficient stoves.

The project activity is first-of-its-kind in Mali not involving any aspect of technology transfer from an industrialized country but an innovation of local technology.

4.5 Sustainable Development Screen

4.5.1 Sustainable Development Assessment

The project has used the sustainable development assessment matrix as required by the Gold Standard version 1. The total score obtained is +10, where:

- Local/regional/global environment has a subtotal of +3
- Social sustainability and development has a subtotal of +5
- Economic and technological development has a subtotal of +2

None of the sub-total scores is negative, the total score is positive and none of the indicators has a score of -2 or -1. All the assumptions used in defining the score values have been reviewed by the audit team based on the desk review of submitted documentations, interviews conducted during the on-site visit undertaken as part of the validation of the project, report on technical test on SEWA stoves (IRL No. 13 & 14), users' instruction (IRL No. 8), and the calculation of NRB submitted by an independent 3rd party. Hence, the project activity complies with this Gold Standard criterion.

The GS Documentation also includes additional parameters (with a score of +1 or +2) to be monitored to further confirm that it is in line with sustainable development. These parameters are:

- Air quality
- Employment quality
- Livelihood of the poor (including poverty alleviation)
- Employment (number)

These additional parameters will be monitored as outlined in the GS documentation, even though the sustainable development assessment matrix did not result in any crucial SD indicators. Nonetheless, these four parameters will help verify that the project contributes to sustainable development in the region.

4.5.2 Environmental Impact Assessment (EIA)

In Mali Environmental Impact Analysis is not required for this project. This was confirmed during interviews with authorities in Mali. The audit team has therefore arrived at the conclusion that it is credible that no EIA is necessary for this project.

However, according to GS an EIA should be performed if any sustainable development indicator is rated -1. Since this is not the case (every sub-total and total score is positive) for this project activity, an EIA is not necessary in order to comply with GS requirements. Nevertheless, the project propo-

nents have assessed the potential environmental impacts and discussed them in the PDD. Furthermore, the Stakeholder Consultation outlined in annex 5 shows that the stakeholders are very positive about the harmless effect of the project. No significant negative impacts have been identified. Therefore, the EIA has not to be performed as according to GS requirements.

Similarly, the Designated National Authority in Mali has already indicated its no objection to the project activity in a letter included in annex 3 of PDD. This letter specifically highlights that the project is consistent with Mali's environmental regulations. The project is therefore exempted from EIA.

4.5.3 Public Consultation Procedures

The project proponent reported one stakeholder consultation and not two as required by the Gold Standard. But it is worth mentioning that projects applying for retroactive registration have to discuss the stakeholder consultation as part of the pre-feasibility assessment and conduct a complementary consultation based on the outcome of the pre-feasibility assessment. The DOE has received pre-feasibility assessment report (IRL No. 38) indicating that this was done and the second round of stakeholder consultation mentioned in the pre-feasibility assessment is what is reported in the PDD undergoing validation.

The lists of participants from the meeting have been included in the PDD. The spectrum of stakeholders invited to attend the meetings can be considered appropriate. This was also confirmed by those who were interviewed during the on site visit. The stakeholders were invited by a number of methods:

- The most important multilateral development organizations, NGOs and governmental institutions were invited per emails and letters (annex 5).
- For those stakeholders who lacked email addresses, project participants made in person visits to the offices of each stakeholder in Bamako more than one week in advance to hand deliver hard copies of the invitations.
- For illiterate stakeholders, project participants relayed the invitation verbally
- Finally, the invitation was posted in two local newspapers in Mali (annex 5).
- Three Gold Standard officials were also invited for virtual input

A total of 53 stakeholders from Mali's government, NGO community, stove users, stove manufacturers, artisans and retailers convened to discuss the carbon finance project aimed at disseminating efficient household cook stoves in Mali. Virtual input was also requested from the 11 invited guests who were unable to attend. One professional note taker was hired to record all comments at the meeting in addition to two professional translators. A formal presentation in French and a native language was given. Before concluding with general feedbacks, there was a question and answer session and also questions relating to the checklist for Social and Environmental Impacts. How due account was taken of any comments received has been provided in section G.3 of the PDD. No objections or negative comments were raised about the project.

The Global Stakeholder Process (GSP) was initiated by TÜV SÜD from 30th of September 2008 and included;

- Making the PDD publicly available on its website
- Inviting all GS supporter organizations, their local representatives and the general public to comment on the project.

The project can be accessed at the link given in section 5:

4.5.4 Summary Table of Gold Standard Criteria

According to the Pre-feasibility Assessment Report of this project conducted by Gold Standard, a summary table for some mentioned points and a brief explanation of how they have dealt with should be provided in the validation report.

Issue raised in the Pre-feasibility Assessment Report		How the issue has been dealt with
1	Eligibility of Greenhouse Gases	The only GHG considered by the project activity are CH ₄ , N ₂ O and CO ₂ . This has been mentioned in the PDD by the project participants (PP) and validated by the DOE.
2	Clarification on Additionality	Project participants have applied the 'Tool for the demonstration and assessment of additionality' version 5 to prove the additionality of the project activity. The main barriers presented are investment barrier and barrier due to prevailing practice. The DOE has reviewed all the documental evidences presented in support of additionality and has reported this in detail in this report.
3	Baseline and project emission reductions	An assessment of the baseline scenario and the range of stakeholders selected have been conducted by an independent third party expert called Berkeley Air Monitoring Group. The Kitchen Survey was conducted by Berkeley Air Monitoring Group staff by visiting the households. All households were visited and no telephone interviews were conducted. The results have been included in the PP as required. The DOE has reviewed the information provided during the desk review of the PDD and also during interviews conducted on-site with a surveyor and some end users. The DOE can therefore confirm that the baseline, project emissions and emission reductions have been determined according to the GS applied cook stove methodology.
4	Non-renewable biomass fraction	The Non-Renewable Biomass fraction (NRB) was determined by Berkeley Air Monitoring Group. TÜV SÜD therefore did not see the need of requesting the expertise of an independent expert in the home country to confirm the non-renewability fraction of biomass (NRB) calculated by Berkeley Air Monitoring Group and stated in the PDD (IRL No. 29) as the best estimate of the percent non-renewability of the wood fuel providing the charcoal used in Bamako is 47%. This is the most conservative of the three values obtained from three different approaches use to calculate NRB. Mr. Kouloutan Coulibaly and Mr. Birama Diabaté of the Direction Nationale de la Conservation de la Nature Mali (IRL No. 4) during an interview with the audit team disclosed that the rate of deforestation for domestic energy needs and otherwise far outweighs the rate of reforestation. They believe that the NRB mentioned in the PDD is very conservative but could not confirm the figure since they are not well versed with the method of calculation.
5	Sustainable Development Assessment Matrix (SDM).	All the assumptions used in defining the score values have been reviewed by the audit team based on the desk review of submitted documentations, interviews conducted during the on-site visit undertaken as part of the validation of the project, report on technical test on SEWA stoves (IRL No. 13 & 14), users' instruction (IRL No. 8), and the calculation of NRB submitted by an independent 3 rd party. Hence, the project

		activity complies with this Gold Standard criterion.
6	Stakeholder Consultation	<p>It is worth mentioning that projects applying for retroactive registration have to discuss the stakeholder consultation as part of the pre-feasibility assessment and conduct a complementary consultation based on the outcome of the pre-feasibility assessment. The DOE has received pre-feasibility assessment report (IRL No. 38) indicating that this was done and the second round of stakeholder consultation mentioned in the pre-feasibility assessment is what is reported in the PDD undergoing validation.</p> <p>The lists of participants from the meeting have been included in the PDD. The spectrum of stakeholders invited to attend the meetings can be considered appropriate. This was also confirmed by those who were interviewed during the on site visit. The stakeholders were invited by a number of methods as indicated in this report.</p>
7	Monitoring	The monitoring plan described in the PDD has been validated by the DOE. All the recommendations in the pre-feasibility report have been addressed by the project participant. No leakage has been considered for this project activity. The method and equations used in the calculation of emission reductions are according to the applied methodology.
8	Others	<p>The project is considered as a large scale project activity since the <i>ex-ante</i> amount of emission reductions is greater than the threshold of 60 000 tCO₂e.</p> <p>This is also indicated in the PDD and was considered by the DOE to be appropriate.</p>

5 COMMENTS BY PARTIES, STAKEHOLDERS AND NGOS

TÜV SÜD published the project documents on its website and invited comments from affected Parties, stakeholders, and non-governmental organisations during a 60 day period.

The following table presents all gathered key information:

webpage: http://www.netinform.net/KE/Wegweiser/Guide2.aspx?ID=5532&Ebene1_ID=49&Ebene2_ID=1722&mode=4	
Starting date of the global stakeholder consultation process: 2008-09-30	
Comment submitted by: None	Issues raised: -
Response by TÜV SÜD: -	

6 VALIDATION OPINION

TÜV SÜD has performed a validation of the following proposed GS project activity:

"Improved Household Charcoal Stoves in Mali."

Standard auditing techniques have been used for the validation of the project. Methodology-specific checklists and protocol for the project have been prepared to carry out the audit in order to present the outcome in a transparent and comprehensive manner.

The review of the project design documentation, subsequent follow-up interviews and further verification of references have provided TÜV SÜD with sufficient information to determine the fulfilment of stated criteria in the protocol. In our opinion, the project meets all relevant GS requirements. Therefore, TÜV SÜD will recommend the project for registration by the Gold Standard Technical Advisory Committee as a Gold Standard VER project activity.

An analysis as guided by the applied methodology demonstrates that the proposed project activity is not a likely baseline scenario. Emission reductions attributable to the project are additional to any that would have occurred in the absence of the project activity. Given that the project would be implemented as designed, it is likely to achieve the estimated amount of emission reductions of **721 117 tCO₂e** over the ten year crediting period, amounting to a calculated annual average of **72 112 tCO₂e** as specified within the final PDD version.

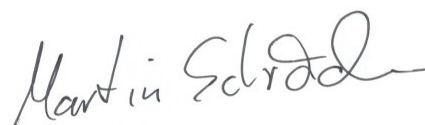
The validation is based on the information made available to us, as well as the engagement conditions detailed in this report. The validation has been performed following the VVM requirements. The sole purpose of this report is its use during the registration process as part of the GS VER project cycle. TÜV SÜD can therefore not be held liable by any party for decisions made, or not made, based on the validation opinion beyond that purpose.

Munich, 24-08-2009



Certification Body "Climate and Energy"
TÜV SÜD Industrie Service GmbH

Munich, 24-08-2009



Martin Schroeder
Assessment Team Leader

Validation of the GS VER Project:
Improved Household Charcoal Stoves in Mali

Annex 1: Validation Protocol

GS Validation Protocol

Project Title: **Improved Household Charcoal Stoves in Mali**

Date of Completion: 15-06-2009

Number of Pages: 69



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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A. General description of project activity				
A.1. Title of the project activity				
A.1.1. Does the used project title clearly enable to identify the unique GS project activity?	1	Yes. The project title is given as “ Improved Household Charcoal Stoves in Mali ”	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.2. Are there any indication concerning the revision number and the date of the revision?	1	Yes. The revision number is indicated as 2.1 and dated 19 th . August 2008.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.1.3. Is this consistent with the time line of the project's history?	1	Yes, this is consistent with the time line of the project's history. However, the project started on 27 th . November 2007.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2. Description of the project activity				
A.2.1. Is the description delivering a transparent overview of the project activities?	1	Yes, the project's description gives a transparent overview of the project activities	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.2.2. What proofs are available demonstrating that the project description is in compliance with the actual situation or planning?	1, 5 ,9	<p>According to the interview conducted on site the following can be concluded:</p> <p>Katene Kadji is producing and selling five categories of SEWA stoves at reduced prices, already considering future credits from the sales of VERs.</p> <p>The five categories are:</p> <ul style="list-style-type: none"> • Super Large • Large • Medium • Small • Tea <p>In the PDD it is stated that: “One category of stove will be marketed on a large-scale under the auspices of the project.” This was contradicted by the operator</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		<p>on site who claimed all stove categories are sold in the project activity.</p> <p><u>Clarification Request No. 1.</u></p> <p>PP should clarify which stove category is part of the project activity.</p>		
<p>A.2.3. Is the information provided by these proofs consistent with the information provided by the PDD?</p>	4	<p>According to the on-site interviews, users of SEWA stoves confirmed that they are able to save charcoal with the stoves compared to the less efficient ones, for example Malgache stoves. Most claimed that a bag of charcoal that used to last about 3 weeks to 30 days now last for about 45 days. They also confirmed that the stoves produces less smoke compared to the other stoves.</p> <p>But the audit team realized almost all the families interviewed still possessed and used the less efficient stoves in parallel with the SEWA stoves. In addition they also still use woodfuel and gas. Most of the families are large with about 5 to 40 members per family. Most of the families use woodfuel when preparing meal for the entire family used SEWA when preparing meal for a small family of about 5. Gas is quite often used very early by very few families in the morning to prepare breakfast for convenience.</p> <p>The audit team is of the following opinion:</p> <p>Considering the fact that the formal stoves are still in used in parallel with the new SEWA stoves and considering the fact that most of the families still use woodfuel and some gas, it appears that the project is not replacing completely the less efficient stoves. The project simply adds another stove on the market which is more expensive compared to the other stoves already on the market. The tendency is that some users still go for the less efficient stoves because of low price. They do not seem to be able</p>		☒

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
		<p>to the customers that the prices have been discounted in anticipation of financing from VERs. In the corresponding sales agreement the stove buyer confirms not to have any claims on carbon rights and that these are passed to Katene. The project owner or operator decided to take this risk with the expectation that the project would be registered and the local team stated during the onsite visit that he would close the business if the project is not registered for it would be impossible to operate as a business considering the financial situation of the end users.</p> <p><u>Corrective Action Request No.1.</u></p> <p>The PDD should be updated, addressing and describing the the issue of rebate or discount cards accordingly and in further detail. Furthermore, the approach on the sale of the stoves and how this assures a surplus sale in comparison to the baseline scenario is to be clearly described (compare also baseline section B).</p>	CAR1	
A.3. Project participants				
A.3.1. Is the form required for the indication of project participants correctly applied?	1	Yes. The form is correctly applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.2. Is the participation of the listed entities or Parties confirmed by each one of them?	1, 16, 21,	<p>A letter of no objection to the project from the Malian Ministry of the Environment has been received.</p> <p>Also, a letter of agreement between E+Co and Katene was signed on 27th. November 2007.</p> <p>Similarly, an ERPA+Amendment between E+Co and Katene was signed on 3rd. December 2007</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.3.3. Is all information on participants / Parties provided in consistency with details provided by further chapters of	1	Yes, the information on private entities in A.3 and in Annex 1 is consistent. However see A.3.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
the PDD (in particular annex 1)?				
A.4. Technical description of the project activity				
A.4.1. Location of the project activity				
A.4.1.1. Does the information provided on the location of the project activity allow for a clear identification of the site(s)?	1, 20	<p>The project is expected to be located in a single country – Mali in this case.</p> <p>Presently, the project is implemented in the capital Bamako where the kitchens are located and the fuel collection area is limited to 200 km around Bamako which provided 95% of the biomass. The project would be extended to other towns in future as stated in the PDD. See section B.4</p> <p>Clarification Request No. 4. PP should clarify the source for the assumption that 95 % of the biomass comes from that area and that the non-renewability was assessed for this area.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.1.2. How is it ensured and/or demonstrated, that the project proponents can implement the project at this site (ownership, licenses, contracts etc.)?	1, 12	<p>The letter of non objection from the Ministry of Environment indicates that Katene is allowed to implement the project in Mali. Katene also has an operating license.</p> <p>The audit team can conclude that the merchandising of stoves, which is the core project activity, does not require further permits.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.2. Size of the project activity (micro-, small- or large-scale)				
A.4.2.1. Is the size of the project specified correctly in the GS-PDD according to the threshold described in the GS Requirement manual?	1	Yes, the size of the project has been indicated in the PDD correctly as large scale (more than 60 000 tCO ₂ eq saved per year)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3. Category(ies) of project activity				

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CHECKLIST TOPIC / QUESTION	Ref.	COMMENTS	PDD in GSP	Final PDD
A.4.3.1. To which category(ies) does the project activity belong to? Is the project category correctly specified as either The Renewable Energy Supply category or The End-use Energy Efficiency Improvement?	1	The project belongs to the category The End-use Energy Efficiency Improvement though indicated in section A.4.3 of the PDD as 'Domestic Energy Efficiency'	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.3.2. Does the project activity belong to one of the categories listed in Annex C to the GS Toolkit?	1	Yes the project activities belong to the category listed as 'Improved distributed heating and cooking devices (e.g. biogas, cook-stoves), and distributed micro-scale electricity generation units (e.g. micro-hydro and PV for households)'	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.4. Brief Explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed GS project, including why the emission reduction would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances				
A.4.4.1. Is there a brief explanation of how the anthropogenic emissions of greenhouse gases by sources are to be reduced by the proposed GS project, including why the emission reduction would not occur in the absence of the proposed project, taking into account national and/or sectoral policies and circumstances?	1	<p>The PDD indicates that emission reductions would be achieved by disseminating more efficient charcoal stoves to end users thereby replacing less efficient ones. The fuel savings is converted to reduction in GHG emissions.</p> <p>While the general feasibility of the approach of reduced GHG emissions through the extended use of more efficient stoves was confirmed during the onsite visit, it is not yet fully clear whether this claimed reduction in emissions would not have occurred without the project.</p> <p>During the audit it was identified that the stoves were sold prior to project activity start.</p> <p>The PDD includes an overview on the historic sales record of the stove (including times prior to project begin - 27 Nov 2007). It is indicated that in 2005 a total of 21 thousand and in 2006 a total of 31 thousand stoves were sold.</p> <p>Thus, it is currently not sufficiently clear how the project activity</p>	CAR2	<input checked="" type="checkbox"/>

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		<p>differs from the (baseline) situation prior to project start.</p> <p>The local project team confirmed during the onsite visit that it is the project goal to increase the sale of the stoves thanks to the carbon financed discount in pricing.</p> <p>Apart from this, section A is to include a summary while the actual additionality analysis is to be presented in section B.</p> <p><u>Corrective Action Request No.2.</u></p> <p>Because stoves were sold prior to project start, the audit team requests that the historic sales are to be considered for baseline setting and / or additionality analysis. This should be well documented in the PDD and further details have to be included in section B.</p>		
A.4.5. Estimated amount of emission reductions over the chosen crediting period				
A.4.5.1. Is the form required for the indication of projected emission reductions correctly applied?	1	Yes, the form is correctly applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.5.2. Are the figures provided consistent with other data presented in the GS PDD?	1	Yes, the figures are consistent with those provided in other section of the PDD. However, see CAR2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6. Technology to be employed by the project activity				
A.4.6.1. Does the technical design of the project activity reflect current good practices?	1	<p>The project intent to replace low efficient stoves with more efficient ones.</p> <p>The high efficiency of the SEWA stove has been achieved by introducing a ceramic liner that increases combustion efficiency and retains heat.</p>	CAR3	<input checked="" type="checkbox"/>

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		<p>Technical drawings have been received and reviewed which underline that the technical approach is feasible.</p> <p>Development agencies have supported this type of technology in the past for the same purpose: increase in efficiency and reduced demand for fuel wood. This technology is considered to reflect good practice for stoves used in less income households in need of an increased fuel efficiency.</p> <p><u>Corrective Action Request No.3.</u></p> <p>Include a technical drawing of the stove(s) in the PDD as well a description of the technical features that allows the increase of the efficiency in fuel use.</p>		
A.4.6.2. Does the description of the technology to be applied provide sufficient and transparent input/ information to evaluate its impact on the greenhouse gas balance?	1	<p>Yes, savings in fuel consumption due to the increase in combustion efficiency would translate to reduction in emission of GHGs.</p> <p>Key assumptions such as design of the stove and lifetime (3 years) indicated in the PDD were found consistent with the field conditions and responses provided by interviewed users.</p> <p>However, the impact of the project may lead to leakage emissions out of the project's boundary. Compare leakage section below.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.3. Does the implementation of the project activity require any technology transfer from annex-I-countries to the host country(ies)?	1	No. The project depends on 'locally manufactured technology with optimized energy efficiency' leading to technological self-reliance.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.4. Is the technology implemented by the project activity environmentally safe?	1	Yes, the project can be considered to be environmentally safe.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.5. Is the information provided in compliance with actual situation or planning?	1	<p>The technology is in compliance with actual situation on the ground.</p> <p>At the moment there is no complete replacement in the house-</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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		holds of less efficient stoves by more efficient ones. See Request above.		
A.4.6.6. Does the project use state of the art technology and / or does the technology result in a significantly better performance than any commonly used technologies in the host country?	1	The technology is considered appropriate and good practice for low income household for it leads to fuel savings and emission reductions as a result.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.7. Is the project technology likely to be substituted by other or more efficient technologies within the project period?	1	It is highly unlikely that this technology would be substituted in the near future by a more efficient one. More than 90 % of Malians have been using charcoal for years and this would not change overnight considering the poor economic situation of Mali. Mali is among the Ten Top Poorest Nations in the world.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.8. Does the project require extensive initial training and maintenance efforts in order to be carried out as scheduled during the project period?	1	The project would require some initial training for new employees. On site visit revealed that there is enough infrastructure for training and to absorb new employment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.9. Is information available on the demand and requirements for training and maintenance?		Onsite interview with project operator revealed that Katene is part of a network of stove manufacturers. One member of the network manufactures the metal components for Katene and her competitors. Those involved in SEWA stoves are employed and trained by the operator. Katene Kadji is also the sole manufacturer and supplier of ceramic linings.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.6.10. Is a schedule available for the implementation of the project and are there any risks for delays?	IRL No.1	The project is already in operation and there is therefore no risk of delay.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
A.4.7. Public funding of the project activity				
A.4.7.1. Is the information provided on public	1	Section A.2 describes the relevance of support by development	CAR4	<input checked="" type="checkbox"/>

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funding provided in compliance with the actual situation or planning as indicated by the project participants?		aid to the project. <u>Corrective Action Request No.4.</u> Document in the PDD the role and use of development aid to the actual project implementation.		
A.4.7.2. Is all information provided consistent with the details given in remaining chapters of the PDD (in particular annex 2)?		See A.4.7.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B. Application of a baseline and monitoring methodology				
<i>B.1. Title and reference of the approved baseline and monitoring methodology applied to the project activity</i>				
B.1.1. Justification of the choice of the methodology and why it is applicable to the project activity				
B.1.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated?	1, 2	Yes. The methodology is "Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes" and its version is 01 <u>Corrective Action Request No.5.</u> Indicate the version number of the methodology in section B1. And D1.	CAR5	<input checked="" type="checkbox"/>
B.1.1.2. Is the applied version the most recent one and / or is this version still applicable?	1, 2	Yes. The recent version of the methodology is being applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.1.1.3. Is the applied methodology considered the most appropriate one?	1, 2	Yes. The methodology is considered most appropriate for this project	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.1.1.4. Is it explained how the procedures provided in the methodology are applied by the proposed project activity?		Yes. The PDD discusses the applicability of the methodology to the project activities. Relevant procedures such as the kitchen test have been applied. See below for details.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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B.1.1.5. Is every selection of options offered by the methodology correctly justified and is this justification in line with the situation verified on-site?	1, 13	<p>No. Every option offered by the methodology is not clearly and transparently justified in the PDD. During the onsite visit technical descriptions of the stove have been provided which underline that the threshold of 50 KW not reached.</p> <p><u>Corrective Action Request No.6.</u> PP should consider every criterion in turn in justifying applicability of the methodology to the project activity. This should be included in the PDD. The first applicability criterion does not seem to be complied with for the audit team did not see any 100 % replacement of high emission cook-stoves and regimes by low emission stoves but rather both high emission regimes and improved stoves were being used in parallel.</p>	CAR6	<input checked="" type="checkbox"/>								
Integrate the required amount of sub-checklists on the applicability criteria as given by the applied methodology and comment on at least every line answered with "No";												
B.1.1.6. Criterion 1: Low-emission cook-stoves and regimes replace relatively high-emission baseline scenarios		<table border="1" data-bbox="1010 1026 1771 1169"> <thead> <tr> <th>Applicability checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Criterion discussed in the PDD?</td> <td>YES</td> </tr> <tr> <td>Compliance provable?</td> <td>YES</td> </tr> <tr> <td>Compliance verified?</td> <td>NO</td> </tr> </tbody> </table> <p>See B.1.1.5 Replacement aspect remains to be clarified. See CAR6 above</p>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	YES	Compliance provable?	YES	Compliance verified?	NO	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No											
Criterion discussed in the PDD?	YES											
Compliance provable?	YES											
Compliance verified?	NO											

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<p>B.1.1.7. Criterion 2: The project boundaries can be clearly identified, and the stoves counted in the project are not included in another voluntary market or CDM project (i.e. no double-counting takes place)</p>		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>YES</td> </tr> <tr> <td>Compliance provable?</td> <td>YES</td> </tr> <tr> <td>Compliance verified?</td> <td>YES</td> </tr> </table> <p>The audit team has not received information that there is another similar project in Mali, which would pose a risk of double counting. The Internet in general, the GS database and the CDM database was checked on this. The existence of other potential VER projects in Mali cannot be fully excluded as VER projects do not count with a central registry.</p>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	YES	Compliance provable?	YES	Compliance verified?	YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No											
Criterion discussed in the PDD?	YES											
Compliance provable?	YES											
Compliance verified?	YES											
<p>B.1.1.8. Criterion 3: The project is located in a single country</p>		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>YES</td> </tr> <tr> <td>Compliance provable?</td> <td>YES</td> </tr> <tr> <td>Compliance verified?</td> <td>YES</td> </tr> </table>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	YES	Compliance provable?	YES	Compliance verified?	YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No											
Criterion discussed in the PDD?	YES											
Compliance provable?	YES											
Compliance verified?	YES											
<p>B.1.1.9. Criterion 4: The improved cook-stoves do not number more than ten per kitchen and each have continuous useful energy outputs of less than 50kW.</p>		<table border="1"> <tr> <td>Applicability checklist</td> <td>Yes / No</td> </tr> <tr> <td>Criterion discussed in the PDD?</td> <td>YES</td> </tr> <tr> <td>Compliance provable?</td> <td>YES</td> </tr> <tr> <td>Compliance verified?</td> <td>YES</td> </tr> </table> <p>PP: Impossible to have more than 10 stoves per kitchen. Stoves specification provided</p>	Applicability checklist	Yes / No	Criterion discussed in the PDD?	YES	Compliance provable?	YES	Compliance verified?	YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Applicability checklist	Yes / No											
Criterion discussed in the PDD?	YES											
Compliance provable?	YES											
Compliance verified?	YES											
B.2. Description of how the methodology is applied in the context of the project activity:												
B.2.1. Baseline: Determine customer groups or project "clusters"												

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<p>B.2.1.1. Has a pilot Sales Record been correctly established according to the approved methodology?</p>		<p>Sales Records are kept by the vendors of the stoves. The company Katene, which produces the stoves, is using this system of vendors as part of its merchandising system. Sales' records on paper maintained by vendors. In the PDD it is mentioned that "The customer database is populated with mobile telephone numbers and/or addresses and land-line telephone numbers, with the aim to achieve a minimum of 400 such in each major cluster". For the pilot sales record, corresponding data was used to identify the households to be visited in the context of the kitchen test for the initial baseline assessment. The approach to quantify baseline emissions based on recent stoves sales (Pilot sales record) is in line with the methodology. A paired study was used, comparing fuel consumption before and after the introduction of the stove. For the Kitchen Test based on the pilot sales record, it was clarified that the project team chose another household if the initial choice could not be located. The audit team contacted a selection of stove owners, part of the initial sales record (compare monitoring section on Usage of stoves)</p> <p><u>Clarification Request No. 5.</u></p> <p>Clarify and document in the PDD how it was assured that the households from the pilot sales record used for the Kitchen Test were not already operating the SEWA stove prior to the date of the baseline assessment.</p> <p><u>Clarification Request No. 6.</u></p> <p>It is indicated that the Kitchen Test was based on 149 respondents. Clarify in the PDD the actual process of selection how these candidates were selected (random clustered selection) and</p>	<p>CR5,</p> <p>CR6</p>	<p style="text-align: center;">☒</p>

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		<p>how it was preceded if a stove owner was not identifiable / locatable, and if this might have impacted the results.</p> <p>b <u>Corrective Action Request No.7.</u> The exact step wise approach (enumeration of steps, including sub-steps) as defined per methodology should be followed in the PDD.</p>	CAR7	
<p>B.2.1.2. Has a provisional assessment of fuel types, fuel mixed and kitchen regime been carried out according to the approved methodology?</p>		<p>The identified cluster of customer groups “improved residential charcoal stoves” is adequate for the project conditions.</p> <p>For the only cluster identified, a homogenous use of fuel-type and fuel-mixing profile, albeit with variability in the volume of charcoal consumption due to differences in stove size and daily cooking.</p> <p>Among the households 12 visited by the audit team it can be concluded that almost all of the household use charcoal, wood fuel and LPG to a limited extent (mostly to prepare breakfast and for quick boil). Only the poorest among the poor cannot afford at least some limited quantity of LPG and these are relatively few in number.</p> <p>The audit team focussed on the confirmation that the chosen sampling approach is adequate.</p> <p>The audit team considered the initial choice of 146 kitchens as traceable and adequate and therefore focussed in its choice of site visits on these households.</p> <p>A sample of 12 households (part of the initial Kitchen Test) was taken and visited by the audit team. In this context the operation of the new stove and the approach of the Kitchen Survey were confirmed. Local inhabitants confirmed the participation in the survey and the approximate values considered in the survey.</p> <p>In essence, no indications were found suggesting that the baseline assessments and the chosen sampling approach did not fol-</p>	☒	☒

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		low good practice.		
B.2.1.3. Has Renewability status of wood fuels been analyzed according to the approved methodology?	1	<p>Yes. The renewability status of wood fuels has been analyzed by an independent 3rd party. Fieldwork was conducted by Berkeley Air Monitoring Group in March, 2008 according to the approved methodology making use of FAO reported data.</p> <p>It was analyzed that for the city of Bamako the relevant supply area is the forest resources within a radius of 200 km from 64 communes.</p> <p>The weighted average of non-renewables woodfuels from different communes and their different supply areas were used. This is considered adequate.</p> <p><u>Clarification Request No. 7.</u> Clarify the approach on the renewability status estimates and the chosen supply areas if in the future the actual target areas is going to be different (including i.e. other cities apart from Bamako)</p> <p><u>Clarification Request No. 8.</u> Clarify if the stere volume of 0,43 m3 is in reference of solid or stack cubic meter.</p> <p><u>Clarification Request No. 9.</u> In regard to harvest data: Provide the actual detailed reference (pages) indicating the input data used for the calculations of None Renewable Fraction per commune group.</p>	<p>CR7</p> <p>CR8</p> <p>CR9</p>	☒
B.2.1.4. Has the pilot Sales Record been divided into customers groups or class according to the approved methodology?	1	One customer cluster has been defined based on the full results of the Baseline Monitoring Report for both the Kitchen Surveys and Kitchen Performance Tests. This is considered adequate in light of homogenous structures of the households.	☒	☒

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B.2.1.5. Has a qualitative Kitchen Survey (KS) been conducted according to the approved methodology?	1, 22	According to the interview on site two teams carried out two surveys. Lists containing families were handed out and during the survey some families were included and others were not available (see comment above). SEWA stoves were given to families without any charges and their charcoal consumption was monitored for four days, making sure that no family had any celebration. The outcome was compiled in a document – “Carbon Monitoring Report on the Sewa Improved Charcoal Stoves of Katene Kadji, Mali” – by Berkeley Air Monitoring Group. The KS was conducted according to the approved methodology.	☒	☒
B.2.2. Calculation of Baseline Emissions				
B.2.2.1. Has an estimate been made of expected variation and improvement in emission reduction according to the approved methodology?	1	Yes. The methodology is based on knowledge of actual fuel consumption levels in kitchens, requiring field surveys (or “Kitchen Tests”) as well as on knowledge of fuel savings and emission reductions derived from lab tests.	☒	☒
B.2.2.2. Are the units of emission reductions or fuel consumption correctly specified according to the approved methodology?	1, 22	Yes. The units of emission reductions or fuel consumption are correctly specified according to the approved methodology. No further units are introduced (stove year), Main input for calculations is the fuel used per day and household/kitchen.	☒	☒
B.2.2.3. Has quantitative Kitchen Performance Test (KPT) or measurements been carried out according to the approved methodology?	1	Yes. E+Carbon hired a third party monitoring firm, Berkeley Air Monitoring Group, to conduct a Kitchen Survey (KS). Participants in the KS were selected through clustered random sampling from the Katene Sales Record, which is currently maintained by Katene staff. The baseline assessments will need to be repeated in the course of the project (compare below, evolving baseline).	☒	☒
B.2.2.4. Is the Baseline correctly calculated or estimated according to the approved methodology?	1	Yes. An “evolving baseline” will be used through the life of the project to take into account the fact that the baseline scenario will likely change over time as fuel use patterns change and the percentage of non-renewable biomass fluctuates.	☒	☒

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		This will require that baseline estimates are revisited at verification.		
B.2.3. Data and parameters that are available at validation				
B.2.3.1. Is the list of parameters presented in the PDD considered to be complete with regard to the requirements of the applied methodology?	1	Yes. The list of default parameters presented is considered to be complete.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Integrate the required amount of sub-checklists for monitoring parameter and comment on any line answered with "No"				
B.2.3.2. Parameter Title: EFbl.bio,co2 CO2 emission factor arising from use of wood-fuel in baseline scenario	1	<u>Corrective Action Request No.8.</u> A table similar to the one used in the Methodology (the layout used in section 8 of the methodology) should be used in describing both default and monitored parameters. Actual values applied and their sources and comments should be indicated.	CAR8	<input checked="" type="checkbox"/>
B.2.3.3. Parameter Title: EFpj.bio,co2 CO2 emission factor arising from use of wood-fuel in project scenario	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.4. Parameter Title: EFaf,co2 CO2 emission factor arising from use of alternative fuel	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.5. Parameter Title: EFbl.bio,non-co2 Non-CO2 emission factor arising from use of wood-fuel in baseline scenario	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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B.2.3.6. Parameter Title: EFpj, bio, non-co2 CO2 emission factor arising from use of wood-fuel in project scenario	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.7. Parameter Title: EFaf, non-co2 Non-CO2 emission factor arising from use of alternative fuel	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.8. Parameter Title: EFbio, prod, co2 CO2 emission factor arising from production of wood-fuel	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.9. Parameter Title: EFaf, prod, co2 Non-CO2 emission factor arising from production of alternative fuel	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.10. Parameter Title: EF-bio, prod, non-co2 Non-CO2 emission factor arising from production of wood-fuel	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.3.11. Parameter Title: EFaf, prod, non-co2 Non-CO2 emission factor arising from production of alternative fuel	1	CAR9	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.4. Ex-ante calculation of emission reductions				
B.2.4.1. Is the projection based on the same procedures as used for future monitor-	1	Yes. The projection is based on the same procedures as used for future monitoring	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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ing?				
B.2.4.2. Are the GHG calculations documented in a complete and transparent manner?	1	Yes. The GHG calculations are documented in a complete and transparent manner in the PDD. However, see B.3.2 <u>Clarification Request No. 10.</u> Provide excel spreadsheets for the relevant emission reduction calculations.	CR10	<input checked="" type="checkbox"/>
B.2.4.3. Is the data provided in this section consistent with data as presented in other chapters of the PDD?	1	Yes. The data provided in this section are consistent with data as presented in other chapters of the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.5. Summary of the ex-ante estimation of emission reductions				
B.2.5.1. Will the project result in fewer GHG emissions than the baseline scenario?	1	Based on the conservative approach as claimed by the PDD and indicated in the passport, the project is expected to result in fewer GHG emissions than the baseline scenario. The project can result to a significant reduction in GHG emissions than the baseline only if the end users were to abandon completely the less efficient stoves for the improved stoves (See CR2). The role of sales of stoves and additionality of the activity remains to be clarified (see CR3).	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.5.2. Is the form/table required for the indication of projected emission reductions correctly applied?	1	Yes. The form/table required for the indication of projected emission reductions is correctly applied.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.5.3. Is the projection in line with the envisioned time schedule for the project's implementation and the indicated crediting period?	1	Yes. The projection is in line with the envisioned time schedule for the project's implementation and the indicated crediting period	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.2.5.4. Is the data provided in this section in consistency with data as presented in	1	Yes. The data provided in this section is consistent with data pre-	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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other chapters of the PDD?		mented in other chapters of the PDD.		
B.3. Description of how the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the registered VER project activity (assessment and demonstration of additionality):				
Integrate questions concerning the determination of the additionality as provided by the methodology applied or insert the module provided when applying the “additionality tool”;				
B.3.1. In case the project activity started before the validation activity, how is it demonstrated that the VER was seriously taken into account in the decision to start the project?	1	Clarification Request No. 11. PP should clarify and provide evidences that income from the sales of VERs was strongly considered in the decision to start the project.	CR11	<input checked="" type="checkbox"/>
B.3.2. Are alternative scenarios defined that provide outputs or services comparable with the proposed GS project activity?	1, 19	Corrective Action Request No.9. The alternatives to the project scenario need to be clearly demonstrated according to the additionality tool requirements (including i.e. the project activity without carbon finance).	CAR9	<input checked="" type="checkbox"/>
B.3.3. Can the list of alternatives be considered to be complete, why? Is the project activity scenario without being registered as GS VER project included?	1	See CAR9 above	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.4. In case several different facilities, technologies, outputs or services are present in the project, are separately alternative scenarios for each of them included? Have realistic combinations been considered as project scenario?	1	See CAR9 above	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.5. Describe why the alternative scenarios are credible and realistic (technology, practices, services, status of implementation)?	1	See CAR9 above	<input type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.6. Do the alternative scenarios comply	1	The alternatives are in line with legal requirements.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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with mandatory laws and regulations?				
B.3.7. If a scenario does not comply with the mandatory laws and regulations, is it clearly demonstrated that the law and/or regulation is systematically not enforced in the country?	1	Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.8. In case of applying step 2 / investment analysis of the additionality tool: Is the analysis method identified appropriately (step 2a)?	1	Yes. The analysis method has been identified correctly. However, see A.4.4.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.9. In case of Option I (simple cost analysis): Is it demonstrated that the activity produces no economic benefits other than carbon income	1, 19	Not applicable.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.10. In case of Option II (investment comparison analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1	<p><u>Corrective Action Request No.10.</u></p> <p>The requirements of the financial analysis the requirements as per additionality tool (investment comparison or benchmark) remain to be demonstrated in the PDD.</p> <p>Note: In the document 'Katene Financial June 2007'. The calculation should be transparent. The cash flows should include investment (expenditure) as well as income with and without carbon credits.</p> <p>PP should perform this analysis to prove the importance of carbon credits to the project.. All excel calculation files should be submitted to the DOE for evaluation.</p> <p>In regard to financing, it was clarified during the onsite visit, that the only continuous and still available grants are those of AMADER in the form of training of personnel and transport of stoves.</p> <p><u>Corrective Action Request No.11.</u></p>	CAR10	<input checked="" type="checkbox"/>
			CAR11	

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		<p>PP should clarify with evidences how the emission reductions would not have taken place without the project.</p> <p>The following should be reported in the PDD:</p> <ul style="list-style-type: none"> ➤ The impact of financial grant from AMADER ➤ The impact of the grant from GTZ on cost of investment ➤ The impact of Enterprise Works ➤ The sale price per stove <p>All excel emission calculations worksheets and investment analysis worksheets should be sent to the DOE for cross-checking</p>		
B.3.11. In case of Option III (benchmark analysis): Is the most suitable financial indicator clearly identified (IRR, NPV, cost benefit ratio, or (levelized) unit cost)?	1	See B.3.10	☒	☒
B.3.12. In case of Option II or Option III: Is the calculation of financial figures for this indicator correctly done for all alternatives and the project activity?	1	See B.3.10	☒	☒
B.3.13. In case of Option II or Option III: Is the analysis presented in a transparent manner including publicly available proofs for the utilized data?	1	See B.3.10	☒	☒
B.3.14. In case of applying step 3 (barrier analysis) of the additionality tool: Is a complete list of barriers developed that prevent the different alternatives to occur?	1	Cost barrier, Knowledge barrier, prevailing practice and Barriers such as institutional, limited information, managerial resources, organizational capacity, financial resources, capacity to absorb new technologies have been discussed in the PDD	☒	☒
B.3.15. In case of applying step 3 (barrier analysis): Is transparent and documented evidence provided on the existence and sig-	1	Barrier linked to financial resources would require some evidence. <u>Corrective Action Request No.12.</u>		☒

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nificance of these barriers?		The requirements as per additionality tool in regards to barrier analysis need to be complied with. Barriers need to be discussed for each alternative.	CAR12	
B.3.16. In case of applying step 3 (barrier analysis): Is it transparently shown that the execution of at least one of the alternatives is not prevented by the identified barriers?	1	Yes. "There is no legislation in Mali that requires the use of efficient stoves, and none is expected to be introduced during the project period."	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.17. Have other activities in the host country / region similar to the project activity been identified and are these activities appropriately analyzed by the PDD (step 4a)?	1	The PDD seems to indicate that there are other improved stoves manufacturers in Mali as well. But the impact of these other stoves on the proposed project activities has not been fully addressed in the PDD <u>Corrective Action Request No.13.</u> PP should fully and transparently analyse and document the effect of other improved cook stoves disseminated within the same project boundary.	CAR13	<input checked="" type="checkbox"/>
B.3.18. If similar activities are occurring: Is it demonstrated that in spite of these similarities the project activity would not be implemented without the VER component (step 4b)?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
B.3.19. Is it appropriately explained how the approval of the project activity will help to overcome the economic and financial hurdles or other identified barriers (step 5)?		<u>Corrective Action Request No.14.</u> Evidence for each barrier should be documented in the PDD and provided to the DOE. The prohibitive character of the barriers needs to be underlined by these references. Among others, it needs to be demonstrated how the approval of the project would help overcome the financial hurdles should be transparently documented in the PDD.	CAR14	<input checked="" type="checkbox"/>

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B.4. Description of how the definition of the project boundary related to the baseline methodology selected is applied to the project activity:														
B.4.1. Do the spatial and technological boundaries as verified on-site comply with the discussion provided by / indication included to the PDD?	1	<p>Project boundary: The project is located in a single country – Mali. In section B.4 the project boundary is defined as the kitchens used by the project population (Katene SEWA stove purchasers).</p> <p>Fuel Collecting area: The project proponents have determined the reachable fuel collection area to be the 95% charcoal basin for Bamako. The area is subdivided into different supply areas.</p> <p>In the PDD it is stated that the activity would be extended in future to include other urban areas in Mali</p> <p><u>Corrective Action Request No.15.</u> The target areas as per methodology definitions shall be clearly defined in the PDD. (It is indicated that the target area is going to be adapted in line with future baseline assessments. Target areas shall be defined)</p>	CAR15	☒										
B.4.2. Description of the sources and gases included in the project boundary														
Integrate the required amount of sub-checklists for sources and gases as given by the methodology applied and comment on at least every line answered with “No”														
B.4.2.1. Source: Cooking Description of Source Gas(es): CO2 Type: Baseline Emissions and Project Emissions	1	<table border="1" data-bbox="1010 1273 1771 1445"> <thead> <tr> <th data-bbox="1010 1273 1619 1310">Boundary checklist</th> <th data-bbox="1619 1273 1771 1310">Yes / No</th> </tr> </thead> <tbody> <tr> <td data-bbox="1010 1310 1619 1347">Source and gas(es) discussed in the PDD?</td> <td data-bbox="1619 1310 1771 1347">YES</td> </tr> <tr> <td data-bbox="1010 1347 1619 1383">Inclusion / exclusion justified?</td> <td data-bbox="1619 1347 1771 1383">YES</td> </tr> <tr> <td data-bbox="1010 1383 1619 1420">Explanation / Justification sufficient?</td> <td data-bbox="1619 1383 1771 1420">YES</td> </tr> <tr> <td data-bbox="1010 1420 1619 1445">Consistency with monitoring plan?</td> <td data-bbox="1619 1420 1771 1445">YES</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	YES	Inclusion / exclusion justified?	YES	Explanation / Justification sufficient?	YES	Consistency with monitoring plan?	YES		☒
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	YES													
Inclusion / exclusion justified?	YES													
Explanation / Justification sufficient?	YES													
Consistency with monitoring plan?	YES													

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		<p><u>Corrective Action Request No.16.</u></p> <p>Table on emissions sources as per methodology section II.1 to be included in the PDD:</p>	CAR16											
<p>B.4.2.2. Source: Cooking Description of Source Gas(es): CH4 Type: Baseline Emissions and Project Emissions</p>	1	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed in the PDD?</td> <td>YES</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>YES</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>YES</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>YES</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	YES	Inclusion / exclusion justified?	YES	Explanation / Justification sufficient?	YES	Consistency with monitoring plan?	YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	YES													
Inclusion / exclusion justified?	YES													
Explanation / Justification sufficient?	YES													
Consistency with monitoring plan?	YES													
<p>B.4.3. Source: Cooking Description of Source Gas(es): N2O Type: Baseline Emissions and Project Emissions</p>	1	<table border="1"> <thead> <tr> <th>Boundary checklist</th> <th>Yes / No</th> </tr> </thead> <tbody> <tr> <td>Source and gas(es) discussed in the PDD?</td> <td>YES</td> </tr> <tr> <td>Inclusion / exclusion justified?</td> <td>YES</td> </tr> <tr> <td>Explanation / Justification sufficient?</td> <td>YES</td> </tr> <tr> <td>Consistency with monitoring plan?</td> <td>YES</td> </tr> </tbody> </table>	Boundary checklist	Yes / No	Source and gas(es) discussed in the PDD?	YES	Inclusion / exclusion justified?	YES	Explanation / Justification sufficient?	YES	Consistency with monitoring plan?	YES	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Boundary checklist	Yes / No													
Source and gas(es) discussed in the PDD?	YES													
Inclusion / exclusion justified?	YES													
Explanation / Justification sufficient?	YES													
Consistency with monitoring plan?	YES													
<p>B.5. Details of baseline information, including the date of completion of the baseline study and the name of person (s)/ entity (ies) determining the baseline:</p>														
<p>B.5.1. Is the baseline determined according to the approved baseline and monitoring methodology?</p>	1	Yes. The baseline is determined according to the approved baseline and monitoring methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										
<p>B.5.2. Is there any indication of a date when the baseline was determined?</p>	1	Yes. The baseline study was conducted by Berkeley Air Monitoring Group in May 2008	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>										

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C. Duration of the project activity / crediting period				
C.1. Duration of the project activity				
C.1.1. Are the project's starting date and operational lifetime clearly defined and reasonable?	1	Yes. The project starting date has been given as 27/11/2007 and its lifetime as 10 years 0 months. These are considered reasonable. Clarification Request No. 12. Clarify and justify the choice of the starting date. Starting date shall be start of implementation of the project activity.	CR12	<input checked="" type="checkbox"/>
C.2. Choice of the crediting period and related information				
C.2.1. Is the assumed crediting time clearly defined and reasonable (renewable crediting period of max 7 years with potential for 2 renewals or fixed crediting period of max. 10 years)?	1	Yes. The crediting period is indicated as fixed for 10 years	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D. Application of the monitoring methodology and description of the monitoring plan				
D.1. Name and reference of approved monitoring methodology applied to the project activity:				
D.1.1. Are reference number, version number, and title of the baseline and monitoring methodology clearly indicated in the PDD?	1	The title of the methodology is given in the PDD as "Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes"	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2. Justification of the choice of the methodology and why it is applicable to the project activity:				
D.2.1. OPTION 1: Monitoring of the emissions in the project scenario and the baseline scenario				
D.2.1.1. Data to be collected in order to monitor emissions from the project activity, and how this data will be archived				
D.2.1.1.1. Are the monitoring tasks undertaken continuously correctly described?				

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1. Maintenance of a Total Sales Record.		The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Maintenance of a Detailed Customer Database, and Monitoring KS's		The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. Continuous updating of the Project Database		The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. Calculation of emission reductions		The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Are the following monitoring tasks undertaken periodically correctly described?				
1, The NRB fraction should be re-assessed, not less frequently than bi-annually.		The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2. Leakage estimates identified in the PDD should be surveyed, and an investigation made into the possibility of new leakage effects, not less frequently than bi-annually.	1	The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3. A Usage Survey should be undertaken not less frequently than bi-annually (every two years) for sales made in the first year of the project,	1	The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4. An "Aging-Stove KT" should be undertaken not less frequently than bi-annually for sales made in the first year,.	1	The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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5. Baseline Monitoring KT. If the KS reveals that baseline parameters of the type measured by KTs may have changed significantly, or if the KS is not adequate to update evolving baseline conditions, and no New-Stove KT is taking place to perform this function, then a Baseline Monitoring KT should be carried out not less frequently than bi-annually amongst new customers to update baseline parameters.	1	The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6. A "New-Stove KT" to measure fuel consumption should take place for new models and designs when they are launched, and will be repeated not less frequently than bi-annually.	1	The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7. The wider social and economic impact of the project should be investigated biannually and an assessment made of its contribution, positive or otherwise, to sustainable development in the area.	1	The corresponding monitoring requirements are defined in section D (prior to D.1) of the PDD and they are in line with the methodology.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Are the following parameters included to the monitoring plan (an evolving baseline option)	1	<u>Corrective Action Request No.17.</u> Consistency of the list of parameters with the methodology shall be assured. Assure for consistent use of parameter titles as per methodology definition.	CAR17	<input checked="" type="checkbox"/>
D.2.1.1.2. Parameter Title: Xnrb,bl,y Non-renewability status of woody biomass fuel in year y in baseline scenario	1	<u>Corrective Action Request No.18.</u> For measured data QA/QC procedure should be provided	CAR18	<input checked="" type="checkbox"/>

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D.2.1.1.3. Parameter Title: Xnrb,pj,y Non-renewability status of woody biomass fuel in year y in project scenario	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.4. Parameter Title: Xre,bl,y Woody biomass combustion avoided due to renewable energy form in year y in baseline	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.5. Parameter Title: Xre,bl,y Woody biomass combustion avoided due to renewable energy form in year y in project	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.6. Parameter Title: Xaf,bl,y Woody biomass combustion avoided due to alternative fuels in year y in baseline	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.7. Parameter Title: Xaf,pj,y Woody biomass combustion avoided due to alternative fuels in year y in project	1	CAR18		<input checked="" type="checkbox"/>
D.2.1.1.8. Parameter Title: Leakage Potential GHG emissions outside project boundary caused by project activity	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>

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D.2.1.1.9. Parameter Title: Bbl,y Mass of woody biomass combusted in the baseline in year y	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.10.Parameter Title: AFbl,i,y The mass of alternative fuel i combusted in the baseline in year y	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.11.Parameter Title: Bpj,,y Mass of woody biomass combusted in the project in year y	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.12.Parameter Title: AFpj,i,y Mass of alternative fuel i combusted in the project in year y	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.13.Parameter Title: Usage in year y Percentage of stoves of age x remaining in use in year y	1	<p>In regard to the audit process applied during the validation, the audit team took a random selection from the already available sales lists (since project start) and tried to contact a selection of the actual users of the stoves.</p> <p>In regard to this, the audit team did not find a fully reliable system of data collection and processing in regard to sales records (which is elaborated by the vendors of the stoves rather than the producing firm/participant). Among others due to the local structure of reduced reliability of addresses in a developing country as well as potentially changing telephone details the address details were not leading to the actual operator of the stove in several in all</p> <p><u>Clarification Request No. 13.</u></p> <p>The sales record found onsite was partially incomplete. The procedure applied and capable to generate reliable a database (Detailed Customer Database) over time (as basis for monitoring)</p>	CR13	<input checked="" type="checkbox"/>

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		shall be further defined and provided.		
D.2.1.1.14. Parameter Title: Age Adjustment to values of B_{pj,,y} and AF_{pj,i,y} for stoves of age x	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.1.15. Parameter Title: New Stove Adjustment to values of B_{pj,,y} and AF_{pj,i,y} for new stove models	1	CAR18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>D.2.1.2. Data to be collected in order to monitor project performance on the most sensitive sustainable development indicators</i>				
Integrate the required amount of sub-checklists for monitoring sustainability parameters and comment on any line answered with "No"				
D.2.1.2.1. Air quality	1	A.2. of the PDD includes the Sustainability assessment as defined by Goldstandard version 01. The provided information is considered credible and in line with the chosen evaluation approach (matrix). Air quality, Livelihood of the poor, Employment is foreseen for monitoring in the PDD. It is indicated that a corresponding survey will be carried out.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.2. Livelihood of the Poor	1	Air quality, Livelihood of the poor, Employment is foreseen for monitoring in the PDD. It is indicated that a corresponding survey will be carried out.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.3. Employment	1	Air quality, Livelihood of the poor, Employment is foreseen for monitoring in the PDD. It is indicated that a corresponding survey will be carried out.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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D.2.1.2.4. Water quality and quantity	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.5. Soil condition	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.6. Other pollutants	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.7. Biodiversity	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.8. Quality of employment	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.9. Access to affordable and clean energy services	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.10. Human and institutional capacity	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.11. Balance of payments and investment	1	Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.2.12. Technology transfer and technological self-reliance		Not foreseen for monitoring. No negative impacts.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>D.2.1.3. Description of formulae used to estimate baseline and project emissions (for each gas, source, formulae/algorithm, emissions units of CO2 equ.)</i>				
D.2.1.3.1. Are the formulae used to estimate baseline emissions consistent with those outlined in the description of the baseline methodology?	1	No information has been provided in this section. Reference to Annex 2 of the PDD is given. Annex 2 provides overview tables and results – for ex-ante estimates. <u>Corrective Action Request No.19.</u> PP should complete this section 2.1.3 of the PDD as required including an indication on the formulae to be applied for expost calculations.	CAR19	
D.2.1.3.2. Are the formulae used to esti-	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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mate project emissions consistent with those outlined in the description of the baseline methodology?				
D.2.1.3.3. Are the gas sources correctly identified?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.3.4. Is the unit of CO2 eq correctly applied to each emission source?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.1.3.5. Is the collection and archiving of relevant data necessary for the calculation of baseline and project emissions done according to good practice?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>D.2.1.4. Relevant data necessary for determining the baseline of anthropogenic emissions by sources of GHGs within the project boundary and how such data will be collected and archived</i>				
D.2.1.4.1. Does the table used to present the data respect the prescribed format?	1	Yes. The table used to present the data respect the prescribed format. See above. Relevant parameters are to be incorporated based on Request indicated in section 2.1.1.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<i>D.2.2. OPTION 2: Direct monitoring of emission reductions from the project activity (values should be consistent with those in section E)</i>				
<i>D.2.2.1. Data to be collected in order to monitor emissions from the project activity and how these date would be archived</i>				
D.2.2.1.1. Is the collection and archiving of relevant data necessary for the calculation of project emissions done according to good practice?	1	<u>Corrective Action Request No.20.</u> PDD template altered. PP should complete the section 2.2 and sub-items of PDD.	CAR21	<input checked="" type="checkbox"/>
D.2.2.1.2. Is the list of parameters complete and accurate?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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D.2.2.2. Description of formulae used to estimate and project emissions (for each gas, source, formulae/algorithm, emissions units of CO2 equ.)				
D.2.2.2.1. Are the formulae used to estimate project emissions consistent with those outlined in the description of the baseline methodology?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2.2.2. Are the gas sources correctly identified?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2.2.3. Is the unit of CO2 eq correctly applied to each emission source?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.2.2.4. Is the collection and archiving of relevant data necessary for the calculation of project emissions done according to good practice?	1	See above	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.3. Treatment of leakage in the monitoring plan				
D.2.3.1. Is the list of parameters to be collected in order to monitor leakage effects of the project complete and accurate?	IRL No.	<p>Yes, the list of parameters to be collected in order to monitor leakage effects of the project can be considered complete and accurate</p> <p>The monitored leakage parameters are:</p> <ul style="list-style-type: none"> • Fuel Switching • Further defined net leakage factors • Undefined net leakage factors. <p><u>Clarification Request No. 14.</u></p> <p>Clarify the chosen leakage parameters. Consistency with the leakage sources indentified to be relevant (section B) shall be assured.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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D.2.3.2. Are the formulae used to estimate project leakage emissions consistent with those outlined in the description of the baseline methodology	1	Yes, the formulae used to estimate project leakage emissions are consistent with those outlined in the description of the baseline methodology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.3.3. Are the sources of leakages correctly identified?	1	Yes, the gas sources of leakages are correctly identified	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.3.4. Is the unit of CO2 eq correctly applied to each source of leakage?	1	Yes, the unit of CO2 eq is correctly applied to each emission source	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.4. Description of formulae used to estimate emission reductions for the project activity (for each gas, source, formulae/algorithm, emissions units of CO2 eq.)				
D.2.4.1. Are the formulae used to calculate emission reductions consistent with those outlined in the description of the baseline methodology?	1	Yes, the formulae used to estimate emission reductions are consistent with those outlined in the description of the baseline methodology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.2.4.2. Is the unit of CO2 eq correctly applied to each emission source?	1	Yes, the unit of CO2 eq is correctly applied to each emission source	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.3. Quality control (QC) and quality assurance (QA) procedures undertaken for data monitored				
D.3.1.1. Is the table outlining data and QC/QA procedures according to the prescribed format?	1	Yes, the table outlining data and QC/QA procedures is according to the prescribed format.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.3.1.2. Can the table be considered complete and accurate?	1	Yes, the table can be considered complete and accurate	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.4. Description of the operational and management structure that the project operator will implement in order to monitor emission reductions and any leakage effects, generated by the project activity				
D.4.1. Is the operational and management structure clearly described and in compliance with the envisioned situation?		Yes, Katene has created a "Detailed Customer Database", consisting of more than 1600 Katene customers willing to be interviewed.		<input checked="" type="checkbox"/>

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		<u>Clarification Request No. 15.</u> PP should clarify how it is assured that a high quality database is available during the quarterly re-assessments. Clarify the mode of information transfer between participants and team for kitchen assessment and where such information is stored.	CR15	
D.4.2. Are responsibilities and institutional arrangements for data collection and archiving clearly provided?	1	A list of stove purchasers is compiled by Katene sales people. This list comprises the customer's name, contact information and type and quantity of stove purchased. During the validation it became clear that Sales Records are partially incomplete. Compare Request above on Procedures for monitoring and information transfer and storage above.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.4.3. Does the monitoring plan provide current good monitoring practice?	1	See H.3.1 below	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.4.4. If applicable: Does annex 4 provide useful information enabling a better understanding of the envisioned monitoring provisions?	1	NA. No information relating to monitoring in Annex 4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.5. Name of person/entity determining the monitoring methodology				
D.5.1. Is the information on the person(s) / entity(ies) responsible for the application of the baseline and monitoring methodology provided consistent with the actual situation?	1	Yes. The baseline study was conducted by Berkeley Air Monitoring Group in May 2008 and it is being applied by Katene Kadji – the project operator.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
D.5.2. Is the person(s)/entity(ies) determining the baseline considered as project participant(s)	1	No. Berkeley Air Monitoring Group is not being considered as a project participant	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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E. Estimation of GHG emissions by sources				
E.1. Estimate of GHG emissions by sources:				
E.1.1. Are estimates of emissions by sources of GHG provided according to the approved methodology?	1	Yes, the sources are provided according to the methodology. However see A.4.6.2	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.2. Can these estimates be considered as reasonable?	1	See E.1.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.1.3. Have the calculations been cross-checked and validated by the DOE?	1	No the calculations have not been cross-checked by the DOE. Calculation files would have to be sent to the DOE for verification as mentioned above.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.2. Estimated leakages:				
E.2.1. Are estimates of leakages provided according to the approved methodology?	IRL No.	Yes, the sources are provided according to the methodology. Section B.2 of the PDD summarizes the participants' views on leakage relevance. <u>Corrective Action Request No.21.</u> Each type of potential leakage as indicated in section II.6 of the methodology shall be analyzed in regard to its relevance (and risk level) for the project case (cluster). Information in the PDD shall be complemented correspondingly for each leakage type according to methodology requirements. Leakage shall be considered if it is identified as necessary.	CAR22	<input checked="" type="checkbox"/>
E.2.2. Can these estimates be considered as reasonable?	1	See above. Leakage was set to zero in the initial PDD	CAR	<input checked="" type="checkbox"/>
E.2.3. Have the calculations been cross-checked and validated by the DOE?	1	See above. Leakage was set to zero in the initial PDD	CAR	<input checked="" type="checkbox"/>

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<i>E.3. The sum of E.1 and E.2 representing the project activity emissions:</i>				
E.3.1. Is the project emissions obtained as the sum of E.1 and E.2?	1	Yes, the project emissions are obtained from the sum of project emissions and leakages	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.3.2. Can this sum be considered as reasonable?	1	To be confirmed with closure of issued Requests.	CAR	<input checked="" type="checkbox"/>
E.3.3. Have the calculations been cross-checked and validated by the DOE?	1	To be confirmed with closure of issued Requests.	CAR	<input checked="" type="checkbox"/>
<i>E.4. Estimated anthropogenic emissions by sources of greenhouse gases of the baseline:</i>				
E.4.1. Is the baseline emissions estimated according to the approved methodology?	1	Yes, the baseline emissions are estimated according to the approved methodology	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.4.2. Can this estimate be considered as reasonable?	1	To be confirmed with closure of issued Requests.	CAR	<input checked="" type="checkbox"/>
E.4.3. Have the calculations been cross-checked and validated by the DOE?	1	To be confirmed with closure of issued Requests.	CAR	<input checked="" type="checkbox"/>
<i>E.5. Difference between E.4 and E.3 representing the emission reductions of the project activity:</i>				
E.5.1. Is the ex-ante estimate of emission reductions done according to the approved methodology?	1	Yes the ex-ante estimate of emission reductions is done according to the methodology as baseline emissions – project emissions	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E.5.2. Can this estimate be considered as reasonable?	1	To be confirmed with closure of issued Requests.	CAR	<input checked="" type="checkbox"/>
E.5.3. Have the calculations been cross-checked and validated by the DOE?	1	To be confirmed with closure of issued Requests.	CAR	<input checked="" type="checkbox"/>
<i>E.6. Table providing values obtained when applying formulae above:</i>				
E.6.1. Is a table summarising the values obtained above been provided using the correct	1	Yes, the table has the correct format	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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format?				
E.6.2. Are the values in the table consistent with those in other sections of the PDD?	1	Yes, the table has the correct format	CAR	<input checked="" type="checkbox"/>
F. Environmental impacts				
F.1. Documentation on the analysis of the environmental impacts, including transboundary impacts				
F.1.1. Has the analysis of the environmental impacts of the project activity been sufficiently described?	1	Section A.2 of the PDD includes the sustainability analysis and also environmental analysis. The descriptions are considered sufficient.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.2. Are there any Host Party requirements for an Environmental Impact Assessment (EIA), and if yes, has an EIA been approved?	1	The host country does not require an EIA for the present project activity. A letter of no objection by the Malian DNA specifically highlights that the project is consistent with Mali's environmental regulations.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.3. Will the project create any adverse environmental effects?	1	No adverse effects expected	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.1.4. Were transboundary environmental impacts identified in the analysis?	1	No transboundary environmental impacts have been identified since the project activity is restricted within Mali's borders.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.2. If environmental impacts are considered significant by the project participants or the host Party, please provide conclusions and all references to support documentation of an environmental impact assessment undertaken in accordance with the procedures as required by the host Party				
F.2.1. Have the identified environmental impacts been addressed in the project design sufficiently?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F.2.2. Does the project comply with environmental legislation in the host country?		Not applicable	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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G. Stakeholders' comments				
G.1. Brief description how comments by local stakeholders have been invited and compiled				
G.1.1. Have relevant stakeholders been consulted?	1	Yes, a total of 53 Stakeholders attended the Mali Stakeholder Consultation Meeting held on Friday, 27 June, 2008, Bamako, Mali. The identified stakeholders from different institutions as well as stove users were consulted.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.1.2. Have appropriate media been used to invite comments by local stakeholders?	1	Stakeholders were invited verbally, via email and through the mass media. Evidence on the invitations was reviewed and is included to the PDD.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.1.3. If a stakeholder consultation process is required by regulations/laws in the host country, has the stakeholder consultation process been carried out in accordance with such regulations/laws?		Stakeholder consultation is certainly not a criterion in the host country for this project. However, the stakeholder consultation was conducted according to GS requirements.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.1.4. Is the undertaken stakeholder process that was carried out described in a complete and transparent manner?	1	Yes, the stakeholder process has been reported in a transparent manner. This include a signed list of participants, Q&A and how due account has been taken of the stakeholders' comment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.2. Summary of the comments received				
G.2.1. Is a summary of the received stakeholder comments provided?	1	Yes, a summary of the received stakeholder comments has been provided.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
G.3. Report on how due account was taken of any comments received				
G.3.1. Has due account been taken of any stakeholder comments received?	1	Yes. See PDD section G.1.4	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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H. Annexes 1 - 4				
H.1. Annex 1: Contact Information				
H.1.1. Is the information provided consistent with the one given under section A.3?	1	Yes, information provided is consistent with the one given under section A.3	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.1.2. Is the information on all private participants and directly involved Parties presented?	1	Yes, information on all private participants and directly involved Parties have been presented	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.2. Annex 2: Baseline information				
H.2.1. If additional background information on baseline data is provided: Is this information consistent with data presented by other sections of the PDD?	11, 20	Yes, additional background information on baseline data is provided; and this is consistent with data presented in other sections of the PDD. Additional interviews with officials from the Ministry of the Environment, Forest Management Unit in Mali confirmed the adequacy of the baseline data applied in regard to NRB.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.2.2. Is the data provided verifiable? Has sufficient evidence been provided to the validation team?	11, 20	Additional interviews with forest experts in Mali confirmed the baseline data on non-renewable biomass and that more than 80% of Malians depend on wood fuel for domestic energy.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.2.3. Does the additional information substantiate / support statements given in other sections of the PDD?	1	Yes, the additional information is substantiated / supported by statements given in other sections of the PDD	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.3. Annex 3: Monitoring information				
H.3.1. If additional background information on monitoring is provided: Is this information consistent with data presented in other sections of the PDD?	1	No further details provided. It is said "E+Co has regional monitoring and evaluation officers that will assess Katene's progress on a regular basis. In addition, E+Carbon will hire specialists to perform various tests to be verified on a regular basis, as outlined in section D."	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.3.2. Is the information provided verifi-	1	See H.3.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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able? Has sufficient evidence been provided to the validation team?				
H.3.3. Do the additional information and / or documented procedures substantiate / support statements given in other sections of the PDD?	1	See H.3.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.4. Annex 4: Declaration of Financier of Non-Use of Official Development Assistance				
H.4.1. Is the Declaration of Financier of Non-Use of Official Development Assistance according to the format given in Annex D to the Toolkit?	1	Yes. The declaration has been provided in the PDD and in annex 1 of the passport using a Letter Head and is duly signed by Erik Wuster on behalf of all project participants.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.4.2. Is 'Acknowledgment of Duty to Notify Upon Discovery' included in the declaration?	1	Yes. The letter indicates the willingness of the financier to notify GS upon discovery of any deviation of ODA	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
H.4.3. If necessary: Is an affirmation available that any such funding from Annex-I-countries does not result in a diversion of ODA?	1	Yes. See H.4.1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

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Table 2 Resolution of Corrective Action and Clarification Requests

Clarifications and corrective action re-quests by validation team	Ref. to table 1	Summary of project owner response	Validation team conclusion	Final PDD
<p><u>Corrective Action Request No. 1</u> The PDD should be updated, addressing and describing the issue of rebate or discount cards accordingly and in further detail. Furthermore, the approach on the sale of the stoves and how this assures a surplus sale in comparison to the baseline scenario is to be clearly described (compare also baseline section B).</p>	A.2.4	<p><u>Project Proponent, 17 Dec 2008:</u> With respect to the rebate cards, the PDD has been updated accordingly. Regarding the second point, see additionality rationale on pg 23.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> The PP had originally planned to use rebate cards as a mechanism to prove additionality, collect end user contact data and allow end users to waive ownership rights. It became clear that illiteracy was a significant barrier to implementing the rebate card system. Thus, different mechanisms have been developed to address these various issues, while any reference to rebate cards have been omitted in the PDD since they are not used in the project activity. For further details on additionality and baseline setting, see CAR 2.</p>	<p><u>Audit team, 8 Jan. 2009:</u> Clarify how the issue of rebate has been addressed in the PDD. A brief summary of the update on rebate and additionality issue should be provided here as appropriate. The additionality issue has become clearer but sales of stoves have to be considered in the baseline setting.</p> <p><u>Audit team, 9 Feb. 2009:</u> On site audit revealed that rebate cards were not used due to the illiteracy problem. Most end users refused to sign the rebate cards for fear of any future implications which they may not be aware of now. This issue can be considered closed out.</p>	☒
<p><u>Corrective Action Request No. 2</u> Because stoves were sold prior to pro-</p>	A.4.4.1	<p><u>Project Proponent, 17 Dec 2008:</u> See additionality rationale outlined in section B.3.</p>	<p><u>Audit team, 8 Jan. 2009:</u> No evidence has been provided</p>	☒

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<p>ject start, the audit team requests that the historic sales are to be considered for baseline setting and / or additionality analysis. This should be well documented in the PDD and further details have to be included in section B.</p>		<p>of PDD, which highlights the fact that existing sales were only made possible due to subsidy programs that no longer exist. In other words, without carbon finance, sales of efficient stoves will drop to zero since Katene will go out of business. As such, the PP kindly requests that the DOE reconsiders their initial assessment. See page 23 in PDD.</p> <p><u>Project Proponent, 4 Feb. 2009:</u></p> <p>The PP has hired a third party financial auditor that conducted an audit to prove that Katene has been running significant and financially unsustainable shortfalls since the project start date. This study is being submitted to the DOE. More importantly, on 6/2/2009 Katene will close its doors due to lack of funds. They will lay off all workers and stop manufacturing stoves pending news on carbon finance. An email between Katene's Managing Director and E+Carbon is being provided that supports this unfortunate situation. The PP kindly requests that the DOE reconsiders their assessment on baseline setting as it is clear that stove sales have already dropped to zero in the absence of subsidies or carbon revenues.</p> <p><u>Project Proponent 9 Feb. 2009:</u></p> <p>Katene was able to survive financially because Katene is owned by an entrepreneur that owns two other profitable businesses, a print shop and a private school. Both of these businesses pro-</p>	<p>showing that sales would drop to zero and that Katene would go out of business without the subsidies from AMADER and GTZ.</p> <p>It is considered conservative if historic sales (especially without the subsidies) are considered for baseline setting. Otherwise additionality cannot be justified. PP should label the graphic on page 26 appropriately to indicate for example the years concerned.</p> <p><u>Audit team, 9 Feb. 2009:</u></p> <p>PP has contracted a private Mali based financial accountant called Nicolas Kouvahey to audit Katene (IRL No. 34). The results of the audit state that "the net result of Katene Kadji in the last five years is a deficit. The accumulated losses in its activities amount to (-) 61.479.645 FCFA ... Finally if Katene continues at this rate of deficit, it risks stopping its activities without an immediate financial contribution".</p> <p>The same report also reveals that Katene's activities have</p>	
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		<p>vided income over the last years that subsidized the unprofitable activities of Katene. In other words, the owner was pumping in his own capital to keep Katene afloat. The PP was also surprised by the outcome of the audit, but it reinforces the fact that carbon revenues are a necessary precondition for efficient stove manufacturing in Mali. For further details on the audit and its findings, please feel free to contact the audit company directly.</p>	<p>never been profitable in the last five years i.e. including the period before the project activity. PP should clarify how this could be possible.</p> <p><u>Audit team, 10 Feb. 2009:</u> The country expert in the audit team can confirm that such unprofitable endeavours are common practices in many sub-Saharan countries. Most even go as far as taking loans and pumping into the business just to keep it afloat out of shame of closing down completely and staying without any occupation. This issue is therefore considered resolved.</p>	
<p><u>Corrective Action Request No. 3</u> Include a technical drawing of the stove(s) in the PDD as well a description of the technical features that allows the increase of the efficiency in fuel use.</p>	A.4.6.1	<p><u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. See pg 4 of PDD.</p>	<p><u>Audit team, 8 Jan. 2009:</u> A technical drawing of a typical SEWA stove has been included in the PDD showing clear the features. This is considered acceptable.</p>	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request No. 4</u> Document in the PDD the role and use of development aid to the actual project implementation.</p>	A.4.7.1	<p><u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. See pg 5, paragraph 2 as well as additionality section, pg 25 & 26.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> GTZ provided funding as a single outlay to pay</p>	<p><u>Audit team, 8 Jan. 2009:</u> It is stated in the PDD that "Since the project start date, there has not been any development aid funding the project." No information has been pro-</p>	<input checked="" type="checkbox"/>

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		<p>for limited capital equipment in 2007. GTZ's funding is no longer available. This is explained on pg 5 of the PDD. In addition to the GTZ/Katene contract already provided to the DOE, the PP is including with this response a letter from GTZ stating that the stove support program ended on June 30, 2007. The PP is also providing receipts for the equipment provided to Katene by GTZ. Again, all support ceased prior to the project start date.</p> <p><u>Project Proponent 9 Feb. 2009:</u> Although GTZ support ended on June 30, 2007, the equipment manufacturer contracted by GTZ was unable to deliver the equipment until later in the year. The equipment delivery was therefore part of the earlier agreement that had already ended. This explains the discrepancy.</p>	<p>vided on the state of the financial aid from GTZ. PP should provide evidence that this aid has also been suspended or whether it was made in a single outlay.</p> <p><u>Audit team, 9 Feb. 2009:</u> The letter from GTZ stating that the stove support program ended on June 30, 2007 (IRL No. 30) has been received. Contrary to this the "Record of surrender of equipment and materials to the project executing organization in the partner land" (IRL No. 31) shows that GTZ handed equipment to Katene Kadji on 10.12.2007. PP should clarify this contradiction.</p> <p><u>Audit team, 10 Feb. 2009:</u> The clarification given by the project participant can be considered appropriate. The issue is therefore closed out.</p>	
<p><u>Corrective Action Request No. 5</u> Indicate the version number of the methodology in section B1. And D1.</p>	B.1.1.1	<p><u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly.</p>	<p><u>Audit team, 8 Jan. 2009:</u> The version number of the Methodology has been included.</p>	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request No. 6</u> PP should consider every criterion in</p>	B.1.1.5	<p><u>Project Proponent, 17 Dec 2008:</u> The PDD has been updated accordingly. See</p>	<p><u>Audit team, 8 Jan. 2009:</u> Each of the applicability criteria</p>	<input checked="" type="checkbox"/>

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<p>turn in justifying applicability of the methodology to the project activity. This should be included in the PDD.</p> <p>The first applicability criterion does not seem to be complied with for the audit team did not see any 100 % replacement of high emission cook-stoves and regimes by low emission stoves but rather both high emission regimes and improved stoves were being used in parallel.</p>		<p>page 15.</p>	<p>has been considered in turn as required and this has been documented in the PDD. Low emission stoves would be replacing relatively high emission stoves. This replacement would be either partial (since some households still use the inefficient stoves at times, though less frequently) or full.</p> <p>Partial replacement is considered in the baseline assessment and is therefore incorporated in the calculations of the emission reductions.</p>	
<p><u>Corrective Action Request No. 7</u></p> <p>The exact step wise approach (enumeration of steps, including sub-steps) as defined per methodology should be followed in the PDD.</p>	B.2.1.1	<p><u>Project Proponent, 17 Dec 2008:</u></p> <p>The PDD has been updated accordingly. See section B2 pg 16.</p>	<p><u>Audit team, 8 Jan. 2009:</u></p> <p>This has been done according to the methodology and is considered acceptable.</p>	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request No. 8</u></p> <p>A table similar to the one used in the Methodology (the layout used in section 8 of the methodology) should be used in describing both default and monitored parameters. Actual values applied and their sources and comments should be indicated.</p>	B.2.3.2	<p><u>Project Proponent, 17 Dec 2008:</u></p> <p>PDD adjusted accordingly. See annex 2 and annex 3 of PDD.</p>	<p><u>Audit team, 8 Jan. 2009:</u></p> <p>A table similar to the layout used in the Methodology to describe parameters has been applied. This is considered appropriate and it is acceptable.</p>	<input checked="" type="checkbox"/>
<p><u>Corrective Action Request No. 9</u></p> <p>The alternatives to the project scenario</p>	B.3.2	<p><u>Project Proponent, 17 Dec 2008:</u></p> <p>See additionality rationale outlined in section B.3.</p>	<p><u>Audit team, 8 Jan. 2009:</u></p> <p>The alternatives to the project</p>	<input checked="" type="checkbox"/>

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<p>need to be clearly demonstrated according to the additionality tool requirements (including i.e. the project activity without carbon finance).</p>		<p>of PDD.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> See CAR 2 and supporting material for full response.</p>	<p>have been described according to the additionality tool.</p> <p>It has been argued that the project scenario without income from VER is impossible. This issue is considered closed out.</p>	
<p><u>Corrective Action Request No. 10</u></p> <p>The requirements of the financial analysis the requirements as per additionality tool (investment comparison or benchmark) remain to be demonstrated in the PDD.</p> <p>Note: In the document 'Katene Financial June 2007'. The calculation should be transparent. The cash flows should include investment (expenditure) as well as income with and without carbon credits.</p> <p>PP should perform this analysis to prove the importance of carbon credits to the project.. All excel calculation files should be submitted to the DOE for evaluation.</p> <p>In regard to financing, it was clarified during the onsite visit, that the only continuous and still available grants are those of AMADER in the form of training of personnel and transport of stoves.</p>	<p>B.3.10</p>	<p><u>Project Proponent, 17 Dec 2008:</u></p> <p>The PDD has been adjusted so as to no longer utilize a financial analysis. Section B.3. in the PDD now applies a barrier analysis instead.</p>	<p><u>Audit team, 8 Jan. 2009:</u></p> <p>Financial analysis has been excluded in updated PDD. Additionality has been discussed in the PDD in terms of Barrier analysis.</p>	<p><input checked="" type="checkbox"/></p>
<p><u>Corrective Action Request No. 11</u></p> <p>PP should clarify with evidences how</p>	<p>B.3.10</p>	<p><u>Project Proponent, 17 Dec 2008:</u></p> <p>PDD has been updated accordingly. See addi-</p>	<p><u>Audit team, 8 Jan. 2009:</u></p> <p>The DOE has been informed</p>	<p><input checked="" type="checkbox"/></p>

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<p>the emission reductions would not have taken place without the project.</p> <p>The following should be reported in the PDD:</p> <ul style="list-style-type: none"> ➤ The impact of financial grant from AMADER ➤ The impact of the grant from GTZ on cost of investment ➤ The impact of Enterprise Works ➤ The sale price per stove <p>All excel emission calculations worksheets and investment analysis worksheets should be sent to the DOE for cross-checking</p>		<p>tionality section beginning on pg 23 and see pg 5, paragraph #2. Investment analysis will no longer apply as additionality section now utilizes a barrier analysis and emission calculation worksheets have been provided to DOE.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> See CAR 2 for full response.</p>	<p>that AMADER and GTZ no longer provide any grants (IRL No. 26 & 30). Enterprise Works only helped in the training of artisans. The sale price (with and without discount) per stove has been provided in the PDD.</p> <p>Excel files: Detailed customer Database.xls (IRL No. 27) and Total Sales record thru Oct. 31, 2008 (IRL No. 28) have been provided to the DOE.</p> <p>Investment analysis was excluded.</p> <p>This issue is considered closed out.</p>	
<p><u>Corrective Action Request No. 12</u></p> <p>The requirements as per additionality tool in regards to barrier analysis need to be complied with. Barriers need to be discussed for each alternative.</p>	<p>B.3.15</p>	<p><u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. See additionality section B.3 beginning on pg 23.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> To pass step 3b of the additionality tool version 5.2, the PP needs to present alternatives that would not be prevented by the barriers outlined in step 3a. Thus, the PP needs to include the business-as-usual scenario as an alternative to pass this test. The PP has thus left the business-as-usual scenario in the analysis of alternatives to the project activity. However, see response to CAR 2 for more clarity on additionality and baseline setting.</p>	<p><u>Audit team, 8 Jan. 2009:</u> Barrier analysis according to the additionality tool has been provided in the PDD. This can be considered adequate.</p> <p>The two alternatives (historic practice of inefficient kitchen regimes and project scenario without carbon finance) are provided. It is considered sufficient that the indicated barriers only refer to the project scenario without carbon finance. The continuation of the historic practice of inefficient kitchen habits does not face any barriers and</p>	<p>☒</p>

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			was witnessed to be the common practice in Bamako. This issue is considered closed out.	
<u>Corrective Action Request No. 13</u> PP should fully and transparently analyse and document the effect of other improved cook stoves disseminated within the same project boundary.	B.3.17	<u>Project Proponent, 17 Dec 2008:</u> PDD has been updated accordingly. See annex 4, pg 62. The DOE has already been furnished with legal documentation referred to in annex 4.	<u>Audit team, 8 Jan. 2009:</u> According to interview conducted on site, no other efficient stove project is going on at the moment in Mali. PDD has been updated.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No. 14</u> Evidence for each barrier should be documented in the PDD and provided to the DOE. The prohibitive character of the barriers needs to be underlined by these references. Among others, it needs to be demonstrated how the approval of the project would help overcome the financial hurdles should be transparently documented in the PDD.	B.3.19	<u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. See additionality section B.3 beginning on pg 23. <u>Project Proponent, 4 Feb. 2009:</u> See response to CAR 2 and CAR 12 for full response.	<u>Audit team, 8 Jan. 2009:</u> A document has been provided (IRL No. 25) showing that the AMADER grant has been suspended. It has been argued that without income from VER the price of stoves would be unaffordable to greater of the target population. <u>Audit team, 10 Jan. 2009:</u> Further evidences have been provided by PP (IRL No. 30 & 34) This issue is considered closed out.	<input checked="" type="checkbox"/>
<u>Corrective Action Request No. 15</u> The target areas as per methodology definitions shall be clearly defined in the PDD. (It is indicated that the target	B.4.1	<u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. See section B4, pg 30.	<u>Audit team, 8 Jan. 2009:</u> The project boundary has been given as the kitchens in Mali where SEWA stoves would be	<input checked="" type="checkbox"/>

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<p>area is going to be adapted in line with future baseline assessments. Target areas shall be defined)</p>		<p><u>Project Proponent, 4 Feb. 2009:</u> The first periodic monitoring task, outlined on pg 35 of the PDD takes into account changes in non-renewability of fuels as market expansion leads to new end user clusters. “The renewability status of wood-fuel used by each cluster (NRB fraction) should be re-assessed, bi-annually.” This assessment every two years will make changes in the fuel collection area as needed.</p>	<p>used. The target area would include Katene’s current distribution network which will also include in future other major towns and cities in Mali apart from Bamako. The fuel collection area has been given to included 200 km radius from Bamako and would also be adapted according to any change in fuel collection habits and Katene’s expansion. This can be considered appropriate. However, it may become necessary for non-renewability status of biomass to be monitored due to expansion into other fuel collection areas if applicable.</p> <p><u>Audit team, 9 Feb. 2009:</u> The monitoring plan foresees the reassessment of NRB as the market expands and fuel collection area changes. This issue is therefore considered closed out.</p>	
<p><u>Corrective Action Request No. 16</u> Table on emissions sources as per methodology section II.1 to be included in the PDD:</p>	<p>B.4.2.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> PDD has been updated accordingly. See pg 30.</p>	<p><u>Audit team, 8 Jan. 2009:</u> The table has been provided as per the methodology.</p>	<p>☒</p>
<p><u>Corrective Action Request No. 17</u></p>	<p>D.2.1.1.2</p>	<p><u>Project Proponent, 17 Dec 2008:</u></p>	<p><u>Audit team, 8 Jan. 2009:</u></p>	<p>☒</p>

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<p>Consistency of the list of parameters with the methodology shall be assured. Assure for consistent use of parameter titles as per methodology definition.</p>		<p>The PDD has been updated accordingly. See section D.2.1.1, pg 36 and Annex 3. Note that the methodology uses one table format while the Gold Standard PDD ver 1 template uses another that necessitates consolidating parameters from methodology. PP attempted to resolve this discrepancy using specific references to parameters in methodology incorporated in chart from PDD template, while including the methodology parameters and their original chart formats in annex 3.</p>	<p>The parameters provided in the PDD are consistent with those specified by the methodologies. The issue is considered closed out.</p>	
<p><u>Corrective Action Request No. 18</u> For measured data QA/QC procedure should be provided</p>	<p>D.2.1.1.3</p>	<p><u>Project Proponent, 17 Dec 2008:</u> PDD has been updated accordingly. See section D.3., pg 43 and annex 3.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> A detailed description has been included in the QA/QC table in section D.3., pg 44-46. QC/QA description in annex 3 now references additional details provided in section D.3.</p>	<p><u>Audit team, 8 Jan. 2009:</u> A concrete procedure should be provided indicating how QA/QC is carried out on the operational level. This shall include indications on concrete QA/QC measures for the various parameters, responsibilities, data collection, security, archiving and transfer. Compare for example the CDM Modalities and Procedures regarding typical requirements.</p> <p><u>Audit team, 9 Feb. 2009:</u> QA/QC procedures have been included in the PDD as required. This issue is therefore closed.</p>	<p>☒</p>
<p><u>Corrective Action Request No. 19</u> PP should complete this section 2.1.3 of the PDD as required including an</p>	<p>D.2.1.2.4</p>	<p><u>Project Proponent, 17 Dec 2008:</u> PDD has been updated accordingly. See pg 37.</p>	<p><u>Audit team, 8 Jan. 2009:</u> The section has been completed as required</p>	<p>☒</p>

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indication on the formulae to be applied for ex-post calculations.				
<u>Corrective Action Request No. 20</u> PDD template altered. PP should complete the section 2.2 and sub-items of PDD.	D.2.1.3.1	<u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. Section D2.2, pg 40.	<u>Audit team, 8 Jan. 2009:</u> The section has been completed as required	<input checked="" type="checkbox"/>
<u>Corrective Action Request No. 21</u> Each type of potential leakage as indicated in section II.6 of the methodology shall be analyzed in regard to its relevance (and risk level) for the project case (cluster). Information in the PDD shall be complemented correspondingly for each leakage type according to methodology requirements. Leakage shall be considered if it is identified as necessary.	D.2.2.1.1	<u>Project Proponent, 17 Dec 2008:</u> The PDD has been updated accordingly. See pg 22.	<u>Audit team, 8 Jan. 2009:</u> Leakage effects have been discussed appropriately in the PDD. The argument can be considered reasonable and acceptable.	<input checked="" type="checkbox"/>
<u>Clarification Request No. 1</u> PP should clarify which stove category is part of the project activity.	A.2.2	<u>Project Proponent, 17 Dec 2008:</u> PDD updated accordingly. See pg 4. <u>Project Proponent, 4 Feb. 2009:</u> The KPT was administered using two of the five stove models, not one. See the baseline study in annex 6, pg 86, "The KPT focused on two of Katene's Sewa stove types, the most popular Grand model and the Average model. The low sales percentages of the Small and Tea models helped to inform this decision." First, the stoves not part of the KPT only represent a small % of sales. Moreover, Berkeley Air Monitoring Group calculated the adjustment factors based on their	<u>Audit team, 8 Jan. 2009:</u> KPTs were conducted using only one kind of these stoves and the calculation of emission reductions is based on this particular stove. Clarify if this is representative and the effect on the emission reduction calculations of now including stoves larger as well as smaller than the one used in establishing fuel savings. <u>Audit team, 9 Feb. 2009:</u>	<input checked="" type="checkbox"/>

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	<p>third party, unbiased, professional opinion of the emission reduction potential of the different size stoves based on the KPTs of two stove sizes already performed. In each instance, the most conservative conversion factors were applied among two to three different methods considered to adjust fuel savings for different sizes. See pg 90 & 91 for full explanation of how charcoal adjustments were applied and how conservative approaches were taken. See pg 92 for fuelwood adjustment factor approach, and note that fuelwood savings for tea and small stoves were completely eliminated to maintain conservativeness. Moreover, the fuelwood savings of the grand stove (from KPT) were used for the super grand without applying any adjustments, even though the super grand stove is significantly larger and likely has higher savings. This was also done to maintain a conservative approach. Berkeley Air Monitoring Group represents that this is an accurate and conservative approach to converting fuel saving numbers and, if anything, understates the emission reduction potential of the other three stoves.</p> <p><u>Project Proponent 9 Feb. 2009:</u> The PP chose to include them in the auspices in of the project activity because, although a low % of overall sales, they still represent a meaningful reduction in emissions and therefore their price could benefit from being reduced by carbon revenues. They are the cheaper of the stove</p>	<p>Fuel adjustment factors would be applied accordingly to the other stoves not part of the KPT in the calculation of emission reductions.</p> <p>However, considering the very low % sale in 'small' and 'tea' categories, PP should justify why they should be included in the auspices of the project activity.</p> <p><u>Audit team, 10 Feb. 2009:</u> The audit team accepts the rationale of including these categories of stoves in the auspices of the project activity. Their contributions to emission reductions would be further evaluated during subsequent verifications. The issue is therefore closed out.</p>	
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		models offered, and with carbon subsidies, will be the most affordable for the lowest income groups.		
<p><u>Clarification Request No. 2</u></p> <p>It remains to be clarified (through GS) if the continued but reduced use of the old / baseline stove may be considered replacement.</p>	A.2.3	<p><u>Project Proponent, 4 Feb. 2009:</u></p> <p>The PP has received clarification from the Gold Standard TAC on this subject. From the clarification, “The opinion of the TAC is that we can allow for the use of existing stoves in parallel with the improved stoves... BUT that an incentive should be given for their actual removal and destruction, for example in the form of a discounted amount of emission reductions for households that do continue making use of old stoves.” Contact Gold Standard for confirmation of their clarification.</p> <p>The PP is implementing a scheme to comply with the clarification that offers a discount on efficient stoves purchased if the purchase is accompanied by surrendering an operational inefficient stove. Inefficient stoves will be destroyed and sold for scrap metal. The PDD has been updated accordingly. See pg 15, applicability criteria #1 and 22, point e).</p> <p><u>Project Proponent 9 Feb. 2009:</u></p> <p>The PP has shared the email from Gold Standard stating this clarification.</p>	<p><u>Audit team, 9 Feb. 2009:</u></p> <p>PP should provide the clarification from GS stating that “The opinion of the TAC is that we can allow for the use of existing stoves in parallel with the improved stoves... BUT that an incentive should be given for their actual removal and destruction, for example in the form of a discounted amount of emission reductions for households that do continue making use of old stoves.”</p> <p><u>Audit team, 9 Feb. 2009:</u></p> <p>The email exchange with GS has been received (IRL No. 35). GS would decide how emission reductions would be discounted due to parallel use of both efficient and inefficient stoves in household. The issue is therefore considered closed.</p>	<input checked="" type="checkbox"/>
<p><u>Clarification Request No. 3</u></p> <p>The project team shall clarify how partial replacement was considered in the project design and emission reduction</p>	A.2.3	<p><u>Project Proponent, 17 Dec 2008:</u></p> <p>Kitchen performance tests are conducted using paired tests and measurement of real, observed reductions in charcoal usage in the field. That is,</p>	<p><u>Audit team, 8 Jan. 2009:</u></p> <p>The time period of 3 days is too short to evaluate the effect of partial replacement since end-</p>	<input checked="" type="checkbox"/>

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<p>calculations.</p>		<p>a family's charcoal use is measured for a period of three days in the absence of an efficient stove. The family is then provided with a new efficient stove but is not told specifically to use only the new stove. After the family has been given sufficient time to become accustomed to cooking with their new stove among their various cooking methods, charcoal use is measured for a three day period with the efficient stove present. Charcoal savings is calculated by subtracting usage before the efficient stove from usage after. Emission reduction calculations are derived from these robust, third party (Berkeley Air Monitoring Group) measurements. In other words, the numbers used already incorporate a certain percentage of end users continuing to use their inefficient stoves in addition to their new efficient stoves.</p> <p><u>Project Proponent, 4 Feb. 2009:</u></p> <p>As independent, third party professionals, Berkeley Air Monitoring Group asserts that observing households for a 3 day period is more than sufficient to capture all common fuel use scenarios in this instance. The assertion that parallel use only occurs during emergencies is speculation based on anecdotal evidence observed in the field. Conversely, Berkeley Air's KPT design was based on having already conducted a kitchen survey. Using statistically robust methods, the KS revealed that there are no situations of sufficient frequency that cause significant changes in parallel use of inefficient stoves. If such situa-</p>	<p>users tend to use both efficient and inefficient stoves in parallel only during emergencies which ought not to be that frequent. However, the manner in which the KPTs were conducted would likely take partial replacement into account.</p> <p>See also CAR6 above.</p> <p><u>Audit team, 9 Feb. 2009:</u></p> <p>The assertion that parallel use of both efficient and inefficient stoves takes place only during emergencies is not based on any speculation from the DOE but on information provided by a vast number of end users during the on-site interviews. However, PP should provide the clarification from GS stating that "The opinion of the TAC is that we can allow for the use of existing stoves in parallel with the improved stoves... BUT that an incentive should be given for their actual removal and destruction, for example in the form of a discounted amount of emission reductions for households that do continue making use of old stoves."</p>	
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		<p>tions were revealed in the KS, Berkeley Air would have designed the KPT to seek out households that exhibit these characteristics or increased the period of observation above 3 days.</p> <p>Similarly, the KS did not reveal any unusual situations that affect the entire sample population simultaneously. Any effect not captured in a 3-day paired KPT would have to affect the sample population simultaneously and not within the 3-day period in which the KPT was conducted to undermine the KPT's accuracy. Since several dozen households were observed, any non-simultaneous effect would be accounted for in a 3-day KPT since, at any given time, some subsection of households observed during the 3-day period would be experiencing this effect. In short, Berkeley Air has conducted such studies all over the world and as professional statisticians, are confident that in Mali, 3 days is sufficient to gain accurate fuel use numbers.</p> <p>As a side note, now that Katene is instituting an inefficient stove buy back program, the incidence of parallel use will likely be lower, and the KPTs performed will understate fuel savings. This is further evidence of conservative approaches in the PDD.</p> <p><u>Project Proponent 9 Feb. 2009:</u> The PP has shared the email from Gold Standard stating this clarification.</p>	<p><u>Audit team, 9 Feb. 2009:</u> The email exchange with GS has been received (IRL No. 35). GS would decide how emission reductions would be discounted due to parallel use of both efficient and inefficient stoves in household. The issue is therefore considered closed out.</p>	
<p><u>Clarification Request No. 4</u></p>	<p>A.4.1.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u></p>	<p><u>Audit team, 8 Jan. 2009:</u></p>	<p><input checked="" type="checkbox"/></p>

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<p>PP should clarify the source for the assumption that 95 % of the biomass comes from that area and that the non-renewability was assessed for this area.</p>		<p>Berkeley Air used this number in approach 2 of 3 different proposed approaches to calculate biomass non-renewability. Approach 3 was ultimately used. The approach used took into account all communes that supplied any charcoal rather than just those that supply 95% of total charcoal. However, the 95% number was incorrectly cited in the body of the PDD and the PDD has been updated accordingly. The number now only appears in the annex in an NRB approach that was not used. For a full outline of how the non-renewability assessment was performed, see Annex 6.</p>	<p>The PDD has been corrected as mentioned by the PP. The non-renewability of biomass was assessed by a 3rd party called Berkeley Air Monitoring Group as described in annex 6 of the PDD.</p>	
<p><u>Clarification Request No. 5</u> Clarify and document in the PDD how it was assured that the households from the pilot sales record used for the Kitchen Test were not already operating the SEWA stove prior to the date of the baseline assessment.</p>	<p>B.2.1.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> The pilot sales record was used to perform the Kitchen Surveys, not the Kitchen Performance Tests. KPTs were performed on households with similar socioeconomic and demographic characteristics as Katene customers (as defined by the Kitchen Survey), but who did not have stoves prior to the test. They were then provided with a stove for purposes of the test. Households with SEWA stoves by definition were excluded from the Kitchen Test. The PDD has been updated accordingly, see pg 21.</p>	<p><u>Audit team, 8 Jan. 2009:</u> This issue has been clarified in the PDD and it can be considered closed out.</p>	<p><input checked="" type="checkbox"/></p>
<p><u>Clarification Request No. 6</u> It is indicated that the Kitchen Test was based on 149 respondents. Clarify in the PDD the actual process of selection how these candidates were selected (random clustered selection) and how it was preceded if a stove owner was not</p>	<p>B.2.1.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> 149 respondents were included in the Kitchen Survey, not the Kitchen Test. Berkeley Air identified households by examining a cross section of Katene's existing customers and identifying three regions within Bamako in which to conduct KSs that they concluded would provide representative</p>	<p><u>Audit team, 8 Jan. 2009:</u> PP should clarify and document in the PDD which portion of the initially sampled households actually entered the Kitchen Survey and to what extent non-identifiable households from the</p>	<p><input checked="" type="checkbox"/></p>

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<p>identifiable / locatable, and if this might have impacted the results.</p>		<p>results. Within each of these areas, households were randomly selected (i.e. clustered random sampling). Berkeley Air found the households in the database easy to locate since they were assisted by the sales people who helped to populate the database, who have intimate knowledge of Katene's sales in each neighborhood. As a result, Berkeley Air does not think that any sampling bias exists based on an inability to locate households.</p> <p>The PDD has been updated accordingly on Pg 20.</p> <p><u>Project Proponent, 4 Feb. 2009:</u></p> <p>Berkeley Air estimates that approximately 50% of the 149 were taken directly from the detailed customer database of 613, and were not difficult to locate. Of the 50% that were taken from the database to survey, all were located and surveyed. The other 50% were sampled based on randomly selecting the neighbors of the first 50%. That is, once surveyors were in the field with the intent to survey specific households from the detailed customer database, they randomly came upon additional SEWA stoves in the field, which were incorporated in the kitchen survey.</p> <p>It is also important to note that the methodology requires that at least 100 households are sampled for the KS, and that the sampling of 149 households in this project far exceeds the requirements of the methodology. Berkeley Air specifically required that we exceed the sample</p>	<p>database may have affected the quality of the sampling.</p> <p>(Consider this item as well for QA/QC procedures in monitoring)</p> <p><u>Audit team, 9 Feb. 2009:</u></p> <p>The sampling of 149 households in this project is in line with the requirements of the methodology and is considered appropriate. During the site visit the audit team also visited some households (without pre-arrangement) just by stumbling over them in the field. It is therefore possible to visit many household simply by coming across them while in the field. It is also unlikely that the monitoring methodology would be affected by the inability to locate households from the database. The audit team would have to use its good judgments depending on the extent of the difficulties. This issue is therefore closed out.</p>	
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		<p>size specified in the methodology so that they could gain higher confidence that the results they reported were indeed representative of all of Katene customers.</p> <p>As such, Berkeley Air does not think that any sampling bias exists as the method used employs a clustered random sampling approach and the sample size far exceeds that which is required in the methodology. More specifically, there are no characteristics that the surveyed customers have in common that are not shared by the rest of Katene customers. As professional statisticians, Berkeley Air fully stands behind this assertion. The PDD has been updated accordingly. See pg 20, step 1.5.</p> <p>With respect to QA/QC procedures, the monitoring methodology will not be affected by the problem of being unable to identify households based on kitchen survey design during monitoring. The PDD has been updated with additional details on this subject. See pg 45, under monitoring KS QA/QC procedures.</p>		
<p><u>Clarification Request No. 7</u> Clarify the approach on the renewability status estimates and the chosen supply areas if in future the actual target areas is going to be different (including i.e. other cities apart from Bamako)</p>	B.2.1.3	<p><u>Project Proponent, 17 Dec 2008:</u> The first and third ongoing monitoring tasks (pg 34, B. 1 & 5) take into account such circumstances. If sales occur outside of Bamako, quarterly KSs will detect the need for additional cluster definitions. Moreover, bi-annual review of the evolving non-renewable biomass baseline will result in necessary adjustments in renewability status of biomass.</p>	<p><u>Audit team, 8 Jan. 2009:</u> PP has indicated that non-renewability of biomass would be monitored and adjusted as required. Similarly, if Katene decides to expand beyond Bamako, the baseline may have to be reassessed. The matter is therefore clarified.</p>	<input checked="" type="checkbox"/>
<p><u>Clarification Request No. 8</u></p>	B.2.1.3	<p><u>Project Proponent, 17 Dec 2008:</u></p>	<p><u>Audit team, 8 Jan. 2009:</u></p>	<input checked="" type="checkbox"/>

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<p>Clarify if the stere volume of 0,43 m3 is in reference of solid or stack cubic meter.</p>		<p>Although the reference from which this number is taken (Agence Malienne pour le Développement de l'Energie Domestique et de l'Electrification Rurale) does not specify whether it is stack or solid, my research suggests that the stere unit normally refers to stack. However, the NRB calculation uses the reported volume of fuelwood regrown (MAI) and harvested (H), both in units of steres from the same source, as in $X_{nr} = 1 - (MAI/H)$. So, whether the stere (0.43 m3) is solid or stacked will not affect the X_{nr} value since it is the ratio between the two that determines the X_{nr} value rather than their absolute value.</p>	<p>The ratio MAI/H does not matter whether both are solid or stack. It would matter only if one is stack and the other solid. Since both are quoted from the same source (IRL No. 20) it can be assumed that they are measured in the same units. The clarification is therefore accepted.</p>	
<p><u>Clarification Request No. 9</u> In regard to harvest data: Provide the actual detailed reference (pages) indicating the input data used for the calculations of None Renewable Fraction per commune group.</p>	<p>B.2.1.3</p>	<p><u>Project Proponent, 17 Dec 2008:</u> Agence Malienne pour le Développement de l'Energie Domestique et de l'Electrification Rurale, "Schéma directeur d'approvisionnement (SDA) en bois énergie de Bamako : Rapport final", Ministère des Mines de L'énergie Et De L'eau, République Du Mali, 2006. -Input data for calculation of NRB by commune group: --Table 36, p. 69 (Tableau 36 : Bilan production prélèvements en stères par commune en 2006) --Table 8, p. 29 (Tableau 8: Communes d'approvisionnement (provenances) et quantités (en stère) de bois énergie drainées)</p>	<p><u>Audit team, 8 Jan. 2009:</u> This document is part of the IRL. The pages are quoted correctly as can be verified in IRL No. 20. The issue is therefore considered closed out.</p>	<p><input checked="" type="checkbox"/></p>
<p><u>Clarification Request No. 10</u> Provide excel spreadsheets for the relevant emission reduction calcula-</p>	<p>B.2.4.2</p>	<p><u>Project Proponent, 17 Dec 2008:</u> Provided to auditor during meetings in Accra.</p>	<p><u>Audit team, 8 Jan. 2009:</u> Emission reductions calculation workbook has been received</p>	<p><input checked="" type="checkbox"/></p>

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<p>tions.</p>			<p>and is still being analysed.</p> <p><u>Audit team, 10 Jan. 2009:</u> A highly professional ER calculation workbook called “CEIHD Household Energy Carbon Calculator” (IRL No. 39) has been analysed by the team of auditors. The inputs and outputs are realistic according to the methodology. The Household Energy Carbon Calculator (CHECC) is a detailed excel model developed by the Center for Entrepreneurship in International Health and Development (CEIHD) that estimates emission reductions of carbon dioxide, methane and nitrous oxide from improved cookstoves. During verification PP would have to explain how parallel use of both efficient and inefficient stoves is captured by this software.</p>	
<p><u>Clarification Request No. 11</u> PP should clarify and provide evidences that income from the sales of VERs was strongly considered in the decision to start the project.</p>	<p>B.3.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> In late 2007, Katene and E+Carbon decided to attempt to harness carbon revenues to fill the expected subsidy gap. After that date, no further subsidies were received, Katene and E+Carbon signed legally binding agreements (provided to DOE), and E+Carbon began committing capital to the pro-</p>	<p><u>Audit team, 8 Jan. 2009:</u> From the document received, a 2nd tier ERPA was signed between E+Co and Katene on 27th February 2008. The date the ERPA itself was signed is not clearly indicated. Evidence of carbon finance</p>	<p><input checked="" type="checkbox"/></p>

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	<p>ject. See also additionality rationale, section B.3. of PDD.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> The ERPA signing date is indicated on the ERPA itself as 3/12/2007, which has been provided to the DOE. This date is included in the text of the last sentence of the ERPA, pg 3. The Letter of Agreement, also provided to the DOE, was signed on 27/11/2007. The PP is also providing the DOE with supporting email dialogue from the ERPA and LOA signing that shows the date of signing of these documents. The start date of the project has been changed in the PDD from 27/11/2007, the date of the Letter of Agreement signing, to 4/12/2007 (although the LOA states 27/11/2007 and ERPA states 3/12/2007, the PP used 4/12/2007 since this was most conservative option and consistent with the email dialogue on the subject during the actual signing). Gold Standard, however, has indicated the LOA signing could be used as a start date if it was clear that resources were being allocated to the project based on anticipated carbon revenues.</p> <p><u>Project Proponent 9 Feb. 2009:</u> The PP agrees that the documents could be clearer in terms of when they were signed. The PP chose 4.12.2007 as a conservative date for when both the LoA and ERPA were signed, since it is not clear exactly which day all of these documents were signed due to delay in commu-</p>	<p>consideration prior to starting the project has to be delivered to the DOE.</p> <p><u>Audit team, 9 Feb. 2009:</u> The ERPA was signed by two parties at different times and none of them indicated the date of its signatory. Similarly, the second party signed the Letter of Agreement on 01.12.2007 and not 27.11.2007. LoA could also mean Letter of Approval and any date on which resources were allocated to the project can be considered as the date when 'real action' started. PP should clarify the significance of 4.12.2007 to the project activity.</p> <p><u>Audit team, 10 Feb. 2009:</u> The audit team, after some telephone conversation with GS officials, has decided to consider the starting date of the project activity as 27/11/2007. This is considered as the most probable date on which real agreement was reached to pursue income from the sales of VERs. This issue is therefore</p>	
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		<p>nication between Mali and the US. So the significance of the date is simply the day when we can conservatively claim that both documents were signed. If this is not sufficient for Gold Standard to prove a start date, then we need to re-examine other documentation to provide proof.</p>	<p>closed out</p>	
<p><u>Clarification Request No. 12</u> Clarify and justify the choice of the starting date. Starting date shall be start of implementation of the project activity.</p>	<p>C.1.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> Legal documents were signed and capital committed to developing the project on the start date. See also response to CR 11.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> The PP has edited the start date to take a more conservative approach. However, note that Gold Standard's approach to start date could be more liberal than CDM's since PP has reviewed this circumstance with Gold Standard and received a positive response. The fact that stoves were being sold at discount and financial loss after the project start date indicates having dedicated financial resources to the project. See also response to CR11.</p> <p><u>Project Proponent 9 Feb. 2009:</u> PP did not word the above statement clearly enough. PP has a general impression that Gold Standard's guidelines for determining start date are more liberal than the CDM's. PP is proposing that perhaps Gold Standard would accept a combination of documentation signed on those dates and the fact that stoves were being sold at</p>	<p><u>Audit team, 8 Jan. 2009:</u> The starting date is the date when "real action" starts. Furthermore, "... the start date shall be considered to be the date on which the project participant has committed to expenditures related to the implementation or related to the construction of the project activity. This, for example, can be the date on which contracts have been signed for equipment or construction/operation services required for the project activity" Also see CR No. 11 above</p> <p><u>Audit team, 9 Feb. 2009:</u> PP is requested to provide evidence that GS has accepted the fact that since "stoves were being sold at discount and financial loss after the project start date indicates having dedicated financial resources to the pro-</p>	<p><input checked="" type="checkbox"/></p>

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		discount since those dates as proof of start date, since this is the first sign the capital is being allocated to the project. Yet PP does not have any documentation that Gold Standard would specifically accept that rationale. PP proposes that we submit to Gold Standard and see how they respond.	ject.” See CR No. 11 above. <u>Audit team, 10 Feb. 2009:</u> The starting date has been considered, after consultation, to be 27/12/2007 and the issue is considered resolved.	
<u>Clarification Request No. 13</u> The sales record found onsite was partially incomplete. The procedure applied and capable of generating a reliable database (Detailed Customer Database) over time (as basis for monitoring) shall be further defined and provided.	D.2.1.1.14	<u>Project Proponent, 17 Dec 2008:</u> According to the methodology, “The detailed customer database is initially filled with the results of the baseline kitchen survey (and may be supplemented with additional data collected during the baseline kitchen tests); it is then further populated by data collected during the course of the project by Monitoring KS’s and Monitoring KT’s.” In other words, a complete detailed customer database is not required according to the methodology. A detailed customer database of 613 users was compiled as the basis for the baseline KS. Since then, quarterly surveys have been conducted based on house to house surveying (pg 32-33 in PDD). Both the detailed customer database and the total sales record, which is complete, have been provided to the DOE. <u>Project Proponent, 4 Feb. 2009:</u> Current and future SEWA customers are surveyed based on random house-to-house surveys targeted in specific neighbourhoods (ie, clustered random sampling). Houses are never repeated from previous quarters. The total sales database is analyzed based on geography of sales, and	<u>Audit team, 8 Jan. 2009:</u> The customer database (IRL No. 26) and sales record (IRL No. 27) have been sent to the DOE. However, PP has to provide documented internal procedures which are being applied to guarantee a reliable customer database for future monitoring tasks. <u>Audit team, 9 Feb. 2009:</u> The internal procedure provided by the PP is considered feasible and would be verified during future verification of the project. The issue can therefore be considered closed out.	<input checked="" type="checkbox"/>

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		<p>random quarterly surveys are performed based on the geographic breakdown of sales from the previous quarter. Logistically speaking, the owner of Katene provides E+Carbon and Berkeley Air with sales data from the previous quarter with sales location code included in each record. This sales data is cross checked with the local surveyor and other data provided by Katene to ensure consistency and accuracy. The data is then analyzed to determine the proportional sales breakdown based on neighbourhood in Bamako and elsewhere. An excel sheet as an example of this procedure has been supplied to the DOE with this response.</p> <p>Berkeley Air then instructs the local surveyor to conduct surveys in the target neighborhoods and according to the target number in each neighborhood. The households are located by randomly surveying house-to-house until SEWA owners are identified. This is a way to achieve a clustered random sampling approach in a context where illiteracy was found to be a significant barrier to populating the Detailed Customer Database by the traditional means – a scenario that is not addressed in the methodology. Those surveyed are then added to the Detailed Customer Database to update permanent records. This is explained in more detail in the PDD on pg 33-34.</p>		
<p><u>Clarification Request No. 14</u> Clarify the chosen leakage parameters. Consistency with the leakage sources</p>	<p>D.2.3.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> All leakage effects have been thoroughly investigated and found to be negligible. Section B.2.,</p>	<p><u>Audit team, 8 Jan. 2009:</u> Leakage has been addressed appropriately in the PDD ac-</p>	<p><input checked="" type="checkbox"/></p>

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<p>identified to be relevant (section B) shall be assured.</p>		<p>pg 22 of the PDD has been updated to reflect all of the same sources as in the methodology, and each source is explained and justified.</p>	<p>ording to the Methodology. This matter is considered clarified.</p>	
<p><u>Clarification Request No. 15</u> PP should clarify how it is assured that a high quality database is available during the quarterly re-assessments. Clarify the mode of information transfer between participants and team for kitchen assessment and where such information is stored.</p>	<p>D.4.1</p>	<p><u>Project Proponent, 17 Dec 2008:</u> The baseline KS was performed based on the database of 613 users. However, due to barriers of illiteracy, the PP was unable to develop a system of collecting ongoing end user contact data. Therefore, ongoing monitoring is performed based on house to house surveying in neighborhoods where SEWA stoves are sold. Households are sampled by neighborhood based on the proportion of sales in each neighborhood the previous quarter. Should changes in sales distribution occur that create the need for new cluster definitions, the quarterly KS will detect these changes and new KPTs will be performed. The PDD has been updated to reflect exact process. See pg 32-33 in PDD.</p> <p><u>Project Proponent, 4 Feb. 2009:</u> The system is not dependant on data collection through sales agents. Rather, the total sales record includes a sales code through which each stove was sold. This information is gathered and reported on a centralized level with Katene. The data is gathered in an excel sheet and sent to the PP and Berkeley Air Monitoring Group for cross checking and analysis. See pg 45, section D.3. point 3 in the chart on QA/QC for more details.</p>	<p><u>Audit team, 8 Jan. 2009:</u> PP was also requested to clarify the mode of information transfer between participants and the team for kitchen assessment and how the information is stored. Due to the organization of the project, which is based on data collection through sales agents, considerable risks regarding the quality of data continue to be a point of concern. To be closed with QA/QC procedure</p> <p><u>Audit team, 9 Feb. 2009:</u> On-site audit revealed that the system depends on the sales information (number of stoves sold) provided by sales agents. If PP thinks this is not the case, he should explain in details what is meant by “sales code through which each stove was sold”</p> <p><u>Audit team, 10 Feb. 2009:</u> According to the information</p>	<p><input checked="" type="checkbox"/></p>

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	<p><u>Project Proponent 9 Feb. 2009:</u></p> <p>To clarify further, each of Katene’s retail partners was assigned a sales code. Katene keeps track of how many stoves are sold to each sales outlet, and notes the sales outlet to which the stove was sold (by noting the retail partner’s sales code) in the total sales database. Therefore, the sales code that is associated with each stove is compiled and reported by Katene, not the sales agents.</p> <p><u>Project Proponent, 10 Feb. 2009:</u></p> <p>After clarifying further with Katene, it became evident that the actual system is a combination of what the DOE observed during the site visit and what the PP was claiming. The DOE is correct that initial stove sales numbers are collected on a decentralized basis from sales outlets. Each sales outlet tracks how many stoves they sell, and reports the number sold to Katene twice per month. However, Katene cross checks these numbers with the number of stoves delivered to the sales outlet for the same period. When any discrepancy exists between the two numbers, the lower of the two are reported in Katene’s sales records and ultimately reported to E+Carbon to be included in the project activity. This cross checking provides an additional level of QA/QC to ensure accuracy and conservative reporting. The PDD has been updated accordingly on page 45, section D.3. point 3 in the chart on QA/QC. Note that Katene has assigned a sales code to each sales outlet, and reports all</p>	<p>collected on-site, sales agents register the number of stoves sold on sheets of paper. These sheets are then forwarded by the various agents to Katene who then transfers them to E+Carbon. The various depots may have codes but the stoves themselves don’t have any codes. Information collection on the number of stoves sold is dependent highly on the sales agent. PP should clarify if this information collected on-site is wrong or correct.</p> <p><u>Audit team, 10 Feb. 2009:</u></p> <p>This is what the audit team observed on-site. The issue is therefore clarified and considered closed out.</p>	
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		stoves sold with an associated sales outlet code so that E+Carbon knows where each stove was sold. These codes are included on paper records that are kept at the sales outlet level and delivered to Katene, to be included in Katene's total sales record in excel.		
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Table 3 Unresolved Corrective Action and Clarification Requests (in case of denials)

Clarifications and / or corrective action requests by validation team	Id. of CAR/CR	Explanation of Conclusion for Denial
-	-	-


Validation of the GS VER Project:
Improved Household Charcoal Stoves in Mali

Annex 2: Information Reference List

Reference No.	Document or Type of Information																																																			
1	Project Design Document: "Improved Household Charcoal stoves in Mali" version 2.2																																																			
2	Title of the methodology: "Indicative Programme, Baseline, and Monitoring Methodology for Improved Cook-Stoves and Kitchen Regimes" and its version is 01																																																			
3	Validation Protocol GS Cookstoves Mali draft CF ver1 (First Draft validation protocol after Desk Reviewing the PDD)																																																			
4	List of Participants during the site visit 02.10.08 to 04.10.08 in Bamako, Mali																																																			
	<p>The on-site audit was conducted from 02 - 04 October, 2008 by the audit team from TÜV SÜD</p> <p>Composition of the audit team:</p> <table> <tr> <td>Martin, Schroeder, Mr</td> <td>Lead GHG Auditor</td> <td>TÜV SÜD, Munich</td> </tr> <tr> <td>Cyprian Fusi, Mr</td> <td>GHG Auditor Trainee</td> <td>TÜV SÜD, Munich</td> </tr> </table> <p>Names of people interviewed:</p> <table> <tr> <td>M. Ousmane Samassekou</td> <td>General Manager</td> <td>Katene Kadji GIE, Mali</td> </tr> <tr> <td>Mme. Mariam Tienou</td> <td>Surveyor</td> <td>Contracted by Berkeley Monitoring Group</td> </tr> <tr> <td>M. Kouloutan Coulibaly</td> <td>Chief of Division</td> <td>DNCN, Mali</td> </tr> <tr> <td>M. Birama Diabaté</td> <td>Employee</td> <td>DNCN, Mali</td> </tr> <tr> <td>M. Doumbia Diakaridia</td> <td>Salesman (Retailer)</td> <td>Katene Kadji GIE, Mali</td> </tr> <tr> <td>M. Sylla Bamahame</td> <td>Salesman (Retailer)</td> <td>Katene Kadji GIE, Mali</td> </tr> <tr> <td>Mme. Sissoko Kouyate</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Hawah Fall</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Aminata Traoré</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Dembele Anna Lyffa</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Haidara Ami</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Oumou Diarra</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Guindo Kozo Maiga</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Mme. Baty Suffa</td> <td>Domestic end-user</td> <td>SEWA stoves</td> </tr> <tr> <td>Just to name a few...due to long list</td> <td></td> <td></td> </tr> </table>	Martin, Schroeder, Mr	Lead GHG Auditor	TÜV SÜD, Munich	Cyprian Fusi, Mr	GHG Auditor Trainee	TÜV SÜD, Munich	M. Ousmane Samassekou	General Manager	Katene Kadji GIE, Mali	Mme. Mariam Tienou	Surveyor	Contracted by Berkeley Monitoring Group	M. Kouloutan Coulibaly	Chief of Division	DNCN, Mali	M. Birama Diabaté	Employee	DNCN, Mali	M. Doumbia Diakaridia	Salesman (Retailer)	Katene Kadji GIE, Mali	M. Sylla Bamahame	Salesman (Retailer)	Katene Kadji GIE, Mali	Mme. Sissoko Kouyate	Domestic end-user	SEWA stoves	Mme. Hawah Fall	Domestic end-user	SEWA stoves	Mme. Aminata Traoré	Domestic end-user	SEWA stoves	Mme. Dembele Anna Lyffa	Domestic end-user	SEWA stoves	Mme. Haidara Ami	Domestic end-user	SEWA stoves	Mme. Oumou Diarra	Domestic end-user	SEWA stoves	Mme. Guindo Kozo Maiga	Domestic end-user	SEWA stoves	Mme. Baty Suffa	Domestic end-user	SEWA stoves	Just to name a few...due to long list		
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Reference No.	Document or Type of Information
5	Fiche de Ventes (Sales inventories for different months and for different communities) Badale: F05-001; Daouda Doumbia: F05-003; Boubocar Dembele: F05-002; Djelibougou: R01-001; Banankabougou: F06-001 K06-002; Barry: K06-001; Barry: K06-002; Moussa Daou: F02-001; N'Golonina: F02-002
6	Projet: Unités de production des foyers améliorés <<SEWA Kadji>> June 2007 (Production details for SEWA stoves)
7	Investment Law Republic of Mali (as an Annex to Production details for SEWA stoves)
8	Utilisation et Entretien du Fourneau SEWA (Users' Instructions)
9	Katene et le Commerce de Carbone (Katene and the Carbon Market – Discounted price list)
10	Recueil des textes législatifs et réglementaires en matière de gestion des ressources forestières fauniques et halieutiques- Sept. 1999 (Text on regulation and management of forest resources, fauna and flora – Sept. 1999)
11	Republic of Mali: Strategie Energie Domestiques (Volet Offre): Schema Directeur D'Approvisionnement en Bois Energie de Bamako (Domestic Energy Strategy: Information system on strategic Supply of Wood fuel in Bamako) March 1998
12	Registration and operating license Katene Kadji GIE No. 10750 of 23.04.2003
13	Rapport de Tests Techniques sur le Fourneau SEWA (Report of Technical Tests on SEWA Stoves), April 1998
14	Rapport de Tests Culinaires sur les fourneaux SEWA, WASSA, DAAMU, NAFACAMAN, MALGACHE (Report of culinary Test on SEWA, WASSA, DAAMU, NAFACAMAN, MALGACHE Stoves) January 1999
15	Technical drawing of SEWA Stoves
16	Emission Reduction Purchase Agreement between E+Carbon and Katene Kadji signed on 27.02.2008 (1 st and 2 nd tier)
17	Annual Report Katene Kadji 2005 & 2006
18	KS & KPT list_Katene Kadji_Mali_Berkeley Air.xls
19	Katene Financial June 2007.doc
20	SCHEMA DIRECTEUR D'APPROVISIONNEMENT (SDA) EN BOIS ENERGIE DE BAMAKO, Rapport Final
21	ERPA Amendment dated 18.08.2008
22	Carbon Monitoring Report on the Sewa Improved Charcoal Stoves of Katene Kadji, Mali
23	Convention Tripartite No. 003/MMEE-AMADER-DED (AMADER Contract: Financial support)
24	Protocole d'Accord (Contract between GTZ and Kadji: Financial support)
25	Katene Financial Summary

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Reference No.	Document or Type of Information
26	Attestation: Portant arret de sunvention des prix des foyers ameliorés SEWA KADJI. (Suspension of aid from AMADER)
27	Detailed customer Database.xls
28	Total Sales record thru Oct. 31, 2008
29	Mali Stove PDD_Final8.doc
30	Projet FOYER amelioré Mali – FAMALI (GTZ end-of-grant attestation dated 21.01.2009)
31	GTZ: Record of surrender of equipment and materials to the project executing organization in the partner land dated 10.12.2007
32	Mali Stove PDD_Final9.doc
33	Q3-2008 Sales Breakdown.xls
34	Katene financial audit report.pdf (Rapport d'audit de rentabilité Période: 2004 à 2008)
35	Gold Standard email between PP and Dr. Meinrad Buerer on parallel usage of both efficient and inefficient stoves
36	Confidential agreement_excerpt.pdf
37	Mali Stove PDD_Final10.doc
38	Prefeasibility Assessment Cook-stoves Mali Final.pdf
39	Mali PDD ER Projections.xls ("CEIHD Household Energy Carbon Calculator")
40	Katene-ERPA.msg.msg
41	Forestry Department Of UN FAO ftp://ftp.fao.org/docrep/fao/009/i5838e/i5838e00.pdf
42	NRBB assessment_Bamako-Mali_Berkeley Air.xls
43	