



## WORK PLAN

for

Gold Standard Verification of Programme of Activities: "The Breathing Space Improved Cooking Stoves Programme, India"

The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 01 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 02 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 03 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 04 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 05 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 06 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 07 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 08 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 09 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit

Gold Standard Ref No: GS 916(PoA), GS 1029 (VPA 01), GS 1030(VPA 02), GS 1031(VPA 03), GS 1032 (VPA 04), GS 3363(VPA 05), GS 3364(VPA 06), GS 3365(VPA 07), GS 3366(VPA 08), GS3367 (VPA 09), GS 4921 (VPA 10), GS 5046 (VPA 11)

Methodology: AMS-II.G

Monitoring Period: 01/08/2015 – 31/07/2017

Applicable Gold Standard Requirements: Version 2.2

**Carbon Check (India) Private Ltd.**  
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Noida – 201 301  
India



## **Abbreviation**

<b>CC IPL</b>	Carbon Check (India) Private Ltd.
<b>DOE</b>	Designated Operational Entities
<b>DVR</b>	Draft Verification Report
<b>ER</b>	Emission Reduction
<b>FVR</b>	Final Verification Report
<b>GS</b>	Gold Standard
<b>GHG</b>	Greenhouse gas(es)
<b>MR</b>	Monitoring Report
<b>MP</b>	Monitoring Plan
<b>OSV</b>	On Site Visit
<b>PDD</b>	Project Design Document
<b>QC/QA</b>	Quality control/Quality assurance
<b>TA</b>	Technical Area
<b>TR</b>	Technical Review
<b>VER</b>	Verified Emission Reduction



Dear Sirs,

Please find below Gold Standard Verification Workplan prepared according to Gold Standard Requirements version 2.2 for PoA-The Breathing Space Improved Cooking Stoves Programme, India.

<b>Monitoring Period</b>	Monitoring Period for VPA 01-11 01/08/2015 – 31/07/2017
<b>PoA title</b>	The Breathing Space Improved Cooking Stoves Programme, India
<b>Project developer</b>	Envirofit International Limited
<b>Country</b>	India
<b>GS project reference number</b>	GS916
<b>Gold Standard Project Registration Date</b>	09 July 2012
<b>CCL Reference No</b>	CC IPL556 A/GS/VER/TBSICSP/20170825
<b>Registered under CDM</b>	NA
<b>Methodology</b>	AMS-II.G
<b>Version of Methodology</b>	Version 3
<b>GHG reducing Measure/technology</b>	GHG reduction due to saving of wood (non renewable biomass) through implementation of efficient Cook stoves.
<b>Sectoral Scope (Technical Area)</b>	3 (3.1)
<b>Applicable Gold Standard Requirements</b>	Version 2.2

Yours sincerely,  
Vikash Kumar Singh  
Team Leader

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**Work Plan of Carbon Check Pty Ltd for GS verification of The Breathing Space Improved Cooking Stoves Programme, India** The verification plan has been prepared specifically depicting the information in accordance with the GS requirements version 2.2.

### **Composition of Audit Team**

According to the technical scopes and experiences in the sectoral or national business environment Carbon Check (India) Private Ltd., (herein after CCIPL) has composed a project team in accordance with the appointment rules of the CCIPL. The team collectively has knowledge of the requirements of CDM and GS. Carbon Check confirms that the audit team has no conflict of interest and further more is fully independent from all other aspects of the project.

The verification team consists of the following personal:

<b>Role/Qualification</b>	<b>Last Name</b>	<b>First Name</b>	<b>Country</b>
Team Leader/ Technical Expert/Local Expert	Singh	Vikash Kumar	India
Team Member	Sharma	Kranav	India
Team Member (Trainee)	Suman	Priya	India
Technical Reviewer	Anand	Amit	India

### **Audit Team Experience:**

The team composition is linked to the methodology and local experience in the host country.

**Vikash Kumar Singh:** Qualified lead assessor and internal technical reviewer for offset projects validations and verifications under CDM, VCS and Gold Standard (GS) and actively been involved in the validation and verification or internal technical review of more than 200 offset projects. He is qualified as technical expert for TA 1.2, 3.1,4.1,13.1 and 13.2 under CDM SS categorisation. He has undergone extensive training in the validation and verification of carbon offset projects including the accreditation requirements for the VVBs. He has also received accreditation from the California Air Resources Board (ARB) under Executive Order H2-13-174 as a GHG offset lead verifier for carbon offsets projects and is a specialist for the livestock protocol. Currently. He is employed with Carbon Check in the capacity of Compliancance officer. He holds a Bachelor of Science degree in Environment & Water Management and Master of Science degree in Environmental Management. He has also attended Several Gold Standard DOE webinar training. He has been involved in number of GS validation and verification projects (as internal technical reviewer and team leader) in the following Gold Standard Projects:

GS 1078, GS 1044, GS 976, GS 850, GS 916 PoA (GS 1231 (VPA 01) GS 1029 (VPA 02), GS 1030(VPA 03), GS 1031(VPA 04) and GS 4364.

**Kranav Sharma:** Kranav Sharma holds a Post Graduate in Renewable Energy Engineering and Management. He is a trained GHG Auditor. He has participated in 2 day ISO 14064 training course (internal) and 3 day ISO 14064 training course organized by CII. He has participated in multiple GS, VCS and CDM validations and verifications. He has also worked as a consultant in GS Verification of “Energy Efficiency measures in DMRC Phase II

stations” with GS reference number GS 1078. He is qualified as technical expert for TA 1.2 and 3.1 CDM SS categories. He is currently actively involved in number of gold standard validations and verifications.

**Priya Suman:** Priya has done B.Sc. in Environment & water management and M.Sc. in Environment Science. Priya is working with CCIPL since last 3 years and has undergone trainings on Accreditation standard, Accreditation Procedure and requirements as well as knowledge of CDM Project cycle and validation and verification standard. Priya has undergone and successfully completed a 5 days Lead Auditor Training Course on Quality Management System based on ISO 9001:2015 Standard by TÜV SÜD South Asia Pvt. Ltd. and 3 days training programme on ISO 14064: 2006 by CII.

### **Gold Standard Verification Time Frame:**

A time frame envisaged for this GS verification project is as follows:-

<b>Milestone description</b>	<b>Time</b>
Date of contract signing with the DOE	09/02/2018
Publication of Documents	1 <sup>st</sup> week
Document Review	2 <sup>nd</sup> week
On-site Audit	5 <sup>th</sup> week (11/04/2018 – 13/04/2018)
Submission of Draft Verification Report (Issuance of CARs/CLs)	6 <sup>th</sup> week
Response from the PP to DVR	7 <sup>th</sup> week
Assessment of PP response to DVR	7 <sup>th</sup> week
2 <sup>nd</sup> Round of Assessment of PP response to DVR	8 <sup>th</sup> week*
FVR Submission for Technical Review	9 <sup>th</sup> week**
Quality Review of FVR before submission to client	9 <sup>th</sup> week
Submission of Final Verification Report	10 <sup>th</sup> week

\*If issues not closed out then 2<sup>nd</sup> round will proceed.

\*\*Provided all issues (Corrective action requests and Clarifications Requests) are closed.

### **Documents to Review**

Explanation on the assessment of SD indicators/parameters

SD indicators parameters/indicators shall be assessed by means of document review and onsite visit. Following documents shall be reviewed as a part of this assessment:

- ⇒ Survey records
- ⇒ Sales Records
- ⇒ Training Records
- ⇒ PP’s records (for the indicator Quantitative employment and income generation)

The assessment above shall be re-confirmed (cross-checked) during the OSV (both by means of physical verification as well as OSV interviews with the relevant stakeholders for e.g. Households, representatives of Envirofit International Limited .

The required sets of documents to be submitted to DOE are as follows:

Sr. No.	Document
/01/	First Monitoring Report
/02/	Emission reduction spread sheet corresponding to /01/
/03/	Technical drawing and specification of all cook stoves models used in VPA 01, VPA 02, VPA 03 , VPA 04, VPA 05, VPA 06, VPA 07, VPA 08,VPA 09, VPA 10, and VPA 11
/04/	Summary for all end users of the individual VPAs containing details of the end user, stove model, batch number and distributor.
/05/	Samples sales records/warranty cards for VPA 01, VPA 02, VPA 03 , VPA 04, VPA 05, VPA 06, VPA 07, VPA 08,VPA 09 VPA 10, and VPA 11
/06/	Efficiency test reports- on site water boiling test records
/07/	Record of ex-post survey done for the monitoring of parameters Stove Operation Fraction, Disposal/Discontinuation of traditional cookstove, Air Quality and Access to affordable and clean energy services.
/08/	Records of HR / Sales and marketing records for the parameter “Quantitative employment and income generation “
/09/	Internal Audit Report
/10/	Records of training Training procedures and records of the personnel involved in GHG monitoring: <ol style="list-style-type: none"> <li>1. Carbon Record Procedure</li> <li>2. Warranty policy documents and their training</li> <li>3. Declaration from Envirofit International Limited that training is provided to personnel involved in the survey &amp; sampling</li> </ol>
/11/	Proof of start date for all VPA(s)
/12/	Evidence for Substantiation of market awareness raising initiatives like demonstrations, stalls, public displays, trainings etc.
/13/	Proof that end users are aware of and give up their rights on emission reductions.

Background documents:

Ref no.	Reference Document
/B01/	1. Validation and Verification Standard version 09

<b>/B02/</b>	Gold Standard specific rule/guidelines/standard: <ol style="list-style-type: none"> <li>1. Gold Standard tool kit (GSv2.1_Toolkit)</li> <li>2. GSv2.1-Requirements</li> <li>3. GS-annexes to toolkit</li> </ol>
<b>/B03/</b>	AMS-II.G, Version 02
<b>/B04/</b>	<ol style="list-style-type: none"> <li>1. Guideline: Completing the monitoring form</li> <li>2. Template of MR available on UNFCCC website</li> </ol>
<b>/B05/</b>	<p>Registration documents:</p> <ol style="list-style-type: none"> <li>a) Gold Standard Passport</li> <li>b) Registered GS-VER-PoA-DD “The Breathing Space Improved Cooking Stoves Programme, India”, 21/11/2012, Version: 5.2</li> <li>c) Registered VPAs Documents (VPA DD and passport) for : <ul style="list-style-type: none"> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 01 Envirofit” – GS 1029</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 02 Envirofit” – GS 1030</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 03 Envirofit” – GS 1031“</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 04 Envirofit” – GS 1032”</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 05 Envirofit- GS- 3363”</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 06 Envirofit – GS -3365”</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 07 Envirofit GS- 3365”</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 08 Envirofit GS- 3366”</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 09 Envirofit GS-3367”</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit” – GS 4291</li> <li>• “The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit” – GS 5046</li> </ul> </li> <li>d) Validation Reports of VPA 01-11</li> <li>e) Verification Report for VPA 01-09.</li> </ol>
<b>/B06/</b>	Standard for Sampling and surveys for CDM project activities and programmes of activities,
<b>/B06/</b>	GS synthesis of the comments and requests for clarification/corrective action

	received during the 8-week registration review period and GS issuance review for VPA 01-04
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The documents submitted would be reviewed to verify the correctness, credibility and interpretation of the presented information; furthermore a cross check between information provided and information from other sources will be done as initial step of the verification process.

Verification approach:

The verification approach consists of the following three phases:

1. A desk review of the MR, ER Sheet and supporting evidences.
2. On-site visit and follow-up interviews with relevant project stakeholders.
3. The resolution of outstanding issues and the issuance of the final verification report.

During the verification process, the audit team shall make reference to available information related to similar projects or technologies as the GS project activity. The documentation shall also be reviewed against the approved methodology applied to confirm the appropriateness of formulae and correctness of calculations.

The background documentation and data would be thoroughly analysed in order to check the emission reductions, sustainability development indicators and mitigation measures are in accordance with monitoring plan of registered PDD and GS monitoring plan guidelines.

### **Parameters to be monitored**

Verification team shall assess the monitoring techniques and feasibility of the values and provide a short summary on the verification of every parameter listed in the monitoring plan and used for calculation of:

Brief descriptions of the monitored parameters are listed below

1. Parameter  $\eta_{new,(i,j)}$   
Efficiency of the system being deployed as part of the project activity
2. Parameter “N<sub>all</sub>”  
Total Number of stoves sold
3. Parameter “SOF”  
Stove Operation Fraction - To determine only stoves that are still operating, measured ex-post through survey
4. Parameter “Disposal/Discontinuation of traditional cookstove”  
Disposal of traditional cookstove

### **On site Audit Planning and schedule**

CCIPL would conduct on site audit and physical site inspection to confirm relevant information and to resolve issues identified in the first document review. The site visit has been planned during the 09<sup>th</sup> April 2018 to 13<sup>th</sup> April 2018, the Team Leader(who is also the technical expert and local expert) shall attend the site visit.

The audit schedule envisaged for this GS-VER verification project is as follow:

Date	Time	Auditor	Location	Topic	Discussion agenda/Required Evidence
<b>DAY 1: 11/04/2018</b>					
11/04/2018	11.00 - 12.00	VKS, PS	Travel to Envirofit office in Pune		
11/04/2018	12.00 - 13.00	VKS, PS	Project site	Opening Meeting and brief project description by the PP.	Project geographical coverage and safety requirements. Internal audits, warranty records, cook stove distribution records and records of sampling and survey including test conducted for efficiency-water boiling test.
11/04/2018	13.00-14.00	Lunch Break- Travel to the project site.			
11/04/2018	14.00-17.00	VKS, PS	Project site	Physical site visit (to check project implementation and operation)	Photographs shall be taken of the project equipment (Stoves) and relevant monitoring equipment's including interview with the end users.
<b>DAY 2: 12/04/2018</b>					
12/04/2018	08.00 - 09.00	Travel to the project site.			
12/04/2018	09.00-12.00	VKS, PS	Project Site	Compliance of Monitoring plan with the applied methodology and registered monitoring plan and project implementation and operation as per the	<ul style="list-style-type: none"> <li>Measurement instruments, onsite observation and interview with the households (stove users)</li> </ul>

Date	Time	Auditor	Location	Topic	Discussion agenda/Required Evidence
				registered PDD.  Physical site visit (to check project implementation and operation)	
<b>12/04/2018</b>	12.00-13.00	Lunch Break			
<b>12/04/2018</b>	13.00-15.30	VKS, PS	Project Site	Onsite inspection	Onsite observation and interview with the households (stove users) and stove distributors
<b>12/04/2018</b>	15.30-17.00	VKS, PS	Project Site	Discussion on Monitoring report and ER calculation spread sheets. Furthermore, monitoring plan discussion (to check compliance with the registered PDD and applied methodology)	Compliances to the applicable guidelines of GS and CDM. Overall discussion on monitoring report and review of the following points: <ul style="list-style-type: none"> <li>• Technical specification data</li> <li>• Document checks e.g. sales records etc.</li> <li>• Data management and reporting</li> <li>• Quality control</li> <li>• Records of cook stoves</li> <li>• Documented procedures related to GHG monitoring</li> <li>• Job descriptions for positions involved in GHG monitoring.</li> </ul> Records inspection and appropriateness of monitoring during the verification period
<b>12/04/2018</b>	17.00-17.30	VKS, PS	Project site/client office	Closing meeting.	
<b>DAY 2: 12/04/2018 - Depart from Pune to Chennai</b>					

Date	Time	Auditor	Location	Topic	Discussion agenda/Required Evidence
<b>DAY 3: 13/04/2018</b>					
13/04/2018	08.00 - 09.00	VKS, PS	Travel to Envirofit office in Chennai		
13/04/2018	09.00 - 13.00	VKS, PS	Project site	Opening Meeting and brief project description by the PP.	Project geographical coverage and safety requirements. Internal audits, warranty records, cook stove distribution records and records of sampling and survey including test conducted for efficiency-water boiling test.
13/04/2018	13.00-14.00	Lunch Break- Travel to the project site.			
13/04/2018	14.00-17.00	VKS, PS	Project site	Physical site visit (to check project implementation and operation)	Photographs shall be taken of the project equipment (Stoves) and relevant monitoring equipment's including interview with the end users.
				Compliance of Monitoring plan with the applied methodology and registered monitoring plan and project implementation and operation as per the registered PDD.	<ul style="list-style-type: none"> <li>Measurement instruments, onsite observation and interview with the households (stove users)</li> </ul>
				Physical site visit (to check project implementation and operation)	
				Onsite inspection	Onsite observation and interview with the households (stove users)

Date	Time	Auditor	Location	Topic	Discussion agenda/Required Evidence
					and stove distributors
				Discussion on Monitoring report and ER calculation spread sheets. Furthermore, monitoring plan discussion (to check compliance with the registered PDD and applied methodology)	<p>Compliances to the applicable guidelines of GS and CDM. Overall discussion on monitoring report and review of the following points:</p> <ul style="list-style-type: none"> <li>• Technical specification data</li> <li>• Document checks e.g. sales records etc.</li> <li>• Data management and reporting</li> <li>• Quality control</li> <li>• Records of cook stoves</li> <li>• Documented procedures related to GHG monitoring</li> <li>• Job descriptions for positions involved in GHG monitoring.</li> </ul> <p>Records inspection and appropriateness of monitoring during the verification period</p>
13/04/2018	17.00-17.30	VKS, PS	Project site/client office	Closing meeting.	

[VKS= Vikash Kumar Singh]

[PS= Priya Suman]

The following set of documents would also be checked during the on-site audit:

Type	Title of Content
Technical	Technical Specifications of project cookstoves including of stove efficiency.
Legal	Consent and approvals from regulatory authorities if applicable, right of relinquishment of carbon credits from H/h to PP.
Organization	Organization chart, monitoring personnel, sampling/survey procedure.

The Audit schedule will be submitted to the client in advance to the on-site audit.

### **Interaction with the project developer**

Communication would be carried out via GS registry (project documentation from PP and protocol/verification report from DOE) and including direct communication with the PP/CME (Email and telephone). The objective of this phase of the verification is to resolve any outstanding issues (issues that require further elaboration, research or expansion) which have to be clarified/corrective action done prior to final DOE's conclusions on the project implementation, monitoring practices and achieved emission reductions. In order to ensure transparency a verification protocol is completed for the project activity. The protocol shows in transparent manner criteria (requirements), means of verification and resulting statements on verification actual project activity against identified criteria

The protocol serves the following purposes:

- ✓ It organises in a table form, details and clarifies the requirements, which the project is expected to meet;
- ✓ It ensures a transparent verification process where the DOE will document how a particular requirement has been verified and the result of the verification.
- ✓ It ensures that the issues are accurately identified, formulated, discussed and concluded in the verification report.
- ✓ It ensures the determination of achieving credible emission reductions from the project activity.

The protocol consists of two tables. Table 1 reflects the verification requirements and reference to the materials used to verify the project activity against those requirements, as well as means of verification, reference to Table 2 (i.e. tables of findings) and preliminary and final opinion of the DOE on every particular requirement listed in table 1.

### **Stakeholders Interviewed**

During the site visit audit, relevant local stakeholders to be interviewed:

1. House-holds (end user) using project technology, i.e. improved cook stoves.
2. Personnel of Envirofit International Limited, Consultant and distributors
3. Other Local stake holders for e.g. party/personels conducted survey and water being test

### **Internal Quality Control**

As a final step of verification, the final documentation including the verification report and annexes have to undergo an internal quality and technical control by the Carbon Check, i.e. Final Verification Report has to be technically reviewed by independent competent technical reviewer and finally approved either by the Head of the DOE or provisional person. If the documents have been satisfactorily approved by the CCIPL QR and TR team, the FVR will be submitted to the PP for further upload to the GS Registry. Communication of final verification opinion to the Gold Standard will be carried out by the DOE via GS registry.

The decision whether the verification opinion will be submitted for approval to the GS or not solely rests with the DOE.



### **Suggestions for more / less frequent site visits**

As per Gold Standard tool kit version 02.1, a site visit is mandatory during one of the first two years after the start of project operation, and by default once every three years after that, This is first periodic verification and site visit has been planned for this verification.

### **Grievance Mechanism**

If at any time you would like to discuss with us how our service to you could be improved, or if you are dissatisfied with the service you are receiving or if you have any other complaint, you may take the issue up with your usual direct contact. If you prefer an alternative route, please contact our Compliance Officer, G 49 & 50, 3rd Floor, Sector-3, Noida – 201 301, India.

We undertake to look into any complaint carefully and promptly and to do all we can to explain the position to you. If we have given you a less than satisfactory service we undertake to do everything reasonable to put it right and, if you are still not satisfied, you may, of course, take matters up with our professional institute body we are to set up. In the event of appeals and disputes these shall be handled in accordance with the complaints, appeals and disputes procedure published on [www.carboncheck.co.in](http://www.carboncheck.co.in)