



Validation report form for Gold Standard component project activities

(version 01.0)


Complete this form in accordance with the attachment: "Instructions for filling out the validation report form for Gold Standard component project activities" at the end of this form.

VALIDATION REPORT

| Reference number and title(s) of the specific-case VPA(s)   | Ref. no.  | Title  |
|---|---|--|
|   |   | 4291   |
|   | 5046  | The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit              |
| Version number of the validation report   | 1.2   |  |
| Completion date of the validation report  | 28/08/2017  |  |
| Title and GS Ref No. of the PoA (where applicable) into which the specific-case VPA(s) is/are included                      | GS 916 : The Breathing Space Improved Cooking Stoves Programme, India |  |
| Version number of the PoA-DD into which the specific-case VPA(s) is/are included  | Version 5.2, dated 21/11/2012   |  |
| Coordinating/managing entity (CME)  | Envirofit International Limited                                       |  |
| Host Party(ies)   | India   |  |
| Estimated annual average emission reductions or net GHG removals in the crediting period (tCO2e) for each specific-case VPA | VPA Ref. no.  | Estimated annual average emission reductions or net GHG removals in the crediting period (tCO2e) |
|   | VPA – 10: 4291  | 22,145   |
|   | VPA – 11: 5046  | 22,543   |
| Sectoral scope(s) for each specific-case VPA  | VPA Ref. no.  | Sectoral scope(s)  |
|   | VPA – 10: 4291  | SS 3 : Energy Demand   |
|   | VPA – 11: 5046  | SS 3 : Energy Demand   |
| Selected methodology(ies) for each specific-case VPA  | VPA Ref. no.  | Selected methodology(ies)  |
|   | VPA – 10: 4291  | AMS-II.G. ver. 3 - Energy efficiency measures in thermal applications of non-renewable biomass   |
|   | VPA – 11: 5046  | AMS-II.G. ver. 3 - Energy efficiency measures in thermal applications of non-renewable biomass   |
| Selected standardized baseline(s) for each specific-case VPA  | VPA Ref. no.  | Selected standardized baseline(s)  |
|   | VPA – 10:   | Not applicable   |

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|--|---|----------------|
|  | 4291  |                |
|  | VPA – 11:<br>5046   | Not applicable |
| <b>Name of DOE</b>   | Earthood Services Private Limited   |                |
| <b>Name, position and signature of the approver of the validation report</b> | <br>Kaviraj Singh<br>Managing Director |                |

## SECTION I. Executive summary

### Summary of PoA and specific case VPA

The PoA under which VPAs seek validation has a GS reference number 916 and titled "The Breathing Space Improved Cooking Stoves Programme, India". The PoA aims at replacing inefficient traditional stoves with highly efficient project cook stoves in domestic households in parts of India.

Currently a large part of rural Indian population used traditional stove, which due to its inefficiency, not only demands more fuel but also produces indoor air pollution. The major victims of this indoor air pollution are women and children due to their close proximity to the source and prolonged exposure. The replacement stove, i.e. improved cook stove (ICS) is much more efficient in terms of fuel consumption and heat transfer both. This will lead to reduced indoor air pollution to which the household people are exposed. Thus, inturn the implementation of this PoA leads to reduction in GHG emission which is measureable and verifiable.

The coordinating and managing entity (CME) for this PoA is Envirofit International Limited. The involvement of CME was also evident during onsite visit. The head office of CME is located in Bengaluru city of India.

The VPAs to be included in the PoA are retroactive in nature which carries forward the same aim as the PoA. All of them involve the installation and maintenance of fuel efficient cook stoves.

### Scope of Validation

Envirofit International Limited (CME) has contracted Earthood Services Private Limited (Earthood) to conduct the validation for the inclusion of "VPA 10 and VPA 11", to the registered GS PoA No. 916 titled "The Breathing Space Improved Cooking Stoves Programme, India".

The scope of validation is to assess the claims and assumptions made in the PoA design document (PoA-DD, VPA-DD) and against the GS & CDM criteria, including but not limited to, GS toolkit, CDM PS, CDM VVS, applied methodology and other relevant rules and requirements established for GS project activities.

The validation is not meant to provide any consulting towards the project participants. However, stated requests for clarification and/or correction actions request may have provided inputs for improvement of the project design.

### Validation Process:

The validation process involves an agreement with project participant for validation scope in accordance with the latest valid GS Toolkit, GS methodology, CDM AS, CDM PS, CDM VVS and other applicable GS annexures.

Earthood assessed and determined whether the implementation and operation of the project activity, and the steps taken to report emission reductions comply with the GS and CDM criteria and relevant guidance provided by UNFCCC and GS. The desk review, onsite assessment, interview, reporting of findings, preparation of draft inclusion report followed by independent technical review (internal quality check) were performed as stated in the further sections of the report. Major inclusion milestones are stated below:

|                                |                          |
|--------------------------------|--------------------------|
| <b>Uploading of work plan:</b> | 23/12/2016               |
| <b>Desk review:</b>            | 24/12/2016 to 01/01/2017 |
| <b>On-site assessment:</b>     | 02/01/2017 to 05/01/2017 |
| <b>Reporting of findings:</b>  | 05/01/2017               |
| <b>Draft Inclusion Report</b>  | 14/07/2017               |
| <b>Final Inclusion Report</b>  | 28/08/2017               |

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**Conclusion:**

Earthood Services Private Limited (hereinafter referred to as Earthood) has performed the validation (Inclusion of VPA) of "VPA 10 and VPA 11". The validation was performed on the basis of rules and requirements defined by UNFCCC and GS for PoA and VPA.

The review of the VPA-DDs, GS passports, supporting documentation and subsequent follow-up actions (onsite visit and interviews) have provided Earthood with sufficient evidences to determine the fulfilment of stated criteria. The proposed VPAs are meeting all the requirements of the PoA "The Breathing Space Improved Cooking Stoves Programme, India" (GS 916).

It is Earthood's opinion that the VPAs 'VPA 10 and VPA 11', as described in the respective VPA-DDs, meets all relevant UNFCCC and GS requirements and correctly applies the baseline and monitoring methodology "AMS-II.G. ver. 3 – Energy efficiency measures in thermal applications of non-renewable biomass". Therefore, Earthood requests the inclusion of the VPAs in the PoA "The Breathing Space Improved Cooking Stoves Programme, India" (GS 916).

**SECTION II. Validation team, technical reviewer and approver****II.1. Validation team member**

| No. | Role             | Type of resource | Last name   | First name  | Affiliation<br>(e.g. name of central or other office of DOE or outsourced entity) | Involvement in |                    |              |                     |
|-----|------------------|------------------|-------------|-------------|---|----------------|--------------------|--------------|---------------------|
|     |                  |                  |             |             |   | Desk review    | On-site inspection | Interview(s) | Validation findings |
| 1.  | Team Leader      | IR               | Gupta       | Anshika     | Central office  | Y              | Y                  | Y            | Y                   |
| 2.  | Validator        | IR               | Gupta       | Anshika     | Central office  | Y              | Y                  | Y            | Y                   |
| 3.  | Trainee verifier | IR               | Kulshrestha | Harshita    | Central office  | Y              | N                  | N            | Y                   |
| 4.  | Technical Expert | IR               | Deka        | Nayan Jyoti | Central office  | Y              | N                  | N            | Y                   |

**II.2. Technical reviewer and approver of the validation report**

| No. | Role               | Type of resource | Last name | First name | Affiliation<br>(e.g. name of central or other office of DOE or outsourced entity) |
|-----|--------------------|------------------|-----------|------------|---|
| 1.  | Technical reviewer | IR               | Garg      | Shreya     | Central office  |
| 2.  | Expert to TR       | IR               | Gautam    | Ashok      | Central office  |
| 3.  | Approver           | IR               | Singh     | Kaviraj    | Central office  |

**SECTION III. Means of validation****III.1. Desk review**

&gt;&gt;

Earthood conducted a desk review as under;

- A review of the data and information presented to verify their completeness;
- A review of the monitoring plan, the monitoring methodology including applicable tool(s) and, where applicable, the applied standardized baseline, paying particular attention to the frequency of measurements, the quality of metering equipment including calibration requirements, and the quality assurance and quality control procedures;
- An evaluation of data management and the quality assurance and quality control system in the context of their influence on the generation and reporting of emission reductions;

In addition to the monitoring documentation, Earthood has reviewed;

- The PoA-DD (accepted revised) Version 5.2 dated 21/11/2012 and the monitoring plan, including any approved revised monitoring plan and/or changes from the registered PoA-DD, and the corresponding validation opinion;
- The applied monitoring methodology (AMS-II.G. ver. 3);
- Any other information and references relevant to the project activity's emission reductions

The complete list of documents reviewed is included under Appendix 3.

### III.2. On-site inspection

| Duration of on-site inspection: 02/01/2017 to 05/01/2017 |  |               |                          |               |
|--|--|---------------|--------------------------|---------------|
| No.  | Activity performed on-site   | Site location | Date                     | Team member   |
| 1.   | Physical sampling of the technology distribution and VPA implementation. Local Stakeholder especially end users interview and, feedbacks                                     | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 2.   | PoA & CPA (Technology, Location and Implementation)  | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 3.   | Choice and applicability of baseline methodology(ies)  | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 4.   | PoA, CPA boundary and emission sources included in the project boundary.   | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 5.   | Baseline identification  | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 6.   | Additionality of the project activity (Baseline alternatives, carbon consideration, Investment analysis, identified barriers, Common Practice analysis)                      | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 7.   | Parameter fixed Ex-ante and Baseline emissions, Project emissions and Leakage calculation, Data monitored inline to PoA-DD and VPA-DD.                                       | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 8.   | Sampling plan and adopted statistical methods/tools stated in PoA-DD, VPA-DDs vis-a-vis implemented on site.   | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 9.   | Monitoring plan (feasibility of monitoring arrangements described in PDD, QA/QC procedures, responsibility of implementation of monitoring plan, data recording & reporting) | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 10.  | Operational lifetime of the technology, Crediting period etc.  | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 11.  | Sustainable Development Matrix, indicators, do not harm assessment and monitored values accordingly.   | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |
| 12.  | Interviews with other stakeholders like suppliers and employees involved in PoA.   | Maharashtra   | 02/01/2017 to 05/01/2017 | Anshika Gupta |

### III.3. Interviews

| No. | Interviewee |            |                                 | Date                     | Subject   | Team member   |
|-----|-------------|------------|---------------------------------|--------------------------|---|---------------|
|     | Last name   | First name | Affiliation                     |                          |   |               |
| 1.  | Lohia       | Rohit      | Envirofit International Limited | 02/01/2017 to 05/01/2017 | Data recording, reporting and calculation of emission reduction, applicability of methodology and compliance with PoA-DD QA/QC procedures, project implementation | Anshika Gupta |
| 2.  | -           | Praveen    | Art of Living                   | 03/01/2017               | Distribution of stoves, implementation of CPAs, grievance mechanism   | Anshika Gupta |

|    |        |        |                                 |                          |   |               |
|----|--------|--------|---------------------------------|--------------------------|---|---------------|
| 3. | Shinde | Bhopal | Art of Living                   | 03/01/2017               | Distribution of stoves, implementation of CPAs, grievance mechanism | Anshika Gupta |
| 4. | Shinde | Dinesh | Art of Living                   | 04/01/2017               | Distribution of stoves, implementation of CPAs, grievance mechanism | Anshika Gupta |
| 5. | -      | Vinay  | Envirofit India Limited         | 02/01/2017 to 05/01/2017 | Implementation of CPAs  | Anshika Gupta |
| 6. | Anchal | Harish | Envirofit International Limited | 02/01/2017 to 05/01/2017 | Implementation of CPAs  | Anshika Gupta |
| 7. | Joshi  | Atul   | Envirofit India Limited         | 02/01/2017 to 05/01/2017 | Implementation of CPAs, data recording, QA/QC procedures            | Anshika Gupta |

#### III.4. Sampling approach

DOE has used a simple random sampling approach for validation purposes. A sample size of 8 was chosen inline to the requirements of Standard Sampling and surveys for CDM project activities and programmes of activities. For the current inclusion request, an acceptance sampling was conducted for 2 VPAs, viz, VPA 10 and VPA 11. The details of the sample of households visited to confirm the project installation has been given in details in the section E.7.1 of the report. As per the sampling methodology for CDM the DOE required 8 random samples to be visited across PoA with an acceptance number of 0, thus DOE selected 10 samples to include a buffer of non-responses. The details of the households visited have been provided in the later sections.

CME shall follow a sampling plan for the following parameters:

1. Efficiency of the ICS deployed ( $\eta_{new}$ )
2. Stoves that are operating (SOF)
3. Disposal / discontinuation of traditional cook-stove
4. Reduction in smoke or Particulate Matter (PM)
5. Access to affordable and clean energy services (Retroactive VPA)

For  $n_{new}$ , water boiling test shall be conducted whereas for all other parameters listed above, a survey will be done. For annual survey, a confidence precision of 90/10 and for biennial survey, 95/5 shall be achieved at VPA level. In case of PoA level, it will be 95/10 and 95/5 respectively. It is inline to the guidelines for sampling and surveys for CDM project activities and programme of activities. A stratified random sampling shall be done with is appropriate for the type of population data.

#### III.5. Clarification requests, corrective action requests and forward action requests raised

| Areas of validation of compliance  | No. of CL | No. of CAR              | No. of FAR |
|--|-----------|-------------------------|------------|
| General description of the VPA(s)  |           |                         |            |
| • Title of the proposed or registered PoA  | -         | -                       | -          |
| • Title(s) of the proposed specific-case VPA(s) and the corresponding generic VPA(s) | -         | -                       | -          |
| • Specific-case VPA design document  | -         | -                       | -          |
| • Purpose and general description of the specific-case VPA(s)                        | -         | CAR#2<br>CAR#3<br>CAR#4 | -          |
| Local stakeholder consultation   | CL#1      |                         |            |
| Eligibility of VPA(s) and estimation of emissions reductions                         |           |                         |            |

|  |    |       |   |
|--|----|-------|---|
| • Applicability of selected methodology(ies) and/or standardized baseline          | -  | -     | - |
| o Deviation from methodology   | -  | -     | - |
| o Clarification on applicability of methodology, tool and/or standardized baseline | -  | -     | - |
| • Sources and GHGs   | -  | -     | - |
| • Description of baseline scenario   | -  | -     | - |
| • Demonstration of eligibility for the VPA(s)                                      | -  | -     | - |
| • Estimation of emission reductions or net GHG removals by sinks                   | -  | -     | - |
| o Explanation of methodological choices  | -  | -     | - |
| o Data and parameters fixed ex ante  | -  | -     | - |
| o Ex ante calculation of emission reductions or net GHG removals by sinks          | -  | -     | - |
| o Summary of ex ante estimates of emission reductions or net GHG removals by sinks | -  | -     | - |
| • Application of the monitoring methodology and description of the monitoring plan | -  | -     | - |
| o Data and parameters to be monitored  | -  | -     | - |
| o Description of the monitoring plan   | -  | CAR#5 | - |
| <b>Total</b>   | 01 | 04    | - |

#### SECTION IV. Internal quality control

The draft validation report that is prepared by validation team is reviewed by an independent technical review team (one or more members) to confirm if the internal procedures established and implemented by Earthood were duly complied with and such opinion/conclusion is reached in an objective manner that complies with the applicable CDM rules/requirements. The technical review team is collectively required to possess the technical expertise of all the technical area/sectoral scope the project activity relates to. All team members of technical review team are independent of the validation team.

During the technical review process additional findings may be identified or the closed out findings may be opened, which needs to be satisfactorily resolved before the request for issuance is submitted to UNFCCC. The independent technical reviewer may either approve the report as such or reject/return the same in such case providing the comments/findings/issues that needs to be resolved by the validation team. The decision taken by the Technical Reviewer is final and is authorized on behalf of Earthood Services Private Limited.

#### SECTION V. Validation opinion

Earthood Services Private Limited (Earthood) has performed a Gold Standard (GS) validation and inclusion of the following VPAs:

- The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit
- The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit

The inclusion is being done under the registered PoA 'The Breathing Space Improved Cooking Stoves Programme, India', GS ref no 916. The validation and inclusion was performed on the basis of rules and requirements defined by Gold Standard and UNFCCC, as appropriate.

The review of the PoA-DD, VPA-DD, Passports, supporting documents and subsequent follow-up actions (onsite visit and interviews) has provided Earthood with sufficient evidence to determine the fulfilment of stated criteria.

The programme of activity is a dissemination of improved cook stoves in households of rural and urban/semi-urban areas in various states of India. The project results in reduction of CO<sub>2</sub>e emissions that are real, measurable and give long-term benefits to the mitigation of climate change. It is demonstrated that the project is not a likely baseline scenario and the emission reductions attributable to the project are, hence, additional to any that would occur in the absence of the proposed GS project activity).

The emission reductions (average) from VPA 10 and VPA 11, are estimated to be 22,145 and 22,543 tCO<sub>2</sub>e/year respectively over the selected fixed 10 years of crediting period. The start date of crediting period

shall be 01/04/2015 for VPA 10 and 22/05/2015 for VPA 11 or two years prior to the date of inclusion in the PoA, whichever is later. The emission reduction forecast has been checked, and it is deemed likely that the stated amount is achievable given that the underlying assumptions do not change.

The monitoring plan explained in VPA-DD is in compliance with the registered PoA DD, Version 5.2. It adequately provides for the ex post monitoring of the project's emission reductions and sustainable indicators as defined in GS passport. The monitoring arrangements described in the monitoring plan are feasible within the project design and it is Earthood's opinion that 'Envirofit International Limited' shall be able to implement the monitoring plan as per the requirements of methodology and registered PoA-DD.

In summary, VPAs as following meets all relevant GS requirements and correctly applies the baseline and monitoring methodology AMS-II.G. ver. 3 - Energy efficiency measures in thermal applications of non-renewable biomass:

| VPA ID  | VPA-DD                          | Passport                        |
|---|---------------------------------|---------------------------------|
| The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit | Version 03.1, dated 21/08/2017  | Version 03.1, dated 21/08/2017  |
| The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit | Version 03.1, dated 21/08/2017, | Version 03.1, dated 21/08/2017, |

Therefore, Earthood requests the inclusion of the above VPAs under the registered PoA (The Breathing Space Improved Cooking Stoves Programme, India) as a GS project activity.

## SECTION VI. Validation findings

### SECTION A. General description of the VPA(s)

#### A.1. Title of the proposed or registered PoA

The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit  
The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit

#### A.2. Title(s) of the proposed specific-case VPA(s) and the corresponding generic VPA(s)

| Specific-case VPA title and reference number  | Version number of the specific-case VPA-DD | Host Party | Version number of the PoA-DD into which the VPA is included |
|---|--|------------|---|
| The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit | Version 03.1, dated 21/08/2017,            | India      | Version 5.2   |
| The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit | Version 03.1, dated 21/08/2017,            | India      | Version 5.2   |

#### A.3. Specific-case VPA design document

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | VPA-DDs for both the VPAs use form CDM-SSC-CPA-DD-FORM version 5.0 which has been issued by UNFCCC for the same purpose. The information has been filled inline to the requirement of form, GS toolkit and applicable annexes. There is no template issued by GS thus usage of this template was found to be appropriate by the assessment team. |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | The template and information contained in it were found to be appropriate and acceptable.  |

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**A.4. Purpose and general description of the specific-case VPA(s)**

| <b>Means of validation</b> | <p><b>Entity/individual responsible for the operation of the VPA(s):</b><br/>                 Envirofit International Limited is the Coordinating and Managing Entity (CME) for both the PoA and VPAs. The information has been reported consistently in design documentations. The participation of the mentioned entity was also evident while onsite visit done by assessment team. The envirofit team was well verse in information related to implementation, QA/QC procedures, data management, carbon emission reduction calculation and other aspects relevant to functioning of VPA.</p> <p><b>Technology/measures to be employed and/or implemented by the VPA(s):</b><br/>                 Both the proposed VPAs involve installations and dissemination of improved cook stoves (ICS). There are 2 models of ICS distributed under these VPAs: M5000 and PCS1 with following thermal efficiencies and 5 years of operational lifetime/8/:</p> <table border="1"> <thead> <tr> <th>Model</th> <th>Thermal efficiency</th> <th>Means of Verification (MoV)</th> </tr> </thead> <tbody> <tr> <td>M5000</td> <td>29.7%</td> <td>Technical specifications document/08/</td> </tr> <tr> <td>PCS1</td> <td>25.4%</td> <td>Technical specifications document/08/</td> </tr> </tbody> </table> <p>The improved cook stove leads to reduced emission by virtue of better heat transfer from stove to pot and a better natural air draft system.</p> <p><b>The Host Party:</b><br/>                 The host party for both the VPAs is India.</p> <p><b>Geographic reference or other means of identification:</b><br/>                 The geographic boundary of both the VPAs has been fixed as physical boundary of India. The boundary was found to be consistent with the sales records/15/ cross-checked onsite and interviews conducted. There were no sales made outside India under both the VPAs. The VPAs has neither been registered as project activities not included in another registered CDM PoA as verified through independent research done by assessment team.</p> <p><b>Duration, crediting period and start date of the VPAs:</b></p> <table border="1"> <thead> <tr> <th>VPA Ref No</th> <th>Duration of the VPA</th> <th>Crediting Period (type, start date)</th> <th>VPA start date</th> <th>Estimated GHG removal during entire crediting period (tCO<sub>2</sub>e) ; annual estimated ERs</th> </tr> </thead> <tbody> <tr> <td>GS 4291 VPA 10</td> <td>10 years</td> <td>Fixed, 01/04/2015 or two years prior to the date of inclusion in the PoA, whichever is later</td> <td>05/05/2014</td> <td>221,450 ; 22,145</td> </tr> <tr> <td>GS 5046 VPA 11</td> <td>10 years</td> <td>Fixed, 22/05/2015 or two years prior to the date of inclusion in the PoA, whichever is later</td> <td>22/05/2015</td> <td>225,430 ; 22,543</td> </tr> </tbody> </table> | Model  | Thermal efficiency | Means of Verification (MoV)  | M5000 | 29.7% | Technical specifications document/08/ | PCS1 | 25.4% | Technical specifications document/08/ | VPA Ref No | Duration of the VPA | Crediting Period (type, start date) | VPA start date | Estimated GHG removal during entire crediting period (tCO <sub>2</sub> e) ; annual estimated ERs | GS 4291 VPA 10 | 10 years | Fixed, 01/04/2015 or two years prior to the date of inclusion in the PoA, whichever is later | 05/05/2014 | 221,450 ; 22,145 | GS 5046 VPA 11 | 10 years | Fixed, 22/05/2015 or two years prior to the date of inclusion in the PoA, whichever is later | 22/05/2015 | 225,430 ; 22,543 |
|----------------------------|---|--|--------------------|--|-------|-------|---------------------------------------|------|-------|---------------------------------------|------------|---------------------|-------------------------------------|----------------|--|----------------|----------|--|------------|------------------|----------------|----------|--|------------|------------------|
| Model                      | Thermal efficiency  | Means of Verification (MoV)  |                    |  |       |       |                                       |      |       |                                       |            |                     |                                     |                |  |                |          |  |            |                  |                |          |  |            |                  |
| M5000                      | 29.7%   | Technical specifications document/08/  |                    |  |       |       |                                       |      |       |                                       |            |                     |                                     |                |  |                |          |  |            |                  |                |          |  |            |                  |
| PCS1                       | 25.4%   | Technical specifications document/08/  |                    |  |       |       |                                       |      |       |                                       |            |                     |                                     |                |  |                |          |  |            |                  |                |          |  |            |                  |
| VPA Ref No                 | Duration of the VPA   | Crediting Period (type, start date)  | VPA start date     | Estimated GHG removal during entire crediting period (tCO <sub>2</sub> e) ; annual estimated ERs |       |       |                                       |      |       |                                       |            |                     |                                     |                |  |                |          |  |            |                  |                |          |  |            |                  |
| GS 4291 VPA 10             | 10 years  | Fixed, 01/04/2015 or two years prior to the date of inclusion in the PoA, whichever is later | 05/05/2014         | 221,450 ; 22,145   |       |       |                                       |      |       |                                       |            |                     |                                     |                |  |                |          |  |            |                  |                |          |  |            |                  |
| GS 5046 VPA 11             | 10 years  | Fixed, 22/05/2015 or two years prior to the date of inclusion in the PoA, whichever is later | 22/05/2015         | 225,430 ; 22,543   |       |       |                                       |      |       |                                       |            |                     |                                     |                |  |                |          |  |            |                  |                |          |  |            |                  |

|                   |   |
|-------------------|---|
|                   | <p>The duration of each VPA is complying with the GS requirements and criteria set in the registered PoA. Type of crediting period is consistently reported in accordance with PoA-DD. The crediting period of the VPAs listed above fall within the PoA lifetime therefore meeting the GS criteria. Start date of VPAs has been found to be after the start date of PoA which is 10/05/2008; validated from the sales record maintained on cloud in database management system by PP /15/ for each VPA.</p> <p><b>Site visit observations:</b><br/>A software called NetSuite, which is a query based system like SAP, has been implemented by CME, as observed while onsite visit, which caters to the database management of bulk sales. For each bulk sales, entry into NetSuite is done along with information such as following (the list below is only for indicative purposes):</p> <ul style="list-style-type: none"> <li>• Name of the client</li> <li>• Address</li> <li>• Contact number</li> <li>• Unique ID of ICS</li> <li>• Installation date</li> </ul> <p>The data management for recording this was found to be robust and reliable. The sales database has been maintained in an easily retrievable manner. Netsuite also contains the financial database pertaining to the distributed cook stoves thus minimises the risk of double counting inter and intra-VPA. In addition to this, each cookstove has been provided with a unique ID which helps in avoiding double counting as well.</p> <p><b>Public funding of VPA:</b><br/>As verified by the no ODA declaration provided by PP /10/, none of the VPAs under inclusion is using public funding.</p> |
| <b>Findings</b>   | CL#1,CAR#2, CAR#3 and CAR#4 were raised and resolved. Please refer appendix 3 for more details.   |
| <b>Conclusion</b> | <p>The DOE confirms the following:</p> <ul style="list-style-type: none"> <li>• The proposed VPAs has only one host party</li> <li>• It is and shall be implemented only in Indian territory</li> <li>• Envirofit International Limited is the CME for both the VPAs</li> <li>• The proposed VPAs has neither been registered as project activities not included in another registered CDM PoA</li> <li>• The proposed VPAs has not been previously excluded from registered PoA</li> <li>• The description of VPAs was found to be accurate and complete</li> </ul>  |

## SECTION B. Eligibility of VPA(s) and estimation of emissions reductions

### B.1. Applicability of selected methodology and/or standardized baseline

|   |   |  |  |               |
|---|---|--|--|---------------|
| <b>Means of validation</b>  | Applicability of methodology for both the VPAs has been assessed below:   |  |  |               |
|   | <b>Applicability condition</b>  | <b>CME justification (VPA 10 and 11)</b>   | <b>DOE assessment</b>  |               |
|   |   |  | <b>VPA 10</b>  | <b>VPA 11</b> |
| This category comprises appliances involving the efficiency improvements in the thermal applications of non-renewable biomass. Examples of these technologies and measures include the introduction of high efficiency biomass fired cook stoves or ovens or dryers and/or improvement of energy efficiency of existing biomass fired cook stoves or ovens or dryers. | The PoA involves installation of improved cooking stoves (efficient biomass cooking stoves) which leads to efficiency improvements in the thermal applications of the non-renewable biomass. The same is being used in the present VPA. | As verified through onsite survey, sales database/15/ and technical specifications of the ICS/8/, VPA includes dissemination of improved cook stoves which has higher efficiency than that of the traditional chulha. Thus, VPA complies with this methodological requirement. | VPA-11 involves the same purpose and implementation as that of other VPAs under the PoA and also VPA-10 as verified through onsite survey and sales database/15/. Efficient cook stoves being disseminated leads to better use of thermal energy from biomass. |               |
| Project participants are able to show that non-renewable biomass has been used since 31 December 1989, using survey methods or referring to published literature, official reports or statistics.   | The same has been justified at the PoA level  | Registered PoA-DD explains the compliance of this criteria. The sources and information mentioned in PoA-DD are still valid and true for the VPA as well. Thus, this requirement is fulfilled by VPA.  | Same as VPA-10   |               |
| <b>Findings</b>   | None  |  |  |               |
| <b>Conclusion</b>   | The methodology was found to be applicable and appropriate for each proposed VPA. This is in compliance with para 81 of VVS version 09.   |  |  |               |

#### B.1.1. Deviation from methodology

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | No deviation from methodology has been observed   |
| <b>Findings</b>            | None  |
| <b>Conclusion</b>          | None of the VPAs show deviation from methodology. |

#### B.1.2. Clarification on applicability of methodology, tool and/or standardized baseline

|                            |                |
|----------------------------|----------------|
| <b>Means of validation</b> | Not applicable |
| <b>Findings</b>            | Not applicable |
| <b>Conclusion</b>          | Not applicable |

### B.2. Sources and GHGs

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | The physical boundary of VPAs has been set as India which was also cross-checked from sales database/15/. For the purpose of quantification of baseline emission only CO <sub>2</sub> has been considered. An apt justification could be found in each VPA-DD. This is consistent with the registered PoA-DD. Project emission has been taken as nil as per the methodology. |
|----------------------------|--|

|                   |  |
|-------------------|--|
| <b>Findings</b>   | None   |
| <b>Conclusion</b> | Sources and GHGs were found to be in compliance with applied methodology, registered PoA-DD and para 91 of VVS Version 09. |

### B.3. Description of baseline scenario

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | In the baseline scenario, population of rural India is using traditional open-fired cook stoves which uses fuel wood as the source of thermal energy used to cook food. It leads to emission of products of incomplete combustion, thereby contributing to environmental damage, degradation of air quality and resultant health impacts. The information has been validated during on-site visit. Baseline scenario was found to be appropriate, applicable and plausible. |
| <b>Findings</b>            | None  |
| <b>Conclusion</b>          | Baseline scenario is in compliance with registered PoA-DD, applied methodology and para 97 of VVS Version 09.   |

### B.4. Demonstration of eligibility for the VPA(s)

#### VPA – 10

| S. No | Eligibility criteria  | CME justification  | DOE assessment  | Conclusion |
|-------|---|--|---|------------|
| 1.    | Involve the distribution of ICS within the geographical boundary of India   | The VPA 10 involves the distribution of ICS within the geographical boundary of India. All ICS included in this VPA 10 are within India  | As verified during onsite visit through end-user survey, interviews and sales records/15/, ICS distribution has taken place only in Indian territory.   | OK         |
| 2.    | Have a maximum energy saving of 180 GWhth/year. Each SSC VPA shall have a system to ensure that stoves bear logo of the PO /CME to ensure their unique association to the PoA | The current size of the proposed SSC VPA 10 is 179.99 GWhth/year and is below the maximum energy saving of 180 GWhth/year prescribed by the methodology. The sales in the CPA will be capped at cumulative energy saving equivalent of 180 GWhth/year. The stoves bear the logo of Envirofit | It was verified through sales records/15/ and technical specification/8/, that the maximum energy saving was below 180 GWhth/year and all the stoves bore logo of the PO /CME.  | OK         |
| 3.    | Uses the small scale approved methodology AMS.II.G ver 3. The CME will verify that all CPA-DDs employ the aforesaid version of the methodology.                               | The proposed SSC-VPA 10 uses the methodology AMS – II.G. ver.3   | It was ensured through desk review that all the VPA-DDs had employed the AMS.II.G ver 3 methodology.  | OK         |
| 4.    | The proposed SSC VPA is voluntary in nature and is not mandated by any law/regulation in India  | The VPA 10 is a voluntary initiative by Envirofit.   | It was checked through interviews onsite that VPA 10 is voluntary initiative by Envirofit. Through desk review pertaining to rules/regulations/laws under Indian constitution it was established that implementation of ICS distributing activity is not mandated by any law/regulation in India. | OK         |
| 5.    | The proposed SSC VPA does not results in diversion of ODA   | The VPA 10 is a voluntary initiative by Envirofit. Envirofit has already submitted a declaration to Gold Standard that they have not received any ODA funding.   | No ODA funding has been given to Envirofit as verified through the declaration submitted by CME/10/ to Gold Standard and also the assessment team. Hence it has been accepted that the proposed SSC VPA did not results in diversion of ODA.  | OK         |

| 6.          | Each SSC VPA must be approved by the coordinating and managing entity prior to its incorporation into the PoA.  | The VPA 10 is being developed by Envirofit International itself.   | It was made sure during onsite visit that each SSC VPA was approved by CME prior to its incorporation in the POA.  | OK           |           |                           |       |       |   |        |      |       |   |        |   |    |
|-------------|---|--|--|--------------|-----------|---------------------------|-------|-------|---|--------|------|-------|---|--------|---|----|
| 7.          | Criteria for transfer of credit ownership: <ul style="list-style-type: none"> <li>For regular cycle VPA, this shall be ensured through relevant provision for example warranty cards, customer agreements etc. or collecting stakeholder feedback on this issue during LSC</li> <li>For retroactive VPA, stakeholder feedback should be collected during SFR or through warranty cards, customer agreements etc.</li> </ul> | The VPA 10 is a retroactive VPA and the transfer of ownership of credits is being ensured via disclaimer on warranty cards/stove box. This disclaimer is now mandated as an internal operational control at the programme level. Each stove in the VPA has a warranty card/stove box that confirms transfer the rights of emission reduction to Envirofit International by the user.   | Transfer of ownership of credit was made by the warranty cards and disclaimer given on the stove packaging/12/, both of which were cross-checked onsite. It was established that rights to emission reduction were transferred to Envirofit international. | OK           |           |                           |       |       |   |        |      |       |   |        |   |    |
| 8.          | Each SSC VPA includes sale of improved cook stoves where the users of the improved cook stoves are households or communities or Small and Medium Enterprises (SMEs)   | The cookstoves are domestic cookstoves and are being deployed in households and SMEs   | Through the sales records/15/ and interviews during onsite assessment and on site survey it was verified that domestic cookstoves are being deployed in households and SMEs.   | OK           |           |                           |       |       |   |        |      |       |   |        |   |    |
| 9.          | The size of each Improved cook stove in the VPA shall not exceed 5% of the small-scale CDM threshold that is 9 GWh <sub>th</sub> energy savings per year  | The thermal energy savings of the cook-stove models is as follows: <table border="1" data-bbox="384 1285 699 1469"> <thead> <tr> <th>Stove Model</th> <th><math>\eta_{new}</math></th> <th>Life time</th> <th>Thermal savings per stove</th> </tr> </thead> <tbody> <tr> <td>M5000</td> <td>0.297</td> <td>5</td> <td>0.0045</td> </tr> <tr> <td>PCS1</td> <td>0.254</td> <td>5</td> <td>0.0050</td> </tr> </tbody> </table> | Stove Model  | $\eta_{new}$ | Life time | Thermal savings per stove | M5000 | 0.297 | 5 | 0.0045 | PCS1 | 0.254 | 5 | 0.0050 | The input vales and calculation method for calculation of thermal savings per stove was checked by assessment team and found to be correct. Thus this requirement has been fulfilled. | OK |
| Stove Model | $\eta_{new}$  | Life time  | Thermal savings per stove  |              |           |                           |       |       |   |        |      |       |   |        |   |    |
| M5000       | 0.297   | 5  | 0.0045   |              |           |                           |       |       |   |        |      |       |   |        |   |    |
| PCS1        | 0.254   | 5  | 0.0050   |              |           |                           |       |       |   |        |      |       |   |        |   |    |
| 10.         | For demonstrating additionality, the following criteria also needs to be complied with for retroactive VPAs in case a new PO implements the VPA <ol style="list-style-type: none"> <li>A new PO entering in the PoA shall justify prior consideration of carbon revenues</li> <li>Provision for warranty of stoves in the</li> </ol>  | <ol style="list-style-type: none"> <li>Envirofit is not a new PO in the PoA hence this is not applicable</li> <li>Each stove owner in VPA 10 has been provided with warranty card for ensuring after-sales service within the warranty period.</li> </ol>  | The two criterion stated for demonstrating are additionality are being met, as Envirofit is not a new PO and each stove has been provided with a warranty card/12/ as checked during onsite visit.   | OK           |           |                           |       |       |   |        |      |       |   |        |   |    |

|  |  |  |  |  |
|--|--|--|--|--|
|  | VPA ensuring after-sales service within the warranty period. |  |  |  |
|--|--|--|--|--|

#### VPA – 11

| S. No | Eligibility criteria  | CME justification  | DOE assessment  | Conclusion |
|-------|---|--|---|------------|
| 1.    | Involve the distribution of ICS within the geographical boundary of India   | The VPA 11 involves the distribution of ICS within the geographical boundary of India. All ICS included in this VPA 11 are within India  | As verified during onsite visit through end-user survey, interviews and sales records/15/, ICS distribution has taken place only in Indian territory.   | OK         |
| 2.    | Have a maximum energy saving of 180 GWhth/year. Each SSC VPA shall have a system to ensure that stoves bear logo of the PO /CME to ensure their unique association to the PoA | The current size of the proposed SSC VPA 11 is 179.36 GWhth/year and is below the maximum energy saving of 180 GWhth/year prescribed by the methodology. The sales in the VPA will be capped at cumulative energy saving equivalent of 180 GWhth/year. The stoves bear the logo of Envirofit | It was verified through sales records/15/ and technical specification/8/, that the maximum energy saving was below 180 GWhth/year and all the stoves bore logo of the PO /CME.  | OK         |
| 3.    | Uses the small scale approved methodology AMS.II.G ver 3. The CME will verify that all CPA-DDs employ the aforesaid version of the methodology.                               | The proposed SSC-VPA 11 uses the methodology AMS – II.G. ver.3   | It was ensured through desk review that all the VPA-DDs had employed the AMS.II.G ver 3 methodology.  | OK         |
| 4.    | The proposed SSC VPA is voluntary in nature and is not mandated by any law/regulation in India  | The VPA 11 is a voluntary initiative by Envirofit.   | It was checked through interviews onsite that VPA 10 is voluntary initiative by Envirofit. Through desk review pertaining to rules/regulations/laws under Indian constitution it was established that implementation of ICS distributing activity is not mandated by any law/regulation in India. | OK         |
| 5.    | The proposed SSC VPA does not results in diversion of ODA   | The VPA 11 is a voluntary initiative by Envirofit. Envirofit has already submitted a declaration to Gold Standard that they have not received any ODA funding.   | No ODA funding has been given to Envirofit as verified through the declaration submitted by CME/10/ to Gold Standard and also the assessment team. Hence it has been accepted that the proposed SSC VPA did not results in diversion of ODA.  | OK         |
| 6.    | Each SSC VPA must be approved by the coordinating and managing entity prior to its incorporation into the PoA.  | The VPA 11 is being developed by Envirofit International itself.   | It was made sure during onsite visit that each SSC VPA was approved by CME prior to its incorporation in the POA.   | OK         |
| 7.    | Criteria for transfer of credit ownership: <ul style="list-style-type: none"> <li>For regular cycle VPA, this shall</li> </ul>  | The VPA 11 is a retroactive VPA and the transfer of ownership of credits is being ensured via disclaimer on warranty cards. There is no need to  | Transfer of ownership of credit was made by the warranty cards or disclaimer given on the stove packaging/12/, both of which were   | OK         |

|             | <p>be ensured through relevant provision for example warranty cards, customer agreements etc. or collecting stakeholder feedback on this issue during LSC</p> <ul style="list-style-type: none"> <li>For retroactive VPA, stakeholder feedback should be collected during SFR or through warranty cards, customer agreements etc.</li> </ul>   | <p>collect this information in SFR as this has already been included as an operational control at the programme level. Each stove now has a warranty cards that transfer the rights of emission reduction to Envirofit International.</p>  | <p>cross-checked onsite. It was established that rights to emission reduction were transferred to Envirofit international.</p>  |               |           |                           |      |       |   |        |  |    |
|-------------|--|--|---|---------------|-----------|---------------------------|------|-------|---|--------|--|----|
| 8.          | <p>Each SSC VPA includes sale of improved cook stoves where the users of the improved cook stoves are households or communities or Small and Medium Enterprises (SMEs)</p>   | <p>The cookstoves are domestic cookstoves and are being deployed in households and SMEs</p>  | <p>Through the sales records/15/ and on site survey it was verified that domestic cookstoves are being deployed in households and SMEs.</p>   | OK            |           |                           |      |       |   |        |  |    |
| 9.          | <p>The size of each Improved cook stove in the VPA shall not exceed 5% of the small-scale CDM threshold that is 9 GWh<sub>th</sub> energy savings per year</p>   | <p>The thermal energy savings of the cook-stove models is as follows:</p> <table border="1"> <thead> <tr> <th>Stove Model</th> <th><math>\eta_{ne w}</math></th> <th>Lifet ime</th> <th>Thermal savings per stove</th> </tr> </thead> <tbody> <tr> <td>PCS1</td> <td>0.254</td> <td>5</td> <td>0.0041</td> </tr> </tbody> </table> | Stove Model   | $\eta_{ne w}$ | Lifet ime | Thermal savings per stove | PCS1 | 0.254 | 5 | 0.0041 | <p>The input vales and calculation method for calculation of thermal savings per stove was checked by assessment team and found to be correct. Thus this requirement has been fulfilled.</p> | OK |
| Stove Model | $\eta_{ne w}$  | Lifet ime  | Thermal savings per stove   |               |           |                           |      |       |   |        |  |    |
| PCS1        | 0.254  | 5  | 0.0041  |               |           |                           |      |       |   |        |  |    |
| 10.         | <p>For demonstrating additionality, the following criteria also needs to be complied with for retroactive VPAs in case a new PO implements the VPA</p> <ol style="list-style-type: none"> <li>A new PO entering in the PoA shall justify prior consideration of carbon revenues</li> <li>Provision for warranty of stoves in the VPA ensuring after-sales service within the warranty period.</li> </ol> | <ol style="list-style-type: none"> <li>Envirofit is not a new PO in the PoA hence this is not applicable.</li> <li>Each stove owner in VPA 11 has been provided with warranty card for ensuring after-sales service within the warranty period.</li> </ol>   | <p>The two criterion stated for demonstrating are additionality are being met, as Envirofit is not a new PO and each stove has been provided with a warranty card/12/ as checked during onsite visit.</p> | OK            |           |                           |      |       |   |        |  |    |

## B.5. Estimation of emission reductions or net GHG removals by sinks

### B.5.1. Explanation of methodological choices

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | The applied methodology is AMS-II.G. ver. 3 - Energy efficiency measures in thermal applications of non-renewable biomass.<br>A comparison of methodologies that can be applied to the VPAs has not been made thus explanation of applicable methodological choices is not required |
| <b>Findings</b>            | None.   |
| <b>Conclusion</b>          | Not applicable.   |

### B.5.2. Data and parameters fixed ex ante

#### B.5.2.1. $Q_{\text{biomass}}$ , Annual average biomass consumption per appliance, Tonnes/ year

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | The value fixed for this parameter is 1.915 and the source for this value is Envirofit Brochures. For the purpose of calculation it is discounted with the fraction of simultaneous use of traditional stove. |
| <b>Findings</b>            | None  |
| <b>Conclusion</b>          | The value was found to be legible and consistent with registered PoA-DD/1/.   |

#### B.5.2.2. $f_{\text{NRB},y}$ Fraction of biomass in year y that can be established as non renewable, Fraction

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | A value of 0.90 has been applied for the purpose of ex-ante calculation which is consistent with PoA-DD. A state-wise weighted average $f_{\text{NRB},y}$ shall be used for ER calculations ex-post |
| <b>Findings</b>            | None  |
| <b>Conclusion</b>          | The value was found to be legible and consistent with registered PoA-DD/1/.   |

#### B.5.2.3. $\text{NCV}_{\text{biomass}}$ , Net Calorific Value of the non –renewable woody biomass that is substituted, TJ/tonne

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | Value applied for this parameter is 0.015 and the source of this data is AMS – II. G ver 03, page 2. |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | The value was found to be legible and consistent with registered PoA-DD/1/.                          |

#### B.5.2.4. $\text{EF}_{\text{projected\_fossil fuel}}$ , Emission factor for the substitution of non renewable biomass by similar consumers, $\text{tCO}_2/\text{TJ}$

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | The value applied for this parameter is 81.6 and source for this value is AMS-II. G version 03, page 2. |
| <b>Findings</b>            | None  |
| <b>Conclusion</b>          | The value was found to be legible and consistent with registered PoA-DD/1/.                             |

#### B.5.2.5. $\eta_{\text{old}}$ , Efficiency of the system being replaced, Fraction

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | The value applied for this parameter is 0.1 and source for this value is AMS-II. G version 03. |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | The value was found to be legible and consistent with registered PoA-DD/1/.                    |

#### B.5.2.6. LAF, Leakage Adjustment Factor, Fraction

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | The value applied for this parameter is 0.95 and source for this value is AMS-II. G version 03 |
| <b>Findings</b>            | CAR#6 was raised. Please refer to appendix three for more details.                             |
| <b>Conclusion</b>          | The value was found to be legible and consistent with registered PoA-DD/1/.                    |

### B.5.3. Ex ante calculation of emission reductions or net GHG removals by sinks

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | The equation for calculation of emission reductions is:<br><br>$\text{ER}_y = B_{y,\text{savings}} * f_{\text{NRB},y} * \text{NCV}_{\text{biomass}} * \text{EF}_{\text{projected\_fossilfuel}} * \text{LAF}$ |
|----------------------------|--|

|                   |  |
|-------------------|--|
|                   | $B_{y, \text{ savings}} = B_{\text{old}} * (1 - \eta_{\text{old}} / \eta_{\text{new}})$ $B_{\text{old}} = Q_{\text{biomass}} * \sum_{i=1}^{\text{Nall}} (\text{Stove year}_i) * \text{SOF}$ <p>The equation used for calculations is in accordance with the applied methodology/7/ and also as per the PoA DD/1/. The values applied for calculations have been found appropriate and lead to conservative value of emission reductions.</p> |
| <b>Findings</b>   | None   |
| <b>Conclusion</b> | The emission reduction calculation was found to be in line to the applied methodology/7/ and registered PoA DD/1/. It was also found to be relevant and accurate for the type of VPAs according to the applied methodology/7/.   |

#### B.5.4. Summary of ex ante estimates of emission reductions or net GHG removals by sinks

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | Ex-ante estimates of each VPA has been listed in appendix 7. It has been calculated using the formula in registered PoA-DD as verified through calculations in ER sheet for each VPA/35/ |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | Ex-ante estimates has been found to be achievable and in compliance with approach mentioned in registered PoA-DD and applied methodology   |

### B.6. Application of the monitoring methodology and description of the monitoring plan

#### B.6.1. Data and parameters to be monitored (Carbon)

##### B.6.1.1. $\eta_{\text{new}}$ , Efficiency of the system being deployed as part of the project activity, Fraction

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | The parameter shall be monitored annually/biennially by conducting water boiling tests. For the purpose of ex-ante emission calculation a value of 29.7% for M5000 and 25.4% for PCS1 has been used. |
| <b>Findings</b>            | CAR#5 was raised. Please refer the appendix 3 for more details.  |
| <b>Conclusion</b>          | The monitoring details for the parameter is in compliance with registered PoA-DD/1/ and applied methodology.   |

##### B.6.1.2. $N_{\text{all}}$ , Total Number of stoves sold, Number

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | Envirofit sales records containing details of all the cook-stoves sold to bulk purchasers like dealers, distributors, retailers and NGOs within a particular SSC VPA was checked and maintained. Value applied for VPA10 is 43,299 and for VPA 11 is 43,284. It shall be monitored continuously. |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | The monitoring details for the parameter is in compliance with registered PoA-DD and applied methodology.  |

##### B.6.1.3. SOF, Stove Operation Fraction- To determine only stoves that are still operating, measured ex post through survey, Fraction

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | The parameter shall be monitored annually or biennially by monitoring survey ex-post on sample basis. For the purpose of ex-ante ER estimation, a value of 0.95 has been used which was found to be appropriate. |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | The monitoring details for the parameter is in compliance with registered PoA-DD and applied methodology.  |

##### B.6.1.4. Disposal/Discontinuation of traditional cookstove, Disposal of traditional cookstove, Fraction

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | Households which own project ICS shall be monitored for disposal/discontinuation of traditional cook-stove either annually or biennially. |
| <b>Findings</b>            | None  |

|                   |   |
|-------------------|---|
| <b>Conclusion</b> | The monitoring details for the parameter is in compliance with registered PoA-DD and applied methodology. |
|-------------------|---|

## B.6.2. Data and parameters monitored (Sustainability)

### B.6.2.1. Air Quality

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | Air quality will be monitored by reduction in smoke or particulate matter (PM) through questionnaires and surveys of a sample of stove users sourced from ex-post monitoring survey. This sustainable development indicator will be monitored annually or biennially. |
| <b>Findings</b>            | No finding.   |
| <b>Conclusion</b>          | The monitoring details for the parameter is in compliance with registered PoA-DD and applied methodology  |

### B.6.2.2. Access to affordable and clean energy services (Regular VPA)

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | <b>Not applicable as this is a retroactive VPA.</b> |
| <b>Findings</b>            | NA  |
| <b>Conclusion</b>          | NA  |

### B.6.2.3. Access to affordable and clean energy services (Retroactive VPA)

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | This sustainability parameter will be monitored through ex-post monitoring survey, measuring annually or biennially the number of ICS sold under the VPA/ complaints addressed during warranty. |
| <b>Findings</b>            | CAR#6 was raised. Please refer to appendix 3 for more information.  |
| <b>Conclusion</b>          | The monitoring details for the parameter is in compliance with registered PoA-DD and applied methodology  |

### B.6.2.4. Quantitative employment and income generation

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | Quantitative employment and income generation will be monitored annually or biennially through HR records/sales and marketing records which will indicate the no of jobs created due to the project activity. |
| <b>Findings</b>            | No finding.   |
| <b>Conclusion</b>          | The monitoring details for the parameter is in compliance with registered PoA-DD and applied methodology  |

## B.6.3. Description of the monitoring plan

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | Refer to section B.6   |
| <b>Findings</b>            | None   |
| <b>Conclusion</b>          | Monitoring plan was found to be in compliance with registered PoA and VVS Version 09 para 148. |

## SECTION C. Compliance of retroactive VPAs

### C.1.1. VPA 4291- The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 10 Envirofit

#### VPA 5046- The Breathing Space Improved Cooking Stoves Programme, India – VPA No. 11 Envirofit

#### C.1.1.1. Pre-Feasibility Assessment

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | The VPAs considered for inclusion under this PoA has start date after time of first submission of PoA to The Gold Standard. They are not first such VPAs thus they were eligible for fast-track pre-feasibility assessment by GS as per latest applicable GS toolkit. A conference call for the same purpose happened on 15/02/2017 at 12 noon/19/ where a positive conclusion was given. |
| <b>Findings</b>            | None  |
| <b>Conclusion</b>          | Both the VPAs fulfil the requirement of GS toolkit version 2.1, annex F.  |

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#### C.1.1.2. Full validation of VPA

|                            |  |
|----------------------------|--|
| <b>Means of validation</b> | According to section 3.4.1 of Annex-F of GS Toolkit Version 2.1, subsequent retroactive VPA(s) with a start date after the time of first submission of the PoA to GS can be included after checking the inclusion criteria set at PoA level and during pre-feasibility assessment of first VPA. Therefore in accordance with the GS guidelines full validation of VPA is not required. |
| <b>Findings</b>            | Not applicable   |
| <b>Conclusion</b>          | Not applicable   |

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#### C.1.1.3. Registration review by Gold Standard

|                            |   |
|----------------------------|---|
| <b>Means of validation</b> | Since both the VPAs have a start date after the time of first submission of the PoA to Gold Standard, registration review is not applicable as per GS Toolkit 2.1 Annex f Section 3.4.1 |
| <b>Findings</b>            | Not applicable  |
| <b>Conclusion</b>          | Not applicable  |

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### SECTION D. Compliance of Micro-scale VPAs

#### D.1. Scale of the activity

|                            |                |
|----------------------------|----------------|
| <b>Means of validation</b> | Not applicable |
| <b>Findings</b>            | Not applicable |
| <b>Conclusion</b>          | Not applicable |

#### D.2. Type of activity

|                            |                |
|----------------------------|----------------|
| <b>Means of validation</b> | Not applicable |
| <b>Findings</b>            | Not applicable |
| <b>Conclusion</b>          | Not applicable |

#### D.3. Host Country

|                            |                |
|----------------------------|----------------|
| <b>Means of validation</b> | Not applicable |
| <b>Findings</b>            | Not applicable |
| <b>Conclusion</b>          | Not applicable |

#### D.4. Additionality

|                            |                |
|----------------------------|----------------|
| <b>Means of validation</b> | Not applicable |
| <b>Findings</b>            | Not applicable |
| <b>Conclusion</b>          | Not applicable |

## SECTION E. Sustainability Assessment

### E.1. Do not harm assessment

| S.No | Safeguarding principle  | Level of risk | Assessment team's opinion/ justification for the mitigation measure   |
|------|---|---------------|---|
| 1.   | The VPA respects internationally proclaimed human rights including dignity, cultural property and uniqueness of indigenous people. The VPA is not complicit in Human Rights abuses. | Low           | The VPA is a voluntary activity which involves installation of ICS in households after the request and consent of the household owner. Economic or social freedom was in no way compromised along with zero alteration to the cultural practice. The host country has ratified many conventions on human rights. India took active part in drafting of the Universal Declaration on Human Rights. The Indian delegation to the United Nations made important contributions in drafting of the Declaration, especially highlighting the need for reflecting gender equality. India is a signatory to the six core human rights covenants, further India introduced The Protection of Human Rights Act, 1993- which provided for the constitution of a National Human Rights Commission at the Union level, which steers State Human Rights Commission in States and Human Rights Courts for better protection of Human Rights and for matters connected therewith or incidental thereto. <b>Thus, low level of risk is acceptable.</b> |
| 2.   | The VPA does not involve and is not complicit in involuntary resettlement   | Low           | VPA includes installation of household stoves thus does not involve any resettlement. <b>Thus, low level of risk is acceptable.</b>   |
| 3.   | The VPA does not involve and is not complicit in the alteration, damage or removal of any critical cultural heritage  | Low           | The stoves will be implemented in the already existing households hence there is no scope of alteration, damage or removal of any cultural heritage. <b>The low level risk is acceptable.</b>   |
| 4.   | The VPA respects the employees' freedom of association and their right to collective bargaining and is not complicit in restrictions of these freedoms and rights                   | Low           | The host government has signed ratified many of the the ILO conventions. In the Constitution of India from 1950, articles 14-16, 19(1)(c), 23-24, 38, and 41-43A directly concern labour rights. Article 14 states everyone should be equal before the law, article 15 specifically says the state should not discriminate against citizens, and article 16 extends a right of "equality of opportunity" for employment or appointment under the state. <b>Thus, low level risk has been accepted.</b>  |
| 5.   | The VPA does not involve and is not complicit in any form of forced or compulsory labour  | Low           | The employees associated with the implementation of VPA has signed contract with Envirofit. Employees are free to quit the company at their will anytime they want as verified from HR policy and review of contract/11/. The Constitution of India prohibits forced labour and considers it an offence punishable under the law. The Bonded Labour System (Abolition) Act, 1976 makes all forms of bonded labour illegal. <b>Thus, low level of risk is acceptable.</b>  |
| 6.   | The VPA does not employ and is not complicit in any form of child labour  | Low           | Envirofit does not support any form of child labour in any form. On-site visit and HR records also did not reveal any signs of child labour. <i>The Child Labour (Prohibition and Regulation) Act of 1986</i> prohibits the employment of children below the age of 14 years in hazardous occupations in India, <b>Thus, low level of risk is acceptable.</b>   |
| 7.   | The VPA does not involve and is not complicit in any  | Low           | HR policy as checked by assessment team reveals that there was no discrimination in employment on   |

|     |   |     |   |
|-----|---|-----|---|
|     | form of discrimination based on gender, race, religion, sexual orientation or any other basis.  |     | the basis of gender, race, religion, sexual orientation or any other basis. It was also substantiated with interviews conducted onsite. <b>Thus, low level of risk is acceptable.</b>   |
| 8.  | The VPA provides workers with a safe and healthy work environment and is not complicit in exposing workers to unsafe or unhealthy work environments.  | Low | The installation and maintenance of ICS is not a hazardous activity, nonetheless, Envirofit makes sure its employees work in a safe environment. The employment contract reveals that Envirofit has zero tolerance to sexual harassment as well. <b>Thus, low level of risk is acceptable.</b>      |
| 9.  | The VPA takes a precautionary approach in regard to environmental challenges and is not complicit in practices contrary to the precautionary principle.   | Low | The implementation of VPA does not involve any implications on environmental parameters. The VPA is an improved cook stove distributing activity which leads to improved ambient air quality. It does not hamper any of the environmental parameters. <b>Thus, low level of risk is acceptable.</b> |
| 10. | The VPA does not involve and is not complicit in significant conversion or degradation of critical natural habitats, including those that are (a) legally protected, (b) officially proposed for protection, (c) identified by authoritative sources for their high conservation value, or (d) recognized as protected by traditional local communities | Low | Since VPA involves only the installation and maintenance of ICS thus this parameter is not applicable.  |
| 11. | The VPA does not involve and is not complicit in corruption.  | Low | As verified through interviews onsite, Enviofit condemns corruption at all levels. <b>Thus, a low risk is accepted.</b>   |

## E.2. Sustainability Development Matrix

The implementation of all the VPAs lead to an overall positive impact on areas where the VPAs are being implemented. No negative impacts from the VPA implementation could be observed during assessment. The assessment of each of the indicator has been provided below.

| S.No | Indicator                  | Assessment and acceptance/non acceptance   |
|------|----------------------------|--|
| 1.   | Air quality                | The score of + is acceptable as the implementation of VPA improves ambient air quality through efficient burning of fuel used for cooking practices. The parameter is also monitored as sustainable development parameter. |
| 2.   | Water quality and quantity | The score of 0 is acceptable as the VPAs does not have any direct implication on water quality and quantity.   |
| 3.   | Soil condition             | The score of 0 is acceptable as the VPAs does not have any direct implication on soil condition.   |
| 4.   | Other pollutants           | The score of 0 is acceptable as the VPAs does not have any direct source of light or noise.  |
| 5.   | Biodiversity               | The score of 0 is acceptable as the VPAs does not have any implications on biodiversity of the region.   |

### Social and economic issues

| S.No | Indicator             | Assessment and acceptance/non acceptance  |
|------|-----------------------|---|
| 1.   | Quality of employment | The implementation of each VPA under PoA results in generation of employment through formation of partner entrepreneurs and technicians. For monitoring of the parameter, number of |

|    |   |  |
|----|---|--|
|    |   | trainings/workshops conducted by PO or PE shall be monitored. The given trainings are deemed to improve the quality of employment thus a score of 0 is acceptable.   |
| 2. | Livelihood of the poor                              | The livelihood of poor shall be improved because of decreased cost of fuel which is a resultant of enhanced efficiency of cook stoves. Thus a 0 score is acceptable.   |
| 3. | Access to affordable and clean energy services      | The implementation of each VPA is making Indian population accessible to affordable and clean energy service by giving away ICS at a subsidised price and providing easy loans. Thus a + score is acceptable.  |
| 4. | Human and institutional capacity                    | VPA implementation will gender equality and empower women through various events/workshops which shall educate the population about harmful effects of degraded air quality. The major beneficiary of using ICS shall be women of the household which are worst affected through poor indoor quality caused by using traditional cooking practises. Thus a score of 0 is acceptable. |
| 5. | Quantitative employment and income generation       | Employment is generated due to the enhanced income generating prospects created with the distribution of cook stoves. Thus a score of + is acceptable.   |
| 6. | Balance of payments and investment                  | Through no ODA declaration/10/, it was verified that VPAs not involve any foreign direct investment.. Thus a score of 0 is acceptable.   |
| 7. | Technology transfer and technological self-reliance | The VPAs does not involve any kind of technology transfer thus a scoring of 0 is acceptable.   |

### E.3. Sustainable monitoring plan

The sustainability monitoring parameters have been included in section B.6.2 of the report.

### E.4. Sustainable Development eligibility criteria for inclusion of a VPA to the PoA

Sustainable development eligibility criteria is not applicable as SD assessment shall be carried out at each VPA level

### E.5. Continuous Input and Grievance Mechanism

| Type of mechanism          | Method chosen  | DOE assessment   |
|----------------------------|--|--|
| Continuous Input           | Grievance Expression Process Book  | It was verified onsite that a grievance mechanism process book was available at envirofit office in Pune, India. |
| Telephone Access           | Customer care number: +91 8956443443                                     | The number provided by the PP is working correctly hence verified.   |
| Internet and E-mail Access | <a href="mailto:India-sales@envirofit.org">India-sales@envirofit.org</a> | Email provided by the PP is working properly hence verified.   |

It may be noted that outer packaging of improved cookstove had a helpline number which initiated an IVR response. In the IVR there was an option to connect to an envirofit representative for carbon credit queries as well. It was verified by assessment team onsite.

### E.6. Stakeholder consultation

Not applicable as the VPA 10 and 11 are retroactive in nature. As per clause VIII.b.4 of GS requirements Project Proponents submitting a project activity for retroactive registration shall not conduct a local stakeholder consultation but instead must apply for a pre-feasibility assessment. Also, as a part of the design consultation for the PoA, the feedback received from stakeholders was to conduct the consultation at the PoA level which has already been conducted.

#### E.6.1. Comprehensive End User Opinion Survey

Earthood as a part of validation procedure conducted a comprehensive end-user opinion survey. It was done during the site visit from Earthood as a part of validation procedure conducted a comprehensive end-user opinion survey. It was done during the site visit from 02/01/2017 to 05/01/2017 in the Indian state of Pune. It

included interaction with the cookstove owners. Earthood team has physically visited various end users and they were questioned from various topics as summarized below;

- *The date of installation and model (capacity) of the device*
- *Phone number (mobile) of the buyer*
- *After sales services related to complaints*
- *General feedback about the product*
- *Any concerns or feedback*

If a person was dissatisfied with the unit or service of CME then his response was classified as 'concerned'; if a person was extremely happy with the product and it was proving to be beneficial to the user then it was classified as 'Positive'; if a unit was proving to be harmful to the user and if the user was extremely dissatisfied then his response was classified as 'Negative'. The table below illustrates the responses received on site:

**Table : End-Users surveyed on-site**

| S.No | Name of the customer    | Location | Unique ID   | Feedback (CPN) | Remarks |
|------|-------------------------|----------|-------------|----------------|---------|
| 1.   | Mahadev Shankar Karande | Pune     | RPF-15-0052 | P              | -       |
| 2.   | Deepika                 | Pune     | F-15-1798   | P              | -       |
| 3.   | Kastura Bai             | Pune     | G-15-2677   | P              | -       |
| 4.   | Savita Sandhu           | Pune     | G-15-2639   | P              | -       |
| 5.   | Ranjana Aavadha         | Pune     | K-14-2932   | P              | -       |
| 6.   | Sangita Bhagwat         | Pune     | K-14-2969   | P              | -       |
| 7.   | Shaila Ghavane          | Pune     | K-14-2935   | P              | -       |
| 8.   | Nanda Ghate             | Pune     | L-14-0053   | P              | -       |
| 9.   | Anita Bhagwat           | Pune     | L-14-0083   | P              | -       |
| 10.  | Sangita Kakade          | Pune     | I-14-1062   | P              | -       |

## Appendix 1. Abbreviations

| Abbreviations     | Full Texts  |
|-------------------|---|
| CAR               | Corrective Action Request                             |
| CDM               | Clean Development Mechanism                           |
| CER               | Certified Emission Reduction                          |
| CL                | Clarification Request                                 |
| CME               | Coordinating and Managing Entity                      |
| CO <sub>2</sub>   | Carbon dioxide  |
| CO <sub>2</sub> e | Carbon dioxide equivalent                             |
| CP                | Crediting Period                                      |
| DNA               | Designated National Authority                         |
| DOE               | Designated Operational Entity                         |
| DR                | Document Review                                       |
| EB                | Executive Board                                       |
| ER                | Emission Reduction                                    |
| ER                | Emission Reduction                                    |
| ESPL              | Earthood Services Private Limited (Earthood)          |
| FAR               | Forward Action Request                                |
| GHG               | Green House Gas                                       |
| GS                | Gold Standard   |
| ICS               | Improved Cookstove                                    |
| IPCC              | Intergovernmental Panel on Climate Change             |
| IR                | Internal Resource                                     |
| IVR               | Interactive Voice Response                            |
| ODA               | Official Development Assistance                       |
| PCP               | Project Cycle Procedure                               |
| PDD               | Project Design Document                               |
| PFA               | Pre-Feasibility Assessment                            |
| PMU               | Project Management Unit                               |
| PoA               | Programme of Activities                               |
| PP                | Project participant                                   |
| PS                | Project Standard                                      |
| SFR               | Stakeholders Feedback Round                           |
| UNFCCC            | United Nations Framework Convention on Climate Change |
| VER               | Verified Emission Reductions                          |
| PO                | Partner Organisation                                  |
| PE                | Partner Entrepreneur                                  |

## Appendix 2. Competence of team member and technical reviewer

| Competence Statement |   |
|----------------------|---|
| <b>Name</b>          | Anshika Gupta                                     |
| <b>Country</b>       | India   |
| <b>Education</b>     | M.Sc. (Climate Science & Policy), TERI University |
| <b>Experience</b>    | 2 Year +  |
| <b>Field</b>         | Climate Change                                    |
| Approved Roles       |   |
| <b>Team Leader</b>   | YES   |
| <b>Validator</b>     | YES   |
| <b>Verifier</b>      | YES   |

|                             |  |             |            |
|-----------------------------|--|-------------|------------|
| <b>Methodology Expert</b>   | AMS-I.A., AMS-II.G., ACM0002, AMS-III.A.V. |             |            |
| <b>Local expert</b>         | YES (India)                                |             |            |
| <b>Financial Expert</b>     | NO   |             |            |
| <b>Technical Reviewer</b>   | NO   |             |            |
| <b>TA Expert (1.2, 3.1)</b> | NO   |             |            |
| <b>Reviewed by</b>          | Abhishek Mahawar                           | <b>Date</b> | 08/09/2016 |
| <b>Approved by</b>          | Ashok Kumar Gautam                         | <b>Date</b> | 08/09/2016 |

| <b>Competence Statement</b>            |   |             |            |
|--|---|-------------|------------|
| <b>Name</b>                            | Nayan Jyoti Deka  |             |            |
| <b>Country</b>                         | India   |             |            |
| <b>Education</b>                       | M.Tech. (Energy Technology), Tezpur University                              |             |            |
| <b>Experience</b>                      | 8 Years +   |             |            |
| <b>Field</b>                           | Climate Change & Energy Management  |             |            |
| <b>Approved Roles</b>                  |   |             |            |
| <b>Team Leader</b>                     | YES   |             |            |
| <b>Validator</b>                       | YES   |             |            |
| <b>Verifier</b>                        | YES   |             |            |
| <b>Methodology Expert</b>              | AMS-I.D., AMS-III.H., AMS-I.C., ACM0006, ACM0002, ACM0014, AMS-IIG, AMS-IE. |             |            |
| <b>Local expert</b>                    | YES (India)   |             |            |
| <b>Financial Expert</b>                | NO  |             |            |
| <b>Technical Reviewer</b>              | YES   |             |            |
| <b>TA Expert (1.1, 1.2, 3.1, 13.1)</b> | YES   |             |            |
| <b>Reviewed by</b>                     | Abhishek Mahawar  | <b>Date</b> | 01/02/2017 |
| <b>Approved by</b>                     | Ashok Kumar Gautam  | <b>Date</b> | 01/02/2017 |

| <b>Competence Statement</b> |  |  |  |
|-----------------------------|--|--|--|
| <b>Name</b>                 | Ashok Gautam   |  |  |
| <b>Country</b>              | India  |  |  |
| <b>Education</b>            | M. Sc. (Environmental Sciences)<br>M. Tech. (Energy & Environmental Management)  |  |  |
| <b>Experience</b>           | 14 Years +   |  |  |
| <b>Field</b>                | Energy, Climate Change & Environment   |  |  |
| <b>Approved Roles</b>       |  |  |  |
| <b>Team Leader</b>          | YES  |  |  |
| <b>Validator</b>            | YES  |  |  |
| <b>Verifier</b>             | YES  |  |  |
| <b>Methodology Expert</b>   | AMS-I.D., AMS-I.A., AMS-I.C. AMS-II.D., AMS-II.G., AMS-III.E., AMS-III.H., AMS-III.AV., ACM0002, ACM0004, ACM0006, ACM0012 |  |  |
| <b>Local expert</b>         | YES (India)  |  |  |
| <b>Financial Expert</b>     | NO   |  |  |
| <b>Technical Reviewer</b>   | YES  |  |  |
| <b>TA Expert (1.1)</b>      | YES  |  |  |
| <b>TA Expert (1.2)</b>      | YES  |  |  |

|                  |                  |      |            |
|------------------|------------------|------|------------|
| TA Expert (3.1)  | YES              |      |            |
| TA Expert (13.1) | YES              |      |            |
|                  |                  |      |            |
| Reviewed by      | Abhishek Mahawar | Date | 08/09/2016 |
| Approved by      | Kaviraj Singh    | Date | 08/09/2016 |

| Competence Statement |   |      |            |
|----------------------|---|------|------------|
| Name                 | Shreya Garg                                       |      |            |
| Country              | India   |      |            |
| Education            | M.Sc. (Climate Science & Policy), TERI University |      |            |
| Experience           | 4 Years +   |      |            |
| Field                | Climate Change                                    |      |            |
| Approved Roles       |   |      |            |
| Team Leader          | YES   |      |            |
| Validator            | YES   |      |            |
| Verifier             | YES   |      |            |
| Methodology Expert   | AMS-I.D., AMS-II.D., ACM0002                      |      |            |
| Local expert         | YES (India)                                       |      |            |
| Financial Expert     | NO  |      |            |
| Technical Reviewer   | YES   |      |            |
| TA Expert (1.2)      | YES   |      |            |
|                      |   |      |            |
| Reviewed by          | Abhishek Mahawar                                  | Date | 08/09/2016 |
| Approved by          | Ashok Gautam                                      | Date | 08/09/2016 |

### Appendix 3. Documents reviewed or referenced

| No  | Author  | Title   | References to the document   | Provider |
|-----|---------|---|--|----------|
| 1.  | CME     | PoA-DD  | Version 5.2, dated 21/11/2012  | Others   |
| 2.  | CME     | PoA passport  | Pertaining to the registered PoA-DD  | Others   |
| 3.  | CME     | VPA-DDs for:<br>VPA 10<br><br>VPA 11  | <a href="#">Version 03.1, dated 21/08/2017,</a><br><a href="#">Version 03.1, dated 21/08/2017,</a> | CME      |
| 4.  | CME     | VPA passports   | Pertaining to latest VPA-DDs   | CME      |
| 5.  | GS      | GS toolkit  | Version 2.1  | Other    |
| 6.  | GS      | GS Annexes  | -  | Other    |
| 7.  | UNFCCC  | Methodology AMS-II.G  | Version 03, dated 15/04/2011   | Other    |
| 8.  | Various | Tech specs of ICS - <ul style="list-style-type: none"> <li>IIT Delhi certificate for efficiency testing</li> <li>Product catalogue from manufacturer</li> </ul> | Dated 23/09/2014   | CME      |
| 9.  | CME     | End user warranty cards   | Various dates  | CME      |
| 10. | CME     | ODA declaration   | 04/01/2017   | CME      |
| 11. | CME     | <ul style="list-style-type: none"> <li>Employment contract of an employee</li> <li>HR Policy</li> </ul>   | -  | CME      |

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|     |        |   |                        |        |
|-----|--------|---|------------------------|--------|
| 12. | CME    | Disclaimer for carbon transfer on:<br><ul style="list-style-type: none"> <li>• Warranty card</li> <li>• Outer packaging of the stove</li> </ul> |                        | CME    |
| 13. | CME    | Invoice raised to Samastha Microfinance Limited by CME  | Dated 05/05/2014       | CME    |
| 14. | CME    | Invoice raised to Kumaran by CME  | Dated 22/05/2015       | CME    |
| 15. | CME    | Netsuite screenshots for sales record   | -                      | -      |
| 16. |        | Old local stakeholder interaction report for VPA 05-09  |                        |        |
| 17. | UNFCCC | Project standard  | Version 09             | Others |
| 18. | UNFCCC | Validation and verification standard for programme of activities  | Version 01             | Others |
| 19. | GS     | Conference call with Gold Standard  | On 15/02/2017 at 12 PM | Others |

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

**Table 1. Remaining FAR from validation and/or previous verification**

There is no finding from GS review of inclusion or verification of other VPAs under the same PoA.

**Table 2. CL from this verification**

| CL ID   | 01 | Section no. | A.4 | Date | : 05/01/2017             |
|---|----|-------------|-----|------|--------------------------|
| <b>Description of CL</b>  |    |             |     |      |                          |
| PP is requested to explain if any stakeholder (especially end user) feedback has been collected from end-user till now? If yes, then what kind of responses were collected and if no then why?  |    |             |     |      |                          |
| <b>Project participant response</b>   |    |             |     |      | <b>Date</b> : 19/01/2017 |
| <p>The VPA 10 and 11 are spread across India covering many various states (17 and 16 states in the VPAs respectively). Therefore, to ensure comprehensive discussions with stakeholders in different regions, multiple stakeholder interactions were organized in form of local awareness / demonstration campaigns, stalls at community gatherings (fair), NGO supported interactive sessions, participation by Envirofit in significant public forums / conferences etc. During these sessions, the VPA was explained and Improved Cook stoves (ICS) were displayed to the stakeholders' present, besides discussing the benefits of using the Envirofit stoves.</p> <p>Specially with respect to end users, the discussions were done at pre-sales and post sales level.</p> <p>1. The pre-sales interactions intended to introduce the concept of ICS to the traditional cook-stove users. It involved explaining about Indoor air pollution, difficulties while using the traditional cook stoves, explaining the importance and benefits of using ICS, demonstrating the ICS and addressing the general questions regarding the product. This helped in creating awareness about the product and creating demand for the product amongst the communities.</p> <p>2. Post Sales interaction: Post dissemination interaction with end user is important to ensure they understand the right usage to maximum benefit of ICS. These interactions included demonstration of the ICS, explaining the do's and don'ts, maintenance of the ICS and addressing warranty issues. Besides, the grievance mechanism (helpline numbers in case of any problem with ICS, first point of contact) was also discussed. The post sales interactions served as a medium for Envirofit to have direct feedback from the users on the product usability and acceptance.</p> <p>Additionally, these VPAs are retroactive in nature and as per clause VIII.b.4 of GS requirements, a retroactive project activity shall NOT conduct a Local Stakeholder Consultation but instead must apply for a Pre-feasibility Assessment. The VPA 10 and 11 have undergone GS PFA accordingly.</p> <p>Further, 60 day SFR is being conducted for these VPAs to collect further feedback from stakeholders.</p> |    |             |     |      |                          |
| <b>Documentation provided by project participant</b>  |    |             |     |      |                          |
| <b>DOE assessment</b>   |    |             |     |      | <b>Date</b> : 08/02/2017 |
| PP has mentioned that at end-user level there were discussions held on two levels, i.e. pre and post sales. However, it has not been given what kind of responses were received in these interactions. Thus, this CAR is <b>open</b> .  |    |             |     |      |                          |
| <b>Project participant response</b>   |    |             |     |      | <b>Date</b> : 03/07/2017 |
| <p>The post sales feedback has been very encouraging and positive. This is reflected by the fact that number of warranty claims have been negligible. Also, not many grievances have been received on the VPAs till date. Besides, the VPAs being retroactive in nature have undergone a 60 day SFR to collect further feedback from stakeholders. The summary of SFR feedback has been incorporated in the revised passports. The response from the users has been largely positive and they have appreciated the VPAs.</p>  |    |             |     |      |                          |
| <b>Documentation provided by project participant</b>  |    |             |     |      |                          |
| <p>TBS ICS Passport VPA10 V 3.0 03072017<br/> TBS ICS Passport VPA11 V 3.0 03072017<br/> TBS ICS VPA Sales Data and ER calculations - VPA 10 version 3.0 03072017<br/> TBS ICS VPA Sales Data and ER calculations - VPA 11 version 3.0 03072017<br/> VPA-DD_TBS ICS VPA10 V 3.0 03072017<br/> VPA-DD_TBS ICS VPA11 V 3.0 03072017</p>   |    |             |     |      |                          |

|   |                         |
|---|-------------------------|
| <b>DOE assessment</b>   | <b>Date:</b> 13/07/2017 |
| Since the PP has provided the sample feedback forms along with revised passports and VPA's, which also indicated the positive responses received by the PP from the end users, hence this CL stands closed. |                         |

**Table 3. CAR from this verification**

|  |    |                    |     |                          |
|--|----|--------------------|-----|--------------------------|
| <b>CAR ID</b>  | 02 | <b>Section no.</b> | A.4 | <b>Date :</b> 05/01/2017 |
| <b>Description of CAR</b>  |    |                    |     |                          |
| The efficiency of ICS model PCS is written as 36.5% in VPA-DD and passport for VPA 10 and 25.4% in VPA-DD and passport for VPA 11. ER calculator for VPA 10 uses the value of efficiency for PCS as 0.254. |    |                    |     |                          |
| <b>Project participant response</b>  |    |                    |     | <b>Date :</b> 19/01/2017 |
| The VPA-DD and VPA passports for VPA 10 and VPA 11 have been revised to mention the thermal efficiency of PCS1 as 25.4%. Thus, the thermal efficiency of PCS1 is now consistent amongst all documents.     |    |                    |     |                          |
| <b>Documentation provided by project participant</b>   |    |                    |     |                          |
|  |    |                    |     |                          |
| <b>DOE assessment</b>  |    |                    |     | <b>Date:</b> 08/02/2017  |
| Value of ex-ante value for $\eta_{new}$ has not been revised on the page 8 of the VPA-DD-10 under the eligibility criteria 9. <b>Thus, this CAR is open.</b>   |    |                    |     |                          |
| <b>Project participant response</b>  |    |                    |     | <b>Date :</b> 03/07/2017 |
| Value of ex-ante value of $\eta_{new}$ has been revised on the page 8 of the VPA-DD-10 under the eligibility criteria 9.   |    |                    |     |                          |
| <b>Documentation provided by project participant</b>   |    |                    |     |                          |
| VPA-DD_TBS ICS VPA10 V 3.0 03072017<br>VPA-DD_TBS ICS VPA11 V 3.0 03072017   |    |                    |     |                          |
| <b>DOE assessment</b>  |    |                    |     | <b>Date:</b> 13/07/2017  |
| The documents now report consistent information. Thus this CAR is <b>closed</b> .  |    |                    |     |                          |

|  |    |                    |     |                          |
|--|----|--------------------|-----|--------------------------|
| <b>CAR ID</b>  | 03 | <b>Section no.</b> | A.4 | <b>Date :</b> 05/01/2017 |
| <b>Description of CAR</b>  |    |                    |     |                          |
| 1. Sales database given in ER sheet in terms of state of distribution and total number of cook stoves is not consistent with sales records cross-checked onsite.   |    |                    |     |                          |
| 2. VPA-DDs does not give any provision for avoiding double counting on inter-VPA and intra-VPA level. How will double counting be avoided amongst other carbon offset programs such as CDM and VCS is also not clear.  |    |                    |     |                          |
| 3. Both the VPA passports lack information on scope and implementation of grievance mechanism.   |    |                    |     |                          |
| <b>Project participant response</b>  |    |                    |     | <b>Date :</b> 19/01/2017 |
| 1. The ER sheets for VPA 10 and VPA 11 have been revised to be in line with the screenshots of the Envirofit ERP software NETSUITE which gives the summary of stoves sales in each VPA (based on the time boundary of the VPAs).   |    |                    |     |                          |
| 2. Suitable provisions have been made to ensure there is not inter-VPA / Intra-VPA double counting. Each ICS bears a serial number and logo of Envirofit. Thus, any ICS outside the PoA cannot be included in the VPAs. Further, no ICS project / PA registered in CDM/ VCS includes the technology / measure included in the VPAs. Further, the presence of the serial number on ICS shall avoid any inter-VPA double counting. The ICS invoice data is also verifiable against the EPR software substantiating the stoves being included have been delivered in the field. |    |                    |     |                          |
| 3. Information on grievance mechanism has been added to the VPA passports  |    |                    |     |                          |
| <b>Documentation provided by project participant</b>   |    |                    |     |                          |
|  |    |                    |     |                          |
| <b>DOE assessment</b>  |    |                    |     | <b>Date:</b> 08/02/2017  |

|   |
|---|
| 1. The screenshot of data management portal (Netsuite) were provided. The value of parameter Nall could be correlated with the information contained in the portal. It was also cross-checked with the sales invoices on sample basis. Thus, this CAR is <b>closed</b> .  |
| 2. The CME has explained the significance of the serial number, provided for each ICS, which has also been cross checked during the onsite survey. The invoicing and data recording/management system was found to be robust, hence the <b>CAR stands closed</b> .  |
| 3. The CME is requested to explain the following inline to Annex W under GS toolkit version 2.1; <ul style="list-style-type: none"> <li>How does the grievance mechanism given in revised passport fulfill the requirements of para 2.</li> <li>Inline to para 6, what measures were taken by CME to reach out to relevant stakeholders and seek their feedback on the continuous input and grievance expression method.</li> </ul> |
| <b>The CAR is open.</b>   |
| <b>Project participant response</b> <span style="float: right;"><b>Date</b> :03/07/2017</span>  |
| 1. Ok<br>2. Ok<br>3. The passport has been revised to include the necessary information in line with Annex W section 2 and section 6.   |
| <b>Documentation provided by project participant</b>  |
| TBS ICS Passport VPA10 V 3.0 03072017<br>TBS ICS Passport VPA11 V 3.0 03072017  |
| <b>DOE assessment</b> <span style="float: right;"><b>Date</b>: 13/07/2017</span>  |
| 1. OK<br>2. OK<br>3. Revised passport contains the required information as per the GS toolkit version 2.1, para and para 6. <b>CAR is closed.</b>   |

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|---|----|--------------------|-----|-------------|--------------------------|--------------|
| <b>CAR ID</b>   | 04 | <b>Section no.</b> | A.4 | <b>Date</b> | : 05/01/2017             |              |
| <b>Description of CAR</b>   |    |                    |     |             |                          |              |
| First stove sold under VPA-10, as per sales records was on 5 <sup>th</sup> May 2014. However, VPA start date has been kept as 1 <sup>st</sup> May 2014. |    |                    |     |             |                          |              |
| <b>Project participant response</b>   |    |                    |     |             | <b>Date</b>              | : 19/01/2017 |
| The VPA start date has been revised in the VPA –DD for VPA 10.  |    |                    |     |             |                          |              |
| <b>Documentation provided by project participant</b>  |    |                    |     |             |                          |              |
|   |    |                    |     |             |                          |              |
| <b>DOE assessment</b>   |    |                    |     |             | <b>Date</b> : 08/02/2017 |              |
| The revised VPA-DD contains accurate information. <b>Thus, this CAR stands closed.</b>  |    |                    |     |             |                          |              |

|   |    |                    |         |             |                          |              |
|---|----|--------------------|---------|-------------|--------------------------|--------------|
| <b>CAR ID</b>   | 05 | <b>Section no.</b> | B.6.1.1 | <b>Date</b> | : 05/01/2017             |              |
| <b>Description of CAR</b>   |    |                    |         |             |                          |              |
| 1. Section D.7.2 of VPA-DD lacks information regarding monitoring plan.   |    |                    |         |             |                          |              |
| 2. Calculation of ex-ante value of parameter $\eta_{new}$ (0.356) cannot be traced back to ER sheet.                              |    |                    |         |             |                          |              |
| <b>Project participant response</b>   |    |                    |         |             | <b>Date</b>              | : 19/01/2017 |
| 1. Section D.7.2 of VPA-DD has been revised to refer to Appendix 4 which provides additional information regarding sampling plan. |    |                    |         |             |                          |              |
| 2. Ex-ante value of parameter $\eta_{new}$ has been revised in the VPA-DDs to be consistent with ER calculator.                   |    |                    |         |             |                          |              |
| <b>Documentation provided by project participant</b>  |    |                    |         |             |                          |              |
|   |    |                    |         |             |                          |              |
| <b>DOE assessment</b>   |    |                    |         |             | <b>Date</b> : 08/02/2017 |              |
| 1. Relevant information has been added to the section D.7.2 of VPA-DD. Henceforth this <b>CAR stands closed</b> .                 |    |                    |         |             |                          |              |
| 2. The revised information has been incorporated Thus, the CAR is <b>closed</b> .   |    |                    |         |             |                          |              |

|                           |    |                    |         |             |              |
|---------------------------|----|--------------------|---------|-------------|--------------|
| <b>CAR ID</b>             | 06 | <b>Section no.</b> | B.6.2.3 | <b>Date</b> | : 05/01/2017 |
| <b>Description of CAR</b> |    |                    |         |             |              |

|  |                          |
|--|--------------------------|
| 1. Section F.1 under "Labour Standards" mentions that "employees can quit their services at any time". No additional information to support this statement has been provided.  |                          |
| 2. Under section G of VPA passports for both the VPAs, indicator number 2 " <i>Access to affordable and clean energy services</i> " mentions the chosen parameter as " <i>Number of ICS sold / Feedback from end users regarding after sales service as part of product warranty</i> " which is not consistent with registered PoA passport.   |                          |
| <b>Project participant response</b>  | <b>Date : 19/01/2017</b> |
| 1. The employment contract template is being submitted. As per the "termination" clause, each party (employer or employee) is free to terminate the employment contract by offering a 1 month notice / one month salary. This notice provisions for smooth transition of knowledge and responsibilities from leaving employee to new employee. This demonstrates that the employment is not bonded and the employees are free to submit notice, if they wish to quit the services.   |                          |
| 2. The PoA passport mentioned 'number of ICS sold' for regular cycle projects and 'feedback from end users regarding after sales services as part of product warranty' for retroactive cycle projects. However, over the years as it was observed that there are hardly any warranty claims received, hence both the parameters were merged into one and was made applicable to all VPAs irrespective of their category (regular / retroactive). The same approach has been adopted in VPA 05-09 which have been approved by GS and included in the PoA. |                          |
| <b>Documentation provided by project participant</b>   |                          |
| <b>DOE assessment</b>  | <b>Date: 08/02/2017</b>  |
| 1. The employee contract and HR policy of the company was reviewed. It was concluded that employees are not bound by any clause and they can quit service anytime with a prior notice. Thus, this CAR is <b>closed</b> .   |                          |
| 2. Choice of this parameter does not impact the conservativeness of the value. Hence it is accepted by the assessment team and this <b>CAR stands closed</b> .   |                          |

**Table 4. FAR from this verification**

There is no FAR from this inclusion.

## Appendix 5. Summary of ex-ante estimation of emission reduction

| VPA – 10                                 |   |
|--|---|
| YEAR                                     | Emission reduction (tCO <sub>2</sub> e) |
| 2015                                     | 24682                                   |
| 2016                                     | 45241                                   |
| 2017                                     | 45241                                   |
| 2018                                     | 45241                                   |
| 2019                                     | 43403                                   |
| 2020                                     | 17649                                   |
| 2021                                     | 0                                       |
| 2022                                     | 0                                       |
| 2023                                     | 0                                       |
| 2024                                     | 0                                       |
| Total                                    | <b>221,450</b>                          |
| Annual average over the crediting period | <b>22,145</b>                           |

| VPA – 11                                 |   |
|--|---|
| YEAR                                     | Emission reduction (tCO <sub>2</sub> e) |
| 2015                                     | 3715                                    |
| 2016                                     | 43249                                   |
| 2017                                     | 45063                                   |
| 2018                                     | 45063                                   |
| 2019                                     | 45063                                   |
| 2020                                     | 41441                                   |
| 2021                                     | 1838                                    |
| 2022                                     | 0                                       |
| 2023                                     | 0                                       |
| 2024                                     | 0                                       |
| Total                                    | <b>225,432</b>                          |
| Annual average over the crediting period | <b>22,543</b>                           |