Template 1.0

DATE 30/10/2019

VALIDATION AND/OR VERIFICATION REPORT

|  |  |
| --- | --- |
| *Title of the GHG-PRR:* | (Enter the name of the project here) |
| *Title of the report:* | (Name of the report) |
| *ID of the GHG-PRR:* | (Corresponds to the identification number in the EcoRegistry database, if already registered) |
| *Report ID:* | (Corresponds to the identification number assigned by the OVV, if applicable) |
| *Verification period:* | (Day.month.year.to.day.month.year) |
| *Client:* | (Person or company to whom the report is addressed, usually the GHG-PRR holder) |
| *Date of preparation:* | (Day.month.year.in.which.this.report.was.issued) |
| *Document elaborated by:* | (OVV agency that prepared the report) |
| *Contact information:* | Physical address, e-mail, telephone and website |
| *Contact information:* | (Physical address, email, phone number(s), website) |
| *Approved by:* | (Person from OVV who approved this report) |
| *Work done by:* | (Individuals who performed this joint validation and/or verification) |

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# Instructions for filling out this document

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Once you have added all the necessary content, generate the table of contents of this document again (click somewhere in the table of contents, choose "Update Table" from the pop-up menu, and choose "Update Entire Table").

# List of acronyms and abbreviations

|  |  |
| --- | --- |
| **A/R** | Forestation/Reforestation |
| **CO2e** | Carbon dioxide equivalent |
| **FR** | GHG emission source or reservoir |
| **GHG** | Greenhouse Gases |
| **GHG-PRR** | Greenhouse Gas Removal or Reduction Projects |
| **tCO2e** | Tons of carbon dioxide equivalent |
| **OVV** | Validation and/or verification body |

***VALIDATION / VERIFICATION REPORT DOCUMENT***

## 1. INTRODUCTION

### 1.1 OBJECTIVE

Explain the purpose of validation and/or verification.

### 1.2 SCOPE AND SPATIAL AND TEMPORAL LIMITS

Explain the scope of the declaration and the spatial and temporal limits covered by the validation and/or verification

### 1.3 TERM OF COMMITMENT

Describe the type of commitment established with the client for each process or if it is the case of the joint validation and verification processes (carried out at the same time).

### 1.4 LEVEL OF ASSURANCE

Describe the level of assurance of the statement(s) issued (of validation and/or verification) agreed with the client as well as how and when evidence or proof is collected so as to obtain a reasonable level of confidence in accordance with the CERCARBON Protocol and applicable laws.

## 2. DESCRIPTION OF THE GHG-PRR

### 2.1 SECTORAL SCOPE OF THE GHG-PRR

Indicate the sectoral scope in which the GHG-PRR is developed and the type of project (if small or large scale) and activity that will implement the GHG-PRR.

### 2.2 PERSON IN CHARGE OF THE ghg-PRR

Indicate the person or organization in charge of the GHG-PRR and the type of activity that will implement the GHG-PRR.

### 2.3 SUMMARY OF THE ghg-PRR

Generate a summary of the GHG-PRR not exceeding 500 words.

## 3. DESCRIPTION AUDIT TEAM

### 3.1 PERSONNEL IN CHARGE OF VALIDATION AND/OR VERIFICATION AUDIT

Describe the professional staff in charge of carrying out the validation and/or verification processes from the OVV:

|  |  |  |  |
| --- | --- | --- | --- |
| *Complete name(s)* | *Role(s) or Responsibility(ies)* | *Type of activity(ies) performed\** | *Type of process(es) realized\*\** |
|  |  |  |  |
|  |  |  |  |

\*Specify if you are in charge of information review, on-site visit, technical review and/or report writing. \*\*Specify if it intervenes in the validation process or in the verification process when it is combined.

## 4. ACTIONS VALIDATION / VERIFICATION PROCESSES

### 4.1 VALIDATION / VERIFICATION PLAN

The validator/verifier shall execute a plan of the validation and verification process in order to identify the types of potential material errors, their probability of occurrence and to select the procedures for collecting evidence, analytical tests and/or estimates; evaluations, calculations, sampling, consultations or other tests or evidence that he/she considers relevant to his/her evaluation and conclusions.

### 4.2 EVALUATION CRITERIA

The validator/verifier shall assess the requirements of the GHG-PRR taking into account: (1) the method for determining the scope and limits of the commitment; (2) the GHGs and FRs to be accounted for; (3) the methods of quantification; and (4) requirements for disclosures, if required.

It will be taken into account within the assessment:

a) The sampling plan and its justification.

b) Material error thresholds.

c) The revision of the definition of the GHG-PRR property, with the corresponding supports.

d) The check or review of conflicts of interest of the OVV.

e) Review of compliance with the proposed co-benefits and the legal authorization of the project, when applicable.

**Note**: the evaluation criteria of the validation and/or verification processes are based on the requirements set forth in the CERCARBON Protocol in accordance with the provisions of ISO 14064:1-3 and 14065.

### 4.3 EVIDENCE COLLECTION PLAN

Describe the design of the plan of activities for the collection of evidence and proof of each activity related to the validation / verification of the GHG-PRR on which its conclusion is based.

### 4.5 SITE OR AREA VISITS TO THE GHG-PRR

Describe the method and objectives of the on-site visits (if developed). Include in the description details of all areas or facilities visited, as well as physical aspects, organizational and process, equipment and revised documentation. In addition, include and relate interviews (if conducted) and the information provided in them.

### 4.6 APPLICATIONS REQUIRED BY OVV

If they have been made, describe the requests made to the customer for clarification, incorrect documents and/or non-conformities, intentional errors or non-compliance with laws and/or regulations. As well as include details of any requests for advance action made for subsequent audits.

### 4.7 INFORMATION SYSTEM AND DATA CONTROL

Evaluating the information and data control system will depend on the results of the risk assessment.

Evidence gathering activities to evaluate the design and effectiveness of the information and data control system should be considered:

1. The selection and management of GHG data and information.
2. The processes for collecting, processing, consolidating and reporting GHG data and information.
3. The systems and processes that ensure the validity and accuracy of the GHG data and information
4. The design and maintenance of the GHG information system.
5. Systems, processes and personnel that support the GHG information system, including activities to ensure data quality.
6. The results of maintenance and calibration of equipment and instruments.
7. The results of previous verifications, if available and appropriate.

The documentation evaluated by the OVV will be held in EcoRegistry, as the GHG-PRR holder has a user account on this platform.

### 4.8 EVALUATION OF THE STATUS OF THE GHG-PRR

In the case of verification, the verifier shall assess any changes in risks and material discrepancy thresholds that may have occurred in the course of the verification. The verifier shall assess whether the high level analytical procedures applied are still representative and appropriate.

The verifier shall determine whether the evidence or evidence collected is sufficient and appropriate to generate a conclusion. If the verifier considers it to be insufficient, he may undertake additional activities to collect evidence. The verifier will also check that there are no errors or material discrepancies.

### 4.9 ASSESSMENT OF CONFORMITY TO REQUIREMENTS

In the case of verifications beyond the first one, which, due to special circumstances, cannot be compared, the verifier will assess any non-conformity with the requirements of the verification process. In assessing conformity, the verifier should consider the following:

1. The scope of the project implementation, including area(s), technology and equipment installation and measurement equipment.
2. The operation of the project, including the operational characteristics when compared to the limitations and assumptions in the criteria.
3. The monitoring plan and methodology, including the requirements in the criteria.
4. Changes to the monitoring plan, installed equipment or baseline.
5. Conservative judgements that have a material effect on the verification statement.
6. The results of any validation.
7. Evaluation of changes from previous periods.

The verifier shall determine whether changes from previous periods have been appropriately disclosed.

## 5. RESULTS OF THE VALIDATION

If the commitment term in this document is for validation or validation and verification, fill out this section. Otherwise, delete the instructions from it and leave it blank.

### 5.1 COMPONENTS OF THE GHG-PRR

Review or identify the components that are part of the GHG-PRR:

1. Information from the holder or other participants in the GHG-PRR.
2. Title, purpose(s) and objective(s) of the GHG-PRR.
3. Sectoral scope of the project and type of GHG-PRR.
4. Description of the GHG-PRR.
5. Justification of additionality of the GHG-PRR.
6. Location and boundaries of the GHG-PRR.
7. Support for ownership or right of use of the area.
8. Characteristics or conditions prior to commencement of the GHG-PRR.
9. Technologies, products, services of the GHG-PRR and the expected level of activity.
10. The methodology selected and applied and important elements such as:
    * Eligibility when applying.
    * The sources of GHG emissions and/or reservoirs contemplated in the baseline and project scenarios.
    * The GHG emissions and removals in the baseline scenario.
    * The removal or reduction of GHGs that may be produced by the GHG-PRR.
    * The net removal or reduction of GHGs that can be produced by the GHG-PRR.
    * The monitoring plan.
    * The management of leaks, if any.
    * The risks identified that could substantially affect GHG removal or reduction, as well as measures to manage those risks.
11. The authorizations and documents required by current legislation for the development and operation of the GHG-PRR, such as Environmental License, Environmental Impact Assessment, Environmental Management Plan, Feasibility Concept of Connection (UPME), Water Concession, among others, depending on the type of project.
12. Relevant results of the consultations with the interested parties.
13. Compliance with the time schedule.
14. The accreditation period of the GHG-PRR.
15. Participation in other certification programs or standards (registration of GHG-PRR and its carbon credits).

### 5.2 SELECTED METHODOLOGY

Review and/or evaluate the components of the selected methodology in accordance with the CERCARBON Protocol.

### 5.2.1 ADDITIONALITY

Assess whether the GHG-PRR meets the conditions of additionality set out in the CERCARBON Protocol and the legislation in force.

### 5.2.2 ELIGIBILITY

Where appropriate, assess whether the GHG-PRR meets the eligibility requirements of the selected methodology.

### 5.2.3 NON-PERMANENCE

Where appropriate, assess whether the GHG-PRR has managed the risks of a reversal of a GHG removal

### 5.2.4 BASELINE SCENARIO

Identify the baseline scenario determined for the GHG-PRR and describe the steps taken to validate it, including (as appropriate)

(a) The description of the GHG-PRR, including the identified FRs

(b) Existing and alternative project types, activities and technologies that provide an equivalent type and level of activity of products or services for the project

(c) Data availability, reliability and limitations;

(d) Other relevant information on present or future conditions, such as legislation, technical, economic, socio-cultural, environmental, geographical, site-specific and temporal assumptions or projections.

Take into account other elements indicated in the CERCARBON Protocol with which this scenario is determined.

### 5.2.5 PROJECT SCENARIO

Identify the GHG-PRR activity and the means used to achieve GHG removals or reductions, including their temporal and spatial limits

### 5.2.4 SOURCES OF GHG EMISSIONS

Describe the steps taken to assess that the sources of GHG emissions have been correctly selected according to the methodology used (including leakage where appropriate). Describe the steps taken to assess whether any relevant sources have not been selected

### 5.2.5 GHG RESERVOIRS

Describe the steps taken to evaluate that the GHG reservoirs have been correctly selected according to the methodology used. Describe the steps taken to assess whether any relevant reservoir has not been selected.

### 5.2.6 GHG EMISSIONS, REMOVALS AND/OR REDUCTIONS IN THE BASELINE SCENARIO

Describe the steps taken to assess that appropriate criteria and procedures are in place to quantify the emissions, removals or reductions of the selected RF in the baseline scenario. As well as the GHG emission or removal factors selected or developed.

#### 5.2.7 QUANTIFICATION OF GHG EMISSIONS, REMOVALS AND/OR REDUCTIONS IN THE PROJECT SCENARIO

Describe the steps taken to assess that appropriate criteria and procedures have been established to quantify emissions, removals or reductions for the selected FRs in the project scenario. As well as, describing the steps taken to assess the selected or developed GHG emission or removal factors.

#### 5.2.8 MONITORING OF THE GHG-PRR

Identify the data or parameters monitored and describe the steps taken to validate the adequacy of the monitoring system implemented (i.e., process and schedule for obtaining, recording, compiling and analyzing the data and parameters monitored).

Provide an overall conclusion on the adherence of the monitoring plan to the requirements of the applied methodology and the Protocol.

## 6. VERIFICATION RESULTS

If the commitment term in this document is for validation only, delete these instructions by leaving this section blank, including subsections 6.1 and 6.2.

#### 6.1 ANALYSIS OF THE REPORT OR MONITORING PLAN

Evaluate the monitored data or parameters and describe the steps taken to verify the adequacy of the implemented monitoring system (i.e., process and schedule for obtaining, recording, compiling and analyzing the monitored data and parameters). And review how the monitoring plan responds to the requirements of the applied methodology (and each of its elements) and the Protocol.

#### 6.1 ACCURACY OF REMOVAL AND REDUCTION CALCULATIONS FOR GHG

Identify the data and parameters used to calculate GHG removals or reductions for this verification period under assessment, and describe the steps taken to assess the following for each of them:

* The accuracy of GHG emission reductions and removals, including the accuracy of spreadsheet formulas, conversions and aggregations, and the consistent use of the data and parameters.
* The appropriateness of the default values used in the monitoring report.

Describe the steps taken to assess whether manual transposition errors have occurred between data sets.

Provide an overall conclusion on whether the GHG emission reductions and removals have been correctly and conservatively quantified according to the monitoring plan and methodology applied for this verification period.

### 6.2 QUALITY OF EVIDENCE OF GHG REMOVALS AND REDUCTIONS

Identify the evidence used to determine GHG removals or reductions for the period under review and describe the steps taken to evaluate the quantity and quality of the evidence. Include details of any cross-checks made on the reported data and how the following were assessed:

* The reliability of the evidence, and the source and nature of the evidence (external or internal, oral or documented) for the determination of GHG emission reductions or removals.
* The flow of information from the generation and aggregation of data, to the recording, calculation and final transposition into the monitoring report.
* When the monitoring plan does not specify the calibration frequency of the monitoring equipment, the adequacy of the implemented calibration frequency.

Provide a general final statement regarding the adequacy of the quantity and quality of evidence used to determine GHG reductions and removals for this verification period.

## 7. CONCLUSION OF THE VALIDATION/ VERIFICATION

### 7.1 RESOLUTION OF FINDINGS

Describe the process for resolution of the findings (corrective actions, clarifications or other findings) rose by the OVV during validation and/or verification.

Indicate the total number of requests for corrective actions, requests for clarifications, requests for direct actions and other findings raised during validation and verification.

Provide a summary of each finding, including the issue raised, the responses provided by the client and the conclusion and any resulting changes to the project documents. If this item becomes too long, it can be related and its information can be annexed in a complementary way.

### 7.2 SUPPORT AND REPORTING

Indicate where the information from the validation and/or verification process (prior to uploading to the EcoRegistry platform) rests and is related, such as:

1. Terms of commitment.
2. Verification / validation plan.
3. Evidence collection plan.
4. Evidence collection plan.
5. Clarification requests, wrong statements and non-conformities derived from the verification / validation and the conclusions reached.
6. Communication with the client about significant misstatements.
7. Conclusions reached and opinions of the verifier / validator.

**Note:** documentation of the GHG-PRR validation and verification process must be kept by the OVV in EcoRegistry.

### 7.3 VALIDATION / VERIFICATION OPINION

Write the validation or verification opinion based on the evidence gathered during the validation or verification process. If the opinion is favorable, in addition to the report it will generate a duly signed statement with the most relevant data from the validation and/or verification process.

### 7.4 VALIDATION / VERIFICATION REPORT

The validator or verifier shall write and sign a report of the validation or verification process carried out according to the CERCARBON Protocol.

Indicate whether the GHG-PRR meets the validation and/or verification criteria and whether its GHG removals or reductions are well estimated or calculated. Provide a conclusion on the amount of GHG removals or reductions achieved by the GHG-PRR, during the verification period, expressed in tCO2e. Include a confirmation and breakdown of such GHG removals or reductions from the verification period (current and/or previous) from [day.month.year] to [day.month.year], where applicable.

For GHG-PRR A/R use the following table:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Emissions or removals in base line (tCO2e) | Emissions and removals by the GHG-PRR (tCO2e) | Leaks (tCO2e) | Net emissions or removal of GHG (tCO2e) | Buffer | CARBONCER |
| Year X |  |  |  |  |  |  |
| Year… |  |  |  |  |  |  |
| **Total** |  |  |  |  |  |  |

For GHG-PRR not A/R, use the following table:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Emissions or removals in base line (tCO2e) | Emissions by the GHG-PRR (tCO2e) | Leaks (tCO2e) | Net emissions of GHG (tCO2e) | CARBONCER |
| Year X |  |  |  |  |  |
| Year… |  |  |  |  |  |
| **Total** |  |  |  |  |  |

### 7.5 FACTS DISCOVERED AFTER VALIDATION / VERIFICATION

The validator or verifier shall obtain sufficient appropriate evidence and identify relevant information up to the date of its verification or validation opinion. If they discover facts or new information that could materially affect the validation or verification opinion after the date of their opinion, the validator or verifier shall take appropriate action, including communication of the issue, as soon as possible to the GHG-PRR holder. The validator or verifier may also communicate to other interested parties the fact that the confidence in the original opinion may be compromised given the facts discovered or the new information.

## 8. REFERENCES

Prepare a list of all references used in the development of the validation or verification report. All references should be available for consultation by CERCARBONO and EcoRegistry.