**Template VERSION 1.1**

DATE: 30.10.2019

**PROJECT DESCRIPTION DOCUMENT (PDD) -CERCARBONO**

|  |  |
| --- | --- |
| Title of the project: | (Project name) |
|  |  |
| Document elaborated by: | (Name(s) of the project proponent) |
| Date of preparation: | (Day/month/year of production) |
| Contact: | (Physical address, email, phone number(s), website) |

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# LIST OF ACRONYMS

|  |  |
| --- | --- |
| **A/R** | Forestation/Reforestation |
| **CO2e** | Carbon dioxide equivalent |
| **FR** | GHG emission source or reservoir |
| **GHG** | Greenhouse Gases |
| **PDD** | Project Description Document |
| **GHG-PRR** | Greenhouse Gas Removal or Reduction Projects |
| **tCO2e** | Tons of carbon dioxide equivalent |
| **OVV** | Validation and/or verification body |
| **FE** | Emission Factor |
| **SIN** | National Interconnected System |
| **UPME** | Mineral-Energy Planning Unit |

# PROJECT DESCRIPTION DOCUMENT

## 1. PROJECT INFORMATION

### GHG-PRR HOLDER INFORMATION

Provide information on the natural or legal person who has a legal document of representation issued or endorsed by the project owner and/or individuals or organizations that grant certain rights with respect to the GHG-PRR, including the withdrawal of the GHG-removal or reduction certificate. Legal evidence of their representation must be attached.

|  |  |
| --- | --- |
| Full name |  |
| Name of institution (if applicable) |  |
| Roles or responsibilities |  |
| Identification |  |
| Location |  |
| Phone |  |
| Email address |  |

### INFORMATION FROM OTHER GHG-PRR PARTICIPANTS

Provide information from individuals or organizations relevant to the GHG-PRR:

|  |  |
| --- | --- |
| Full name |  |
| Name of institution (if applicable) |  |
| Roles or responsibilities |  |
| Identification |  |
| Location |  |
| Phone |  |
| Email address |  |

### PURPOSE AND OBJECTIVES OF THE GHG-PRR

Detail the purpose and objectives of the GHG Removal or Reduction Project (GHG-PRR).

### SECTORIAL SCOPE AND TYPE OF GHG-PRR

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

Note: the sectoral scopes covered by CERCARBONO's voluntary carbon certification are detailed in its Protocol.

### DESCRIPTION OF THE GHG-PRR

Provide a brief description (300-500 words) of the GHG-PRR activity including its duration, emission sources, GHG reservoirs (FR) and leakage (if applicable) under baseline and project scenarios, and the estimated annual GHG removal or reduction over the entire project duration.

List also the types of GHGs covered by the GHG PRR:

| **Type of GHG** | **Activity that generates, removes or reduces it** |
| --- | --- |
|  |  |
|  |  |
|  |  |

### LOCATION AND BOUNDARIES OF THE GHG-PRR

Detail the location and geographic boundaries of the GHG-PRR, including organizational, geographic, and physical location information (if applicable, which corresponds to the agency operating or managing the project). All this allows the unique identification and delimitation of the specific extension of the GHG-PRR. It may include as appropriate, but not be limited to

* Geographic coordinates of the area or all areas (or any stratification) within the boundaries of the GHG-PRR,
* Geo-referenced spatial data (maps, geographic information, aerial photographs, among others).
* Report and justification of any change in any of the discrete areas that form the GHG-PRR.

### OWNERSHIP OR RIGHT OF USE OF THE AREA

Evidence of rights and/or ownership of the area(s) where the GHG-PRR is or will be implemented must be described and provided. This may include as appropriate, but is not limited to

* Certificates of freedom and tradition or as appropriate.
* Permits or concessions for the use of the area.
* Proprietary rights.
* Land use plans.
* Information from local records such as cadastre, owner's registry, land use or management records.
* Others that apply to the project context

### CHARACTERISTICS OR PRECONDITIONS AT THE START OF THE GHG-PRR

For GHG-PRR A/R, detail existing conditions of area(s) prior to the start of the GHG-PRR.

For GHG-PRR other than A/R, detail the existing conditions of technologies, products or services prior to the start of the GHG-PRR that would be changed by its implementation generating a net GHG reduction.

When the baseline scenario is the same as the existing conditions prior to the start of the GHG-PRR, it is not necessary to repeat its description, it should be expanded in the baseline scenario section.

### TECHNOLOGIES, PRODUCTS, SERVICES AND/OR MEASURES IMPLEMENTED BY THE GHG-PRR

Describe the technologies, products, services and/or measures implemented by GHG-PRR that will alter the conditions of the baseline scenario.

### MANAGEMENT OF LEGAL REQUIREMENTS

All local, regional and national laws, statutes and regulatory frameworks that apply to the project activity and its main activity must be specified. Also the relevant environmental requirements and the register of the concrete project actions (in the case of A/R projects, the register of plantations). It may include, but is not limited to:

* Environmental permits or licenses.
* If required, Environmental Impact Assessment, Environmental Management Plan, Feasibility of Connection Concept (UPME), Water Concession, among others, depending on the type of project.
* Current environmental regulations for which compliance with all those that apply to the GHG-PRR must be referenced, described, and justified. For projects in Colombia, registration in the national emissions reduction registry - RENARE when authorized).

### CRONOLOGICAL PLAN

Detail the actual dates and justification (if required) of:

* The start date of the GHG-PRR activity.
* The baseline period.
* The end date of the GHG-PRR;
* The frequency of monitoring and reporting and the project period, including relevant project activities at each step of the project cycle, as appropriate;
* The frequency of validation and verification, as appropriate.

## 2. METHODOLOGY

Establish and justify the conditions of applicability of the selected methodology and/or methodological tools

Provide the name, reference and/or version of the methodology implemented for the development of the GHG-PRR. Specify also other methodological tools used.

The protocol for voluntary carbon certification - CERCARBONO establishes the methodologies and tools that can be used.

### ADDITIONALITY

Demonstrate that project activities remove or reduce GHGs above and/or below what would have occurred in the absence of the GHG-PRR, in accordance with compliance with Resolution 1447 of 2018 of the Colombian Ministry of Environment and Sustainable Development.

In the case of GHG-PRR A/R, demonstrate that the project activities remove GHGs above what would have occurred in the absence of the GHG-PRR.

In the case of projects other than GHG-PRR A/R, demonstrate that project activities reduce GHGs in relation to what would have occurred in the absence of the GHG-PRR.

### ELIGIBILITY CRITERIA

In the case of GHG-PRR A/R, describe the eligibility analysis for the areas of the GHG-PRR.

### NON PERMANENCE

In the case of GHG-PRR A/R projects, identify risks that could substantially affect GHG removal, as well as measures to manage those risks.

### BASELINE SCENARIO

Identify and justify the baseline scenario and the procedures to determine it, considering the following:

1. The description of the GHG-PRR, including the identified FRs.
2. Existing and alternative project types, activities and technologies that provide an equivalent type and level of activity of products or services for the project.
3. Data availability, reliability and limitations.
4. Other relevant information on present or future conditions, such as legislation, technical, economic, socio-cultural, environmental, geographical, site-specific and temporal

assumptions or projections.

Demonstrate functional equivalence in the type and level of activity of the products or services provided between the project and baseline scenarios and explain, as appropriate, any significant differences between the two.

Select or establish, describe and apply criteria and procedures to identify and justify the baseline scenario and demonstrate additionality.

The justification of baseline and additionality must take into account the likely future behaviour of the baseline scenario (especially FRs) in order to comply with the principle of conservatism.

### PROJECT SCENARIO

Provide a description of the GHG-PRR activity and the means used to achieve GHG removals or reductions.

* For GHG-PRR A/R should be included:
* Description of forestry activities including forestry planning, species type and justification of use, production of plant material, establishment and maintenance of plantations and harvesting.
* Information on any conservation, management or planting activities, including a description of how various organizations, communities and other entities are involved.
* For GHG-PRRs other than A/R, this should be included:
* A list and layout of the major technologies, systems and manufacturing / production equipment involved, including information on the age and average life of the equipment according to manufacturer's specifications and industry standards and existing and expected capacities, load factors and efficiencies.
* The types and levels of services (typically in terms of mass or energy flows) provided by the systems and equipment being modified and/or installed and their relationship, if any, to other manufacturing / production equipment and systems outside the GHG-PRR boundary. Describe how this would have been done in the baseline scenario.
* If applicable, a list of the facilities, systems and equipment in operation under the scenario existing prior to the implementation of the GHG-PRR.

Describe the selection or establishment of criteria, procedures or methodologies to quantify GHG emissions, removals or reductions during the implementation and operation of the GHG-PRR. Detail the criteria and methodologies selected or approved for quantification.

GHG removals or reductions shall be quantified as the difference between the emissions, removals and/or reductions of FR relevant to the project scenario and those relevant to the baseline scenario. Emissions, removals or reductions shall be quantified, as appropriate, separately for each FR for the project scenario and for the baseline scenario, by converting the amount of each type of GHG to tCO2e.

### GHG EMISSIONS SOURCES

Relate the activity and type of GHG that the GHG-PRR contemplates in the baseline scenario, in the project scenario and leakage (if applicable) It can be based on the specifications established in the CERCARBON Protocol or justify the addition or elimination of the predetermined or new types of GHGs to be incorporated.

| **ACTIVITY** | **Line base** | | | **Project scenario** | | | **Leaks** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **CO2** | **CH4** | **N2O** | **CO2** | **CH4** | **N2O** | **CO2** | **CH4** | **N2O** |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |

\*Rows can be included or removed as deemed necessary.

### GHG RESERVOIRS

Relate the GHG reservoirs that the GHG-PRR will contemplate in the baseline scenario and in the A/R GHG-PRR scenario. It can be based on the specifications established in the CERCARBON Protocol or justify the addition or elimination of predetermined or new GHG reservoirs to be incorporated.

| **RESERVOIRS** | **Line Base** | **Project scenario** |
| --- | --- | --- |
|  |  |  |
|  |  |  |

### \*Rows can be included or removed as deemed necessary.

### CREDITING PERIOD

Define and justify the start date of the accreditation period

It is important to note that the crediting period will be 20 years, or equal to the operational life of the GHG-PRR (if less than 20 years, counted from the time it generates the first removals or emission reductions). After the initial crediting period, if the limit of the operational life of the GHG-PRR has not yet been reached, the crediting period may be renewed as many times as desired, for periods of 20 years or for a shorter period, until the end of the operational life of the GHG-PRR. The renewal of the crediting period will be done through a new validation statement, which will analyse if the GHG-PRR continues to be additional and if it continues to comply with the requirements of the Protocol.

## 3. CALCULATION OF REMOVALS OR REDUCTIONS OF GHG

### ESTIMATION OF GHG EMISSIONS AND REMOVALS IN THE BASELINE SCENARIO

Describe the criteria and procedures or methodologies used to quantify emissions or removals for the selected FRs. Specify the tools used, equations and default values included in the calculation.

Depending on the criteria and procedures or methodologies selected, GHG emissions or removals should be quantified separately for each relevant FR in the baseline, by converting the amount of each type of GHG to tCO2e.

If applicable, emission or removal factors will be selected or developed.

For GHG-PRRs other than A/R it is recommended to use the INS FE calculated by the UPME. The emission factor applies in this case to renewable energy projects that displace electricity that would have been supplied to the grid by other more GHG-intensive means.

If applicable, also assess the risk of a reversal of a GHG removal (i.e., the possible non-permanence of these mitigation actions).

### QUANTIFICATION OF NET GHG EMISSIONS, REMOVALS OR REDUCTIONS IN THE PROJECT SCENARIO

Calculate the GHG emissions, removals or reductions (as appropriate) from the GHG-PRR and describe the procedure used Specify the tools used, the equations and the default values included in the calculation

The GHG removals or reductions shall be quantified as the difference between the emissions, removals from the FR relevant to the project scenario and those relevant to the baseline scenario. Emissions or removals shall be quantified as appropriate separately for each FR for the project scenario and for the baseline scenario, by converting the amount of each type of GHG to tCO2e.

### LEAKS

If applicable, identify and calculate project leakage and describe the procedure used. Specify the tools used, the equations and the default values included in the calculation

### NET REMOVALS OR REDUCTIONS OF GHG

Describe the procedure for the calculation of net removals or reductions (as applicable) of GHGs from the GHG-PRR.

For A/R projects, include the description of the tool for assessing the risk of non-permanence (buffer)

As appropriate, list in the table below the net GHG removals or reductions from the GHG-PRR:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Line base scenario | | Project scnerario | | | NET  Removal or Reduction |
| Emissions | Removals | Emissions | Removals | Leaks |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

\*Rows can be included or removed as deemed necessary.

## 4. MONITORING OF THE GHG-PRR

### MONITORING PLAN

### Describe the monitoring plan, including the procedures and schedule implemented to measure or obtain, record, compile and analyze data and information relevant to quantifying and reporting GHG emissions, removals, or reductions relevant to the baseline and project scenario using calibrated and updated measurement equipment and/or appropriate technologies. If no FR identified in the GHG baseline scenario is selected in the monitoring, provide the corresponding justification.

### 

### The monitoring plan shall include the following, as appropriate to the type of project:

### List of parameters measured and monitored, specifying the unit of measurement, the tool implemented for their measurement, the frequency of measurement.

### Types of data and information to be reported, including units of measurement

### Origin of the data.

### Monitoring methodologies (estimation, modeling or measurement), calculation approaches and uncertainty.

### Frequency of monitoring, considering the needs of the expected users.

### Definition of roles and responsibilities, including procedures for authorizing, approving and documenting changes to recorded data.

### Controls including internal evaluation of input, transformation and output data and procedures for corrective actions .

### GHG information management systems, including location and retention of stored data and data management including a procedure for data transfer between different forms of systems or documentation.

### MONITORING OF GHG EMISSIONS AND REMOVALS IN THE BASELINE SCENARIO

### If applicable, describe the criteria and procedures or methodologies for monitoring emissions or removals for the selected FRs in the baseline scenario.

### MONITORING OF GHG EMISSIONS, REMOVALS OR REDUCTIONS IN THE PROJECT SCENARIO

### Describe the selection or establishment of criteria and procedures or methodologies to monitor GHG emissions, removals or reductions during project implementation and operation, according to the criteria and procedures or methodologies selected to quantify them

## 5. LEGAL AND DOCUMENTARY ASPECTS

### LEGAL REQUIREMENTS

### List, describe and justify compliance with local, regional or national laws, statutes and regulatory frameworks that apply to the GHG-RP activity, including applicable environmental requirements and record of specific project actions when applicable.

### DATA QUALITY

Establish and implement procedures for data and information management and quality, including uncertainty assessment, relevant to project and baseline scenarios.

### DOCUMENTATION OF THE GHG-PRR

Supporting documentation demonstrating the conformity of the GHG-PRR with the Protocol. This documentation should be consistent with the validation, verification and certification processes.

### CONSULTATION OF INTERESTED PARTIES

If applicable, describe the process and relevant results of the stakeholder consultation, the mechanisms for their involvement, for ongoing and feedback communication and for their respective documentation, taking into account the provisions of the Protocol.

### CO-BENEFITS

If applicable, describe the activities to improve the quality of life of local populations affected by the GHG-PRSP, taking into account the provisions of the Protocol.

## 6. REFERENCES

Prepare a list of all references used in the development of the DDA. All references should be available for consultation by the OVV.