

CERTIFICATION AND
REGISTRATION PROGRAM FOR
GHG MITIGATION INITIATIVES
AND OTHER GREENHOUSE GAS
PROJECTS

PROCLIMA[®] PROGRAM
Responsibility and Quality

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Table of contents

1	Introduction.....	8
1.1	Background	8
1.2	Objectives.....	10
2	Version.....	10
3	Scope.....	11
4	Area of application	12
5	Principles	13
5.1	Pertinence.....	13
5.2	Total coverage	13
5.3	Coherence.....	13
5.4	Accuracy	13
5.5	Transparency.....	13
5.6	Conservative attitude	13
6	General terms	13
7	Normative references	14
8	Methodological documents and other methodologies	15
9	Project type.....	16
9.1.1	Sectoral GHG mitigation projects.....	16
9.1.2	REDD+ projects.....	19
9.1.3	Other greenhouse gas projects.....	19
10	General requirements.....	20
10.1	Project location	20
10.2	Project scale.....	20
10.3	Quantification periods of GHG emission reductions and removals.....	21
10.4	Use of appropriate methodologies.....	21
10.5	Conservative approach and uncertainty management	22
10.6	Risk management.....	23
10.7	Baseline or reference scenario	24
10.8	Leakage and non-permanence for GHG removal activities and REDD+ projects.....	25

10.9	Mitigation results	25
10.10	Compliance with national legislation.....	26
10.11	Carbon ownership and rights	26
10.12	Environmental aspects.....	28
10.13	Socioeconomic aspects	28
10.14	Sustainable Development Goals	29
10.15	Monitoring plan	30
10.16	Stakeholders' consultation.....	32
10.17	Grouped projects.....	32
10.17.1	Projects in the AFOLU sector	33
10.17.2	Projects in the energy, waste and transport sectors	33
11	Requirements for GHG mitigation initiatives	35
11.1	Start date	35
11.2	Land ownership.....	35
11.3	Methodologies for quantification and monitoring of GHG emission reductions and removals.....	36
11.3.1	Sectoral GHG mitigation projects	36
11.3.2	REDD+ projects.....	37
11.4	Baseline scenario	37
11.4.1	Sectoral GHG mitigation projects	37
11.4.2	REDD+ projects.....	37
11.5	Additionality.....	38
11.5.1	Sectoral GHG mitigation projects	38
11.5.2	REDD+ projects.....	38
11.6	REDD+ Safeguards	38
11.7	Additional requirements for oil palm cultivation	39
11.8	Registration on the RENARE platform	41
12	Requirements for other GHG projects.....	42
13	Special categories related to co-benefits.....	42
13.1	Special categories components.....	43
13.1.1	Biodiversity conservation	43

13.1.2	Benefits related to the community.....	43
13.1.3	Gender equity.....	44
13.1.4	Climate change adaptation.....	45
13.2	Categories and additional benefits (co-benefits)	46
13.2.1	Category 1. Orchid.....	46
13.2.2	Category 2. Wax Palm.....	47
13.2.3	Category 3. Andean Condor.....	48
14	Validation and verification.....	49
14.1	Validation	51
14.2	Verification.....	52
14.3	Specific considerations for validation and verification of GHG mitigation initiatives ...	53
14.3.1	Sectoral GHG mitigation projects	53
14.3.2	REDD+ projects.....	53
14.4	Validation or verification opinion	54
15	Conformity Assessment Bodies.....	54
15.1	Certification and Registration of Verified Carbon Credits (VCC)	57
16	Other GHG programs.....	57
17	Registry platform.....	58
18	Public information.....	59
19	Transition plan	59
	ANNEX A. GLOSSARY OF TERMS	60

Index of figures

Figure 1.	Orchid category requirements.....	47
Figure 2.	Wax palm requirements	48
Figure 3.	Requirements for the Andean Condor category	49

Acronyms and abbreviations

AFOLU	Agriculture, forestry, and Other Land Use
ART	Territorial Renovation Agency (Agencia de Renovación del Territorio)
CAB	Conformity Assessment Bodies
CAR	Autonomous Regional Corporation (Corporación Autónoma Regional)
CDM	Clean Development Mechanism
CH ₄	Methane
CO ₂	Carbon dioxide
CO _{2e}	Equivalent carbon dioxide
EOT	Territorial Planning Scheme (Esquema de ordenamiento territorial)
FAO	Food and Agriculture Organization of the United Nations
GHG	Greenhouse gases
HCV	High Conservation Value
IAF	International Accreditation Forum
ICA	Colombian Agricultural Institute (Instituto Colombiano Agropecuario)
ICONTEC	Colombian Institute of Technical Standards and Certification (Instituto Colombiano de Normas Técnicas y Certificación)
IDEAM	Institute of Hydrology, Meteorology and Environmental Studies (Instituto de Hidrología, Meteorología y Estudios Ambientales)
INGEI	National Greenhouse Gas Inventory) (Inventario Nacional de Gases Efecto Invernadero)
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
IUCN	International Union for Conservation of Nature
LMT	Landscape management tools
MLA	Mutual Recognition Arrangement
MRV	Monitoring, reporting, and verification
N ₂ O	Nitrous oxide
NCRE	Non-Conventional and Renewable Energy Sources (NCRE)

ONAC	National Accreditation Body (Organismo Nacional de Acreditación)
PATR	Action Plan for Regional Transformation (Plan de Acción para la Transformación Regional)
PBOT	Basic Plan of Territorial Planning (Plan Básico de Ordenamiento Territorial)
PDET	Development Programs with a Territorial Approach (Programas de Desarrollo con Enfoque Territorial)
PES	Payments for Environmental Services
POMCA	Watershed Planning and Management Plan (Plan de Ordenación y Manejo de Cuencas)
POMIUAC	Planning and Integrated Management Plan for Coastal Environmental Units (Plan de Ordenación y Manejo Integrado de Unidades Ambientales Costeras)
POT	Territorial arrangement planning (Plan de Ordenamiento Territorial)
REAA	Registry Unique of Ecosystems and Environmental Areas (Registro Único de Ecosistemas y Áreas Ambientales)
REDD+	Reduction Emissions from Deforestation, Degradation and forest conservation, sustainable management, or improvement of carbon stocks in forests
RENARE	National Registry of GHG emissions reduction (Registro Nacional de Reducción de Emisiones de GEI)
RLFE	Reference Level on Forestry Emissions
RUNAP	National Unique Registry of Protected Areas (Registro Único Nacional de Áreas Protegidas)
SDG	Sustainable Development Goal
SDGs	Sustainable Development Goals
SIAC	Environmental Information System for Colombia (Sistema de Información Ambiental para Colombia)
SISCLIMA	National Climate Change System (Sistema Nacional de Cambio Climático)
SMBYC	Forest and Carbon Monitoring System (Sistema de monitoreo de bosques y carbono)
UNFCCC	United Nations Framework Convention on Climate Change
VCC	Verified Carbon Credits

1 Introduction

1.1 Background

In the Special Report (2018), the Intergovernmental Panel on Climate Change (IPCC)¹ addresses the impacts of global warming of 1.5°C above the pre-industrial level and makes a new alert call. The panel insists that limiting global warming to 1.5°C requires unprecedented efforts and urges society to strengthen the response to the threat of climate change, sustainable development, and poverty eradication.

Earlier, in the fifth "Climate Change 2014"² report, the IPCC stated, with 95% certainty, that human activity is currently the leading cause of global warming and concluded that the higher the disruption caused by human activity to the climate, the higher the risks of severe and irreversible impacts on ecosystems and humans, and the more widespread and long-lasting the changes in all components of the climate system.

In this regard, the panel notes that *"in all the emission scenarios evaluated, projections indicate that the temperature of the Earth's surface continues to rise throughout the 21st century. Heatwaves are likely to occur more frequently and last longer, and extreme precipitation episodes are more intense and frequent in many regions."*

Consequently, considering the urgent need to prevent the increase in the planet's global average temperature from exceeding 2°C concerning pre-industrial levels, the so-called Paris Agreement was adopted on December 12, 2015 (COP21). With this international, legally binding agreement, the signatory countries committed themselves to increase efforts to achieve global reductions in greenhouse gases.

This agreement is a milestone in the fight against climate change, with low-carbon development goals, climate-resilient, and recognizing that this task takes longer for developing countries. In this way, the Agreement sets out as much ambition as possible to reduce the risks and impacts of climate change worldwide.

¹ Allen, M.R., O.P. Dube, W. Solecki, F. Aragón-Durand, W. Cramer, S. Humphreys, M. Kainuma, J. Kala, N. Mahowald, Y. Mulugetta, R. Perez, M. Wairiu, and K. Zickfeld, 2018: Framing and Context. In: Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty [Masson-Delmotte, V., P. Zhai, H.-O. Pörtner, D. Roberts, J. Skea, P.R. Shukla, A. Pirani, W. Moufouma-Okia, C. Péan, R. Pidcock, S. Connors, J.B.R. Matthews, Y. Chen, X. Zhou, M.I. Gomis, E. Lonnoy, T. Maycock, M. Tignor, and T. Waterfield (eds.)]. In Press. <https://www.ipcc.ch/sr15/>

² IPCC, 2014: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. <https://www.ipcc.ch/report/ar5/wg3/>

To jointly monitor the achievement of the proposed targets, countries shall communicate a nationally determined contribution every five years, under the provisions of COP21, considering the global assessment results referred to in the Paris Agreement. Thus, the Parties (involved as the participating countries of the United Nations Framework Convention on Climate Change) shall prepare, communicate, and maintain the successive nationally determined contributions (NDC) planned.

For example, in Colombia, the national government, assuming the challenges of sustainable growth, considering the global responsibilities of climate change and based on decisions that allow progress towards climate-resilient and low-carbon development, proposes that "*climate change management be oriented towards achieving short-, medium- and long-term GHG adaptation and mitigation goals*".³

In this way, it is assumed that adaptation and mitigation targets can contribute to addressing climate change by proposing comprehensive strategies that link adaptation and mitigation with social and local, regional, and national development objectives.

As per the country's strategies to achieve compliance with international commitments related to climate change mitigation, one economic instrument arises that encourages the achievement of the proposed goals. Consequently, Decree 926 of 2017⁴ regulates the procedure to make effective the non-causation of the national carbon tax and, likewise, certify being carbon neutral, following the provisions of paragraph 3 of Article 221 of Law 1819 of 2016. In 2018, Resolution 1447 (August 01) regulates the system for monitoring, reporting, and verifying mitigation actions at the national level.

In this context, the PROCLIMA Program aims to certify and register initiatives⁵ and other greenhouse gas projects that contribute to reducing greenhouse gas emissions, favoring low-carbon growth, and ensuring compliance with national and international policies related to sustainable development objectives.

³ Política nacional de cambio climático / Luis Gilberto Murillo, ministro (2016 - :); [Eds.] Dirección de Cambio Climático: Florián Buitrago, Maritza; Pabón Restrepo, Giovanni Andrés; Pérez Álvarez, Paulo Andrés; Rojas Laserna, Mariana; Suárez Castaño, Rodrigo. Bogotá, D. C.: Colombia. Ministerio de Ambiente y Desarrollo Sostenible, 2017. 290 pp. http://www.minambiente.gov.co/images/cambioclimatico/pdf/Politica_Nacional_de_Cambio_Climatico_-_PNCC_/PNCC_Políticas_Publicas_LIBRO_Final_Web_01.pdf

⁴ República de Colombia. Ministerio de Hacienda y Crédito Público. Decreto 926 (1 de junio de 2017). Por el cual se modifica el epígrafe de la Parte 5 y se adiciona el título 5 a la Parte 5 del Libro 1 del Decreto 1625 de 2016 Único Reglamentario en Materia Tributaria y el Título 11 de la Parte 2 de Libro 2 al Decreto 1076 de 2015 Único Reglamentario del Sector Ambiente y Desarrollo Sostenible, para reglamentar el parágrafo 3 del artículo 221 y el parágrafo 2 del artículo 222 de la Ley 1819 de 2016.

<http://es.presidencia.gov.co/normativa/normativa/DECRETO%20926%20DEL%2001%20DE%20JUNIO%20DE%202017.pdf>

⁵ The initiatives are GHG Mitigation Projects (Sectoral and REDD+), giving compliance with Colombian national regulations.

Likewise, the PROCLIMA Program seeks to generate confidence in the market, promoting the participation of the private sector, and strengthening mechanisms that favor the execution of mitigation actions to achieve the objectives of national contributions.

1.2 Objectives

The objectives of the "Certification and Registration Program of GHG Mitigation Initiatives and Other Greenhouse Gas Projects" (from now on referred to as this Program) are:

- (a) provide requirements applicable to GHG Mitigation Initiatives, classified as Sectoral GHG Mitigation Projects and REDD+ Projects;
- (b) give the provisions applicable to other GHG projects;
- (c) promote a clear understanding of requirements and procedures to ensure quality in the quantification and management of GHG emissions reductions and removals;
- (d) support the compliance of project design documents submitted by the initiative and other GHG projects holders;
- (e) guide Conformity Assessment Bodies (CAB), related to the validation and verification processes of GHG mitigation initiatives and other greenhouse gas projects;
- (f) ensure the overall efficiency and integrity of the PROCLIMA Program.

2 Version

This version constitutes the Version 3.0. May 13, 2021.

This version of the document may be adjusted periodically. Intended users should ensure that they are using the updated version. Holders of GHG mitigation initiatives and projects have a three-month transition period for using the updated version, starting from its publication.

This document also complies with the documents referenced in this and other materials that make up this Program.

3 Scope

This Program is a certification schema, that include also the guidelines for the registration of GHG mitigation initiatives that demonstrate compliance with the requirements established in the legal national legal frameworks and compliance with the rules and procedures established by PROCLIMA.

The certification and registration of mitigation initiatives and other GHG projects are possible within this program's framework if such initiatives or projects⁶ have been previously validated and verified by accredited Conformity Assessment Bodies, which comply with the provisions' in-force regulations.

This document provides the set of principles and requirements necessary for the design, development, validation, verification, and certification of mitigation initiatives and other GHG projects, as well as for the issuance of Verified Carbon Credits (from now on VCC), ensuring that they comply with the conditions established in the applicable national regulations and this Program.

The scope of this Program is limited to:

- (a) the following greenhouse gases covered by the Kyoto Protocol: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O);
- (b) mitigation initiatives using a methodology developed or approved by this Program, applicable to sectoral GHG mitigation projects and REDD+ projects;
- (c) the other GHG projects that using a methodology proposed and approved for use under the CDM mechanisms;
- (d) the other GHG projects that apply a methodology developed or approved by this Program;
- (e) quantifiable GHG emission reductions and removals generated by the implementation of sectoral GHG mitigation projects as also when applicable to REDD+ projects;
- (f) measurable and verifiable reductions of GHG emissions from other greenhouse gas projects.

⁶ Hereinafter, when initiatives or projects are mentioned, reference is made to GHG mitigation initiatives and other greenhouse gas projects.

This document presents the requirements for the design, validation, verification, and certification of projects, actions, or activities, whose purpose is to reduce and remove GHG emissions. The Program includes other documents⁷ that constitute the methodologies for quantifying GHG emissions reductions and removals, defined by sector, and applicable to project type (See Section 8).

4 Area of application

This program intends to serve:

- (a) any natural or legal person, public or private that seeks to register its GHG mitigation initiative, to qualify for payment for similar outcomes or offsets because of actions that generate GHG emission reductions and removals;
- (b) any natural or legal person, public or private that seeks to register its GHG mitigation initiative to demonstrate its mitigation results in the context of meeting national climate change targets, established under the CMNUCC, as a result of the implementation of such actions;
- (c) any natural or legal person, public or private that intends to register its greenhouse gas project to demonstrate its mitigation results in the context of meeting international climate change targets, at the voluntary or the regulated markets;
- (d) Conformity Assessment Bodies (CAB), meaning, independent entities that perform validation and verification processes of GHG mitigation initiatives and/or other greenhouse gas projects;
- (e) regulatory authorities and those involved in climate change information management;
- (f) actors involved in the trading and transaction of GHG emission reductions;
- (g) holders of GHG mitigation initiatives classified as sectoral GHG mitigation projects or REDD+ projects;
- (h) holders of other greenhouse gas projects;

⁷ Methodological documents

5 Principles

Holders of GHG mitigation initiatives and, in general, all those involved in the design, development, validation, verification, and certification of GHG mitigation initiatives and other greenhouse gas projects should apply the following principles⁸:

5.1 Pertinence

To select sources, sinks, GHG reservoirs, data, and methodologies appropriate to the intended user.

5.2 Total coverage

Include all relevant GHG emissions and removals. Include all relevant information to support the criteria and procedures.

5.3 Coherence

Allow for meaningful comparisons in GHG-related information.

5.4 Accuracy

Reduce bias and uncertainty as much as possible.

5.5 Transparency

Disseminate sufficient and appropriate GHG-related information to enable future users to make decisions with reasonable confidence.

5.6 Conservative attitude

Use conservative assumptions, values, and procedures to avoid overestimating the emission reductions or the increase of GHG removals.

6 General terms

The following general terms apply for this Program:

- (a) "Shall" is used to indicate that the requirement shall be met;

⁸ As set out in the ISO 14064-2 Standard

- (b) "Should" is used to suggest that, among several possibilities, a course of action recommended as particularly appropriate;
- (c) "May" is used to indicate that it is permitted.

7 Normative references

The following references are indispensable for the implementation of this Program:

- (a) PROCLIMA Methodological Documents and PROCLIMA Program Methodological Guides,
- (b) Decree 926 of 2017 amended the heading of Part 5, and Title 5 is added to Part 5 of Book 1 of Decree 1625 of 2016 Single Regulatory in Tax Matters and Title 11 of Part 2 of Book 2 to Decree 1076 of 2015 Single Regulatory in the Environment and Sustainable Development Sector, to regulate paragraph 3 of Article 221 and paragraph 2 of Article 222 of Law 1819 of 2016 (Ministry of Finance and Public Credit) or the one that amends or updates it, where applicable;
- (c) Decree 446 of 21 March 2020 amends article 2.2.11 .1.2 of Chapter 1 of Title 11 of Part 2 of Book 2 of Decree 1076 of 2015, and adds an item to Chapter 1 of Title 11 of Part 2 of Book 2 of Decree 1076 of 2015, concerning the accreditation of bodies for the verification of greenhouse gas emissions reductions and removals (Ministry of Environment and Sustainable Development), or that which amends or updates it, where applicable;
- (d) Resolution 1447 of 2018 Which regulates the system of monitoring, reporting, and verification of mitigation actions at the national level referred to in Article 175 of Law 1753 of 2015, and other provisions (Ministry of Environment and Sustainable Development), or that which modifies or updates it, where applicable, where applicable;
- (e) Decree 1595 of August 5, 2015. by which rules are issued concerning the National Subsystem of Quality and amending Chapter VII and Section 1 of Chapter VIII of Title I of Part 2 of Book 2 of the Single Regulatory Decree of the Trade, Industry, and Tourism Sector, Decree number 1074 of 2015, and other provisions or that which amends or updates it, where applicable;
- (f) Clean Development Mechanism rules, procedures, methodologies, and methodological tools, where applicable;
- (g) National legislation applicable to other greenhouse gas projects;

(h) This Program Glossary of terms.

Similarly, compliance with the following ISO Standards is essential:

- (a) ISO 14064-2:2019(es). Greenhouse gases - Specification with guidance, at the project level, for quantifying, monitoring, and reporting the reduction of emissions or the enhancement of removals of greenhouse gases, or that which updates it;
- (b) ISO 14064-3:2019(es). Greenhouse gases - Part 3: Specification with guidance for validation and verification of greenhouse gas declarations, or its amendment;
- (c) ISO 14065:2013(es). Greenhouse gases - Requirements for bodies undertaking validation and verification of greenhouse gases for use in accreditation or other forms of recognition.

8 Methodological documents and other methodologies

This Program includes methodological documents for quantifying GHG emission reductions or removals, at the project level, for the mitigation initiatives and the other greenhouse projects in the AFOLU and transport sectors.

The methodological documents contain the applicability criteria and detailed steps for quantifying and monitoring results against design and implementation of GHG mitigation initiatives and other greenhouse gas projects, by a given project type.

Although the methodological documents contain specific guidance for each type of initiative or project, what describes these documents adheres to the general principles and requirements in this Program document.

All methodological documents developed by PROCLIMA and approved by the PROCLIMA Technical Committee are available on the PROCLIMA website.

Project holders in the energy sector and waste, both sectoral GHG mitigation projects and other greenhouse gas projects, shall use methodologies approved by the Executive Board of the Clean Development Mechanism⁹ (CDM - UNFCCC).

⁹ The CDM methodologies are available in <https://cdm.unfccc.int/methodologies/index.html> and the CDM Methodological tools in <https://cdm.unfccc.int/Reference/tools/index.html>

9 Project type

As noted in section 3 (Scope), this Program provides the standard for certification of GHG mitigation initiatives and other greenhouse gas projects.

GHG mitigation initiatives are projects, actions, or activities developed at a national, regional, local, and applicable to a sectoral level that aim to reduce emissions and when applicable to avoid GHG emissions. These are classified into GHG emission reduction initiatives and GHG removal initiatives. The initiatives can be either sectoral (sectoral GHG mitigation projects) or REDD+.

Other greenhouse gas projects include projects in the energy, waste and AFOLU sectors.

9.1.1 Sectoral GHG mitigation projects

Sectoral GHG mitigation projects are initiatives developed in Colombia, including GHG emission reduction or removal activities other than REDD+. Sectoral GHG mitigation projects eligible under this program are:

(a) GHG removal activities

They are GHG mitigation actions in the AFOLU sector, based on agricultural and forestry activities. These may include silvopastoral systems (grasses and planted trees), agroforestry systems (agroforestry crops), commercial plantations (forest plantations), and other landscape management tools, as well as oil palm crops, as long as they are growing in areas other than natural forest or natural vegetation cover other than forest¹⁰.

NOTE: The areas at the geographical boundaries of the project do not correspond to the category of forest (as defined by the Forest and Carbon Monitoring System), nor to natural vegetation cover other than wood at the start of project activities, nor five years before the project start date.

(b) Energy from Non-Conventional and Renewable Energy Sources (NCRE)

This type of sectoral project is an alternative to the mining energy sector, which includes the generation of energy with non-conventional sources of renewable energy.

According to UPME (2015)¹¹, *"approximately 78% of the energy consumed in Colombia today comes from fossil sources, while the remaining 22% comes from renewable"*

¹⁰ The names in parentheses correspond to the definitions contained in CORINE Land Cover. See Glossary of Terms.

¹¹ UPME. (2015). Integración de las energías renovables no convencionales en NE. CONVENIO ATN/FM-12825-CO

sources. The local availability of NCRE not yet exploited, added to the progressive reduction in costs associated with its use and the evolution of related technologies, makes integrating these sources to the national energy basket more relevant due to its potential benefits".

Under this Program, energy generation projects, incorporated in Law 1715 of 2014¹², based on non-conventional energy sources (FNCE)¹³ may be certified and registered, particularly those of renewable energies such as solar, wind, biomass, and hydraulic power, defined in Law 1715 of 2014, as well:

Solar energy. Energy obtained from that non-conventional source of renewable energy that consists of electromagnetic radiation from the sun.

Wind energy. Energy obtained from that non-conventional source of renewable energy that consists of the movement of air masses.

Biomass energy. Energy obtained from that unconventional source of renewable energy is based on the spontaneous or induced degradation of any organic matter that has had its immediate origin as a result of a biological process. It also refers to plant photosynthesis products and products from heterotrophic organisms, provided that those products are not in contact with traces of elements that confer some degree of danger on them.

Energy from small hydroelectric developments. Energy obtained from that non-conventional source of renewable energy is based on water bodies on a small-scale.

The latter includes only small hydroelectric plants (PCH), i.e., with an installed capacity between 500 and 20,000 kW, run-of-river operation, applicable to non-interconnected areas and interconnected areas (without the possibility of participating in electricity dispatch, less than 500 kW, and with the option of participating in electricity dispatch for areas higher than 10,000 kW)¹⁴.

(c) Energy efficiency

Componente I Proyecto inversiones catalizadoras para energía geotérmica Promoción de criterios de mercado para las energías renovables no convencionales a través de la eliminación de barreras para su desarrollo. Bogotá. 188 p.

¹² The law aims to "promote the development and use of non-conventional energy sources, mainly those of a renewable nature, in the national energy system, through their integration into the electricity market, their participation in non-interconnected areas and other energy uses as a necessary means for sustainable economic development, the reduction of greenhouse gas emissions and the security of energy supply.

¹³ They are those energy resources available globally that are environmentally sustainable, but which in the country are not employed or are used marginally and are not widely commercialized (Law 1715 of 2014).

¹⁴ According to the classification of the hydropower plants in the Atlas of the Hydropower Potential of Colombia (2015).

According to the URE Law¹⁵, energy efficiency is the relationship between the energy used and the total energy used in any energy chain process, within the framework of sustainable development and respecting current regulations on the environment and renewable natural resources.

This category includes projects related to the adoption of new technologies (of use, measurement, and analysis), good operational practices, and habits to optimize the use of energy resources and when applicable to reduce GHG emissions associated with the use of energy resources.

(d) Transportation

The program considers GHG mitigation initiatives that include the conversion of cars to Natural Gas systems.

(e) Waste handling and disposal

Waste handling and disposal projects, which can be registered in ProClima, are GHG emission reduction projects focused on utilizing waste or eliminating GHG emissions generated during the treatment and final disposal of the solid or liquid, industrial, household, or mixed waste.

The holders of this type of project shall apply the methodologies classified on sector 13 of the Clean Development Mechanism (CDM): Waste handling and disposal.

Some projects include waste handling and disposal components, classified as renewable energy or energy efficiency. For this program's purposes, those methodologies that are not considered in the latest version of the Guidance for the certification and registration of Non-Conventional and Renewable Energy Sources (NCRE) contain both waste and energy components considered it as Waste Sector projects.

Waste handling and disposal projects can include the following activities:

- a. Burning, oxidation, or use of gas in the landfill;
- b. Recovery and recycling of materials coming from waste;
- c. Use of gases, including syngas as a renewable energy source;

¹⁵ LEY 697 de 2001 (octubre 3). Mediante la cual se fomenta el uso racional y eficiente de la energía, se promueve la utilización de energías alternativas y se dictan otras disposiciones. DIARIO OFICIAL. AÑO CXXXVII. N. 44573. 5, OCTUBRE, 2001. PAG. 1

- d. Use or replacement of technology to eliminate or reduce the generation of GHG in reliable waste treatment systems;
- e. Use or replacement of technology to eliminate or reduce the generation of GHG in wastewater treatment;
- f. Burning or use of gas in systems of wastewater treatment.

9.1.2 REDD+ projects

These are GHG mitigation projects that implement activities aimed at reducing emissions due to deforestation and forest degradation, as well as promoting conservation, sustainable forest management and increasing forest carbon stocks.

9.1.3 Other greenhouse gas projects

According to ISO 14064-2:2019, a greenhouse gas project (GHG project) is an activity or activities that alter GHG baseline conditions, which causes GHG emission reductions or GHG removal enhancements.

In this type of project, which can be certified and registered under this Program, there are energy generation projects with activities in the energy and waste sectors. Also, activities in the AFOLU sector.

The other greenhouse gas projects include:

- (a) Projects developed outside Colombian territory;
- (b) Other greenhouse gas projects, which do expect to demonstrate their mitigation results within the framework of meeting national climate change targets, established under the CMNUCC for their country of origin;
- (c) Energy generation projects (wind and solar energy) and energy efficiency;
- (d) Projects that generate emission reductions from waste handling and disposal;
- (e) GHG removal activities. That is, GHG mitigation actions in the AFOLU sector based on agricultural and forestry activities, including silvopastoral systems, agroforestry systems, commercial plantations, as well as crops (in monoculture or agroforestry systems), as long as they are developed in areas other than natural forest or natural vegetation cover other than forest¹⁶.

¹⁶ According to the national definitions of forest and non-forest natural vegetation covers

- (f) GHG emission reduction projects designed and monitored with Clean Development Mechanism methodologies, where applicable.

Despite the certification and registration of these GHG projects in this Program, GHG emission reductions from other GHG projects are not eligible for carbon-neutral certification in Colombia.

The reductions in GHG emissions and removals, eligible for carbon-neutral certification, within the scope of the national carbon tax in Colombia, shall come from a GHG mitigation initiative developed in the national territory. Under no circumstances, GHG emission reductions or removals from projects implemented outside the national territory are eligible for carbon tax under this Program.

10 General requirements

To certify GHG mitigation initiatives and the other greenhouse projects and obtain the issuance of Verified Carbon Credits (VCC), holders of GHG mitigation initiatives and the other GHG projects shall comply with the rules and procedures established under the PROCLIMA Program, including this document.

In this sense, for all projects seeking Certification and Registration with PROCLIMA, the general requirements described below apply.

10.1 Project location

GHG mitigation initiatives, meaning sectoral GHG mitigation projects and REDD+ projects, shall be in Colombian territory.

The other GHG projects can be located anywhere in the world, outside Colombian territory.

10.2 Project scale

GHG mitigation initiatives, classified as GHG removal activities, and REDD+ Projects, are not subdivided into project scale categories.

The other GHG projects are (in sectors other than AFOLU) large-scale and small-scale, following the definitions of the Clean Development Mechanism¹⁷.

¹⁷ Information available in https://cdm.unfccc.int/methodologies/documentation/meth_booklet.pdf

10.3 Quantification periods of GHG emission reductions and removals

The quantification periods of GHG emission reductions or removals are as follows:

- (a) for projects in the AFOLU sector, other than REDD, a minimum of 20 years and a maximum of 30 years;
- (b) for REDD+ projects, a minimum of 30 years and a maximum of 60 years;
- (c) for sectoral mitigation projects in the energy and transport sectors, the same rules on quantification periods (crediting period), as defined by the Clean Development Mechanism, shall apply. A maximum of seven years, renewable at most twice, or a maximum of ten years with no option for renewal¹⁸.
- (d) for other greenhouse gas projects in the energy and waste sectors, the same rules on quantification periods (crediting period), as defined by the Clean Development Mechanism, shall apply. A maximum of seven years, renewable at most twice, or a maximum of ten years with no option for renewal.

10.4 Use of appropriate methodologies

Sectoral GHG mitigation projects and other greenhouse gas projects based on GHG removal activities, as well as the REDD+ projects, shall apply methodologies developed by PROCLIMA. These projects shall use them in their entirety, including the full application of methodological guidelines referred to in the method, if any. Practices are available on the PROCLIMA website.

The initiative and other GHG projects holders interested in obtaining certification may also use another methodology and appropriate tools as long as those apply to the proposed mitigation, but a ProClima approval is necessary.

Other greenhouse gas projects, in energy and waste sector, shall apply methodologies approved by the Clean Development Mechanism Executive Board, including the rules and procedures, concepts, definitions, and methodological tools used by CDM projects.

Holders of GHG mitigation initiatives should always use the latest version of current methodologies and applicable to methodological documents. Suppose the operator of the action proposes activities that involve the use of different methods in the same GHG

¹⁸ In case the CDM criteria are modified, the initiative holder shall apply the latest version of the criteria.

mitigation initiative. In that case, he may check that meet the conditions for applicability of the requirements contained in the jointly applied methodologies¹⁹.

Once it appears new requirements, procedures, or documents certified initiatives, in ordered to demonstrate compliance, shall comply with the transition plans defined by this Program.

10.5 Conservative approach and uncertainty management

Holders of GHG mitigation initiatives and other GHG projects should use methodologies that define a mechanism for managing uncertainty in baseline quantification and mitigation results.

According to the International Organization for Standardization (ISO), "*uncertainty is the parameter associated with the result of quantification, which characterizes the dispersion of values that could reasonably be attributed to the quantified quantity. Uncertainty information generally specifies quantitative estimates of the likely dispersion of values and a qualitative description of the likely causes of the dispersion*"²⁰.

As a matter of good practice, national or local values and data should be used, where available. Given this, holders of mitigation initiatives and other GHG projects may use the IPCC default values, yes and only if local or national data (for the type of project and parameter required) are not available²¹. On the other hand, to achieve a conservative attitude, when using default values, the traditional values of the settings should be used²², for example, by the use of the lower limit of the range of data or the lower limit of the field as long as it applies and corresponds to the most conservative assumption²³.

Finally, if reference is made to external documents, subject to change and when applicable to update, such as the IPCC Guidelines for National GHG Inventories, the most recent version of those documents should be used.

¹⁹ For example, project activities may be specific to areas classified as wetlands or may be combined with other AFOLU activities.

²⁰ ISO 14064-2:2019(en)

²¹ Guidance on Default Values - IPCC (Extract from the report of the 25th meeting of the Executive Board of the Clean Development Mechanism, paragraph 59) "The Board agreed that the IPCC default values should be used only when country or project specific data are not available or difficult to obtain". https://cdm.unfccc.int/Reference/Guidclarif/meth/meth_guid16_v01.pdf

²² The conservative value of a parameter refers to the value that, when used in calculations, is more likely to result in underestimation rather than overestimation of GHG emission reductions or removals (ISO 14064-2:2019).

²³ The conservative attitude can be ensured by the appropriate choice of parameters affecting the project's GHG emissions, removals, sinks and reservoirs.

For the management of uncertainty in projects in the AFOLU sector, this program determines criteria and guidelines to comply with the management of risk associated with models to estimate emission reductions in sectoral GHG mitigation and REDD+ projects²⁴.

Suppose the data and parameters applied to estimate the reduction and removal GHG emissions are consistent with the emission factors, activity data, projection of GHG emissions and the other parameters used to construct the national inventories of GHG and the national reference scenario. In that case, it is not necessary to apply the percentages defined for the discount factor (in the guidelines for managing uncertainty).

For the other sectoral GHG mitigation projects, issues related to the conservative attitude and uncertainty management are in each sector's methodological documents.

10.6 Risk management

The holders of GHG mitigation initiatives and other GHG projects shall assess the risks related to the implementation of project activities in the environmental, financial and social dimensions.

Based on the identification of risks in these three dimensions, the holder of the initiative or project shall design measures to manage the risks, so that the reduction or removal of GHG emissions are maintained during the life of the project.

In this regard, the initiative or project holder shall:

- (a) identify the potential natural and anthropogenic risks that GHG mitigation actions may face and determine the measures necessary to mitigate such risks;
- (b) identify potential financial risks related to expected costs and investments, as well as project cash flows and define the necessary measures to mitigate financial risks;
- (c) determine, in the medium and short term, the risks associated with the participation of local communities and stakeholders in the activities proposed by the holder of the initiative or project.

The holder of the GHG initiative or project shall use appropriate methodologies to carry out the assessment of the expected risks (direct and indirect) and consider mitigation measures, within the framework of adaptive management.

²⁴ Available in the methodological documents, developed for each sector or project type.

Adaptive management is a process by which project actions can be adapted to future conditions to ensure the achievement of the proposed objectives. It is a structured decision-making process that takes into account the impact variables in order to reduce uncertainty about the results.

Finally, and taking into consideration the above, risk assessment and management must be adequate, accurate and objective.

10.7 Baseline or reference scenario

GHG mitigation initiative and other GHG projects holders shall establish a baseline or reference scenario, meaning, the situation that represents the GHG emissions that would occur in the absence of an GHG mitigation activity, so that they comply with the methodology applicable to the initiative or project.

Holders shall justify the identification and selection of the baseline methodology and the reasons for applying this methodology to the project activities.

Definition of the reference scenario shall follow the provisions contained in the PROCLIMA methodological documents and the other methodologies applicable to projects, in their most recent version and:

- (a) transparently regarding assumptions, methods, parameters, data sources, and factors;
- (b) considering uncertainty and using prudential assumptions;
- (c) specifically, for each GHG mitigation activity;
- (d) considering relevant national as also when applicable to sectoral policies and circumstances;
- (e) implementing procedures to ensure data quality under ISO 14064-2 and the requirements of the selected methodology;
- (f) in such a way that no GHG reductions or removals can obtain, due to decreases in an activity outside the project activity;
- (g) covering emissions and removals of all gases, defined in the applied methodologies, included in the project boundary under consideration.

10.8 Leakage and non-permanence for GHG removal activities and REDD+ projects

GHG mitigation initiatives and other GHG projects based on GHG removal activities as well as the REDD+ projects should use methodologies that define a mechanism for managing the risk of leakage and managing uncertainty in baseline quantification and mitigation results.

Likewise, the holder of the mitigation initiative or the other GHG project shall ensure the permanence of the project activities to quantify the GHG reductions or removals, following the conditions set forth by this Program. The monitoring of project activities, through verifications, shall evaluate the permanence of project activities.

In any case, once quantified GHG reductions or removals (based on the selected quantification methodology), holders of GHG mitigation initiatives and other GHG projects, should discount and maintain a reserve of 15% on the total quantified GHG reductions or removals for each verified period. As a risk management measure, this reserve guarantees the replacement of lost credits by occurs events that require the replacement of credits placed in the market.

PROCLIMA periodically reviews this percentage and, if necessary, adjust it.

The 15% discount on Verified Carbon Credits in each verification period is held in a reserve account for the mitigation initiative to which they belong.

Verified Carbon Credits placed in the reserve account may be released and placed on the market at a later verification. Provided that there has been no cancellation of such credits, as described above.

10.9 Mitigation results

GHG mitigation initiatives and other GHG projects shall demonstrate their mitigation results in the context of the fulfillment of the national climate change targets established under the UNFCCC and those that set binding standards in this regard.

They shall also ensure that GHG mitigation results, obtained because of their implementation, are verifiable within the framework of ISO 14064-3:2019, or those that update it.

10.10 Compliance with national legislation

The GHG mitigation initiative and other GHG projects holder shall demonstrate compliance with legislation applicable related to GHG mitigation activities.

In this sense, the initiative or project holder shall have a documented procedure (Documentary Management System). The relevant legislation and regulations are identified and accessed on an ongoing basis, demonstrating that it has a process for periodically reviewing compliance with them.

Accordingly, the mitigation initiative or project holder shall maintain an updated list of all legislative requirements applicable to its GHG mitigation initiative activities.

Besides, in compliance with these documented procedures, the GHG mitigation initiative or other GHG project holder shall²⁵:

- (a) determine and have access to legal and other requirements related to its activities;
- (b) determine how these legal and other requirements applicable to the mitigation initiative or project;
- (c) take these legal and other requirements into account when establishing, implementing, maintaining, and continuously improving its document management system;

10.11 Carbon ownership and rights

Carbon rights are defined by the property of verified carbon credits (VCC) and when applicable to rights to benefits from the sale of carbon credits or other payments or interests received from emissions reductions or GHG removals. In short, they are the right to benefit from emission reductions or GHG removals. In this sense, GHG mitigation initiative and other GHG project holders shall demonstrate full legal ownership of the VCCs.

Carbon rights shall demonstrate transparency and, if necessary, with evidence of a process based on full, prior, and informed consent.

For example, when the GHG mitigation initiative develops activities within territories of ethnic groups and traditional local communities, both its members, individuals, and

²⁵ Adapted from NORMA TÉCNICA COLOMBIANA NTC-ISO 14001. SISTEMAS DE GESTIÓN AMBIENTAL. REQUISITOS CON ORIENTACIÓN PARA SU USO. 2015-09-23.

environmental authorities shall ensure respect for their rights, warn and develop the procedures provided for in article 330 of the Political Constitution, Law 21 of 1991, Law 99 of 1993 article 76, Decree 1320 of 1998, and other rules that complement, amend, add.

Consequently, in cases where the initiative holder is a natural or legal person other than the local ethnic groups and traditional communities, the holder of the sectoral GHG mitigation project or REDD+ projects shall first request the Pre-Consultation Directorate of the Ministry of the Interior. This Pre-consultation is the Certification Procedure to establish whether or not in the area of the project or initiative ethnic communities are registered on which the Basic Right should be guaranteed.²⁶

Initiative and projects holders shall demonstrate carbon rights, with agreements and documents that ensure the requirement is met, with at least the following information:

- (a) parties who sign the agreement(s);
- (b) agreement objectives;
- (c) agreement date;
- (d) name of the GHG mitigation initiative;
- (e) period of quantification of GHG reductions/removals;
- (f) responsibilities, obligations, and rights of each of the signatory parties.

Suppose the GHG mitigation initiative includes ethnic groups as participants in the action. In that case, the enterprise holder shall present proof of registration of the election of the legal representative and board of directors for black communities or proof of registration of the possession of the town hall for indigenous communities, issued by the respective municipal mayor's office, where applicable.

If the territory occupying the ethnic community transcends the geographical boundaries of a territorial entity, the constancy shall be issued by the municipality's administrative authority with the more significant land extension of the ethnic territory.

It shall also submit the certificate of registration in the Single Registry for Black and Indigenous Communities maintained by the Ministry of the Interior, through the

²⁶ <https://www.mininterior.gov.co/mision/direccion-de-consulta-previa/certificacion-de-presencia-de-grupos-etnicos-ano-2013-mayo/certificaciones-de-presencia-de-grupos-etnicos>

Directorate of Black, “Raizal,” and “Palenque” Communities and the Directorate of Indigenous Affairs, ROM, and Minorities, if is an GHG mitigation initiative.

If the GHG mitigation initiative holder is the ethnic community, documentation should be submitted by the authority legitimately representing the community. The certificate of registration demonstrates this in the single registry for ethnic communities of the Ministry of the Interior and when applicable, in the certificate of registration with the mayor's office or governor's office.

In the case of other GHG projects that develop activities within the territories of ethnic groups and/or local traditional communities, the GHG project holder must comply with the applicable regulations in its country.

In some cases, carbon rights are together with other ones, such as land tenure rights, which develops projects in the AFOLU sector. In detail, this requirement is in the section on requirements for GHG removal activities and REDD+ projects.

10.12 Environmental aspects

Without prejudice to the fact that the mitigation initiative or GHG project is obliged to develop an environmental management plan, in the terms indicated by what regulates the environmental licenses (or the applicable regulations), the holders of the GHG mitigation initiatives or GHG project shall carry out an environmental evaluation, analyzing the foreseeable effects on the biodiversity and the ecosystems, within the limits of the project. Reliable and recent references shall support the analysis.

If the GHG mitigation initiative or project activities could generate adverse effects, the initiative holder shall define actions and corrective measures to manage and minimize the impact derived from the development of the activities of the GHG mitigation initiative.

10.13 Socioeconomic aspects

GHG mitigation initiative or GHG projects holders shall analyze the significant socioeconomic effects of project activities within the project boundaries, clearly explaining the assumptions used and justifying the review results. The assessment shall also refer to related documentation and evidence.

Suppose this assessment leads to the conclusion that adverse effects would generate. In that case, the initiative or project holder shall define actions and corrective measures to prevent and when applicable to diminish the social and economic effects derived from the development of the GHG mitigation initiative or project activities.

10.14 Sustainable Development Goals

GHG mitigation initiatives and the other GHG projects shall be conducive to climate action, based on sustainable development and the common good. To this end, GHG mitigation initiative or project holders shall assess the GHG mitigation initiative's contribution as also when applied to the project to the Sustainable Development Goals (SDGs)²⁷.

To demonstrate compliance with this requirement, GHG mitigation initiative holders shall show, with a definition of relevant criteria and indicators, the project's contribution or initiative to sustainable development goals, applicable to the project activities proposed by the enterprise or project holder.

The 17 objectives of sustainable development include recognition and efforts regarding fundamental rights and actions to improve well-being and quality of life, such as food security, healthy living, education, gender equality, access to water and energy, economic growth, and sustainable use of ecosystems and peaceful societies.

Holders of mitigation initiatives as also when applicable to GHG projects should, for example, determine whether the project contributes to actions such as²⁸:

- (a) to reduce the proportion of men, women, and children of all ages living in poverty in all dimensions according to national definitions;
- (b) ensure that all men and women, particularly the poor and vulnerable, have equal rights to economic resources and access to essential services, ownership, and control of land and other property;
- (c) improve agricultural productivity and the income of small-scale food producers, women, indigenous peoples, family farmers, livestock, and fishers;
- (d) ensure the sustainability of food production systems and implement resilient agricultural practices that increase productivity and production, contribute to the maintenance of ecosystems, and strengthen adaptive capacity;
- (e) achieving universal sanitary coverage, including protection from financial risks, access to quality essential health services, and access to safe, effective, affordable, and quality medicines and vaccines for all;

²⁷ Bearing in mind the Sustainable Development Priorities at the national level, in the host country.

²⁸ Variables based on the 2030 Agenda in Colombia (adapted from some of the Agenda indicators)

- (f) reduce the number of deaths and illnesses caused by hazardous chemicals and by pollution and contamination of air, water, and soil;
- (g) ensure the full and active participation of women and equal opportunities for leadership at all levels of decision-making in political, economic, and public life;
- (h) give women equal rights to economic resources, as well as access to ownership and control of land and other property, financial services, inheritance, and natural resources;
- (i) support the efficient use of water resources and ensure the sustainability of freshwater extraction and supply to address water scarcity;
- (j) provide full and productive employment and decent work for all women and men, including young people and persons with disabilities, and equal pay for work of fair value;
- (k) protect labor rights and promote a safe and secure working environment for all workers, including migrant workers, migrant women, and persons in precarious employment;
- (l) promote inclusive and sustainable industrialization and significantly increase the industry's contribution to work and gross domestic product under national circumstances.

As mentioned above, it is mandatory to determine criteria and indicators for each mitigation initiative and carry out monitoring that demonstrates compliance with the initiative holder's signs concerning the SDG.

10.15 Monitoring plan

As part of the project document, initiative or GHG projects holders shall submit a monitoring plan that, as required by the methodology applied, contains the following:

- (a) necessary data and information to estimate GHG reductions or removals during the project's quantification period;
- (b) the data and supplementary information for determining the baseline or reference scenario;
- (c) specification of all potential emissions that would occur outside the project boundaries, attributable to the activities of the GHG mitigation initiative (leakage);

- (d) information related to the assessment of environmental effects of GHG mitigation activities;
- (e) procedures established for the management of GHG reductions or removals and related quality control for monitoring activities;
- (f) description of the methods defined for the periodic calculation of GHG reductions or removals and leakage;
- (g) for oil palm crops, the activities proposed to invest 20% of the gross revenue from the sale of Verified Carbon Credits in conservation and watershed management actions (as described in section 11.7 of this document);
- (h) the assignment of roles and responsibilities for monitoring and reporting the variables relevant to the calculation of reductions or removals;
- (i) the related procedures whit the assessment of the mitigation initiative contribution whit the Sustainable Development Goals (SDGs);
- (j) criteria and indicators relating to the contribution of the project or initiative to sustainable development objectives applicable to the project activities proposed by the project or initiative holder;
- (k) the procedures associated with the monitoring of co-benefits and category, defined in section 13 (below), if applicable;
- (l) the criteria and indicators defined to demonstrate the additional benefits and measurement of co-benefits and the specific category, defined in section 13.2 (below), if applicable.

The monitoring plan should base on a monitoring methodology approved within the framework of the methods referred to in section 10.4 of this document and the following:

- (a) national circumstances and the context of the GHG mitigation initiative;
- (b) monitoring acceptable practices, adequate for the follow-up, and control of the activities of the GHG mitigation effort;
- (c) procedures to ensure data quality under ISO 14064-2

Holders of GHG mitigation initiatives shall execute the monitoring plan validated by the CAB. Execution of the approved monitoring plan and, where appropriate, its modifications, shall be a requirement for verification.

During the verification process, the initiative holders shall submit the report under the monitoring plan. Any revisions to the monitoring plan, either to increase its accuracy or information completeness, shall be justified and submitted to the CAB.

The CAB, based on the implementation of the monitoring plan and the evaluation of the estimates of GHG reductions or removals and the baseline scenario, shall determine that its calculus follows the methodology used by the GHG mitigation initiative holder.

10.16 Stakeholders' consultation

Holders of GHG mitigation initiatives and GHG projects should carry out a stakeholder consultation before validation, report on project activities, design and facilitate access to all information related to the project's potential environmental and social effects.

This stakeholder consultation is different from the previous query, noted in section 10.7 of this document.

Initiative and GHG project holders shall establish appropriate mechanisms for stakeholders to comment on the initiative or project and demonstrate how stakeholders are appropriately engaged.

The stakeholder consultation scope should include a description of the potential effects (positive and negative) of the project and the considerations of the stakeholder comments.

About the participants in the local stakeholder consultation, GHG mitigation initiative holders should invite, as a minimum, representatives of directly affected local stakeholders and representatives of local authorities (environmental and governmental) relevant to the initiative's activities.

Holders of GHG mitigation initiatives should provide evidence that sent invitations to stakeholders and that the relevance of their comments was analyzed and considered. If any of the relevant stakeholders did not receive an invitation, the initiative holders should provide appropriate justification.

10.17 Grouped projects

Projects may be in the developing framework of grouped projects. Grouped projects are those projects in which the addition of new areas (in the case of projects in the AFOLU sector) and instances (in the other industries) is allowed after the GHG mitigation project's validation. That is, projects can expand without the need for a new validation of the project description. These projects shall comply with the conditions for bundling described below.

10.17.1 Projects in the AFOLU sector

Sectoral mitigation projects classified as GHG removal activities and the other GHG projects as well as the REDD+ projects may add areas to the project (after validation). To do so, the mitigation initiative holder shall:

- (a) identify the expansion area of the initiative or project during the validation process and define the criteria for the addition of the new regions;
- (b) comply with the guidelines of the Certification and Registration Program for GHG Mitigation Initiatives and other Greenhouse Gas Projects, in its most recent version;
- (c) comply with all the provisions of the PROCLIMA methodological documents that apply in their latest release;
- (d) include emission reductions or removals only for validated project activities;
- (e) implement the GHG emission reduction or removal activities described in the validated project document;
- (f) demonstrate that baseline scenario, land tenure, and additionality considerations are consistent and valid for the new areas;
- (g) provide evidence of the start date of activities in the new regions, demonstrating that this date is later than the date of commencement of GHG removal activities in the areas included in the validation;
- (h) in the case of REDD+ projects, further, demonstrate that the causes and drivers of deforestation/degradation and the reference scenario are consistent with the validated characteristics for the primary project areas;
- (i) Similarly, for REDD+ projects, considering that in some cases, the leakage belt may overlap with the validated expansion area, the initiative holder shall update the leakage belt to include potential displacement of deforestation by the implementation of the REDD+ project activities.

10.17.2 Projects in the energy, waste and transport sectors

Similarly, GHG mitigation initiative and other GHG project holders, in the sectors of energy, waste and transport can develop grouped projects. To this end, they shall meet the following requirements:

- (a) identify, during the validation process, the geographical area(s) within which (initial²⁹ and additional) instances of the project are developed and define the criteria for the addition of new cases;
- (b) comply with the guidelines for the certification and registration program for GHG mitigation initiatives and other greenhouse gas projects, in their most recent version;
- (c) comply with all the provisions of the PROCLIMA methodological documents they apply, in their latest release;
- (d) include emission reductions only for validated project activities;
- (e) implement the GHG emission reduction activities described in the validated project document;
- (f) demonstrate that the new instances meet the conditions of applicability described in the methodology applied;
- (g) demonstrate that geographic areas (to be included in project boundaries) in which there are no initial instances are subject to the same baseline scenario conditions and additionality as the areas in which are the initial instances;
- (h) provide evidence of the start date of activities in the new instances, demonstrating that this date is later than the start date of the GHG emission reduction activities in the cases included in the validation (initial instances);
- (i) determine the baseline scenario and demonstrate additionality based on the initial instances of the project;
- (j) confirm that each instance complies with all the methodology applied, including the capacity limits set out in the methods and carbon standards applicable to the project type.

The PROCLIMA methodological documents can also provide additional specifications for grouped projects.

²⁹ The initial instances are those included in the project description during validation.

11 Requirements for GHG mitigation initiatives

11.1 Start date

The start date for GHG mitigation initiatives is when activities that result in actual reductions/removals of GHG emissions begin. That is when the implementation, construction, or real action of a GHG initiative begins.

For GHG removal forestry activities and oil palm cultivation, this start date corresponds to the time on which site preparation, the establishment of crop, commencement of restoration activities, or other actions related to mitigation initiative activities begin.

For REDD+ projects, the start date is when the activities proposed by the project to demonstrate reduced emissions from deforestation and forest degradation begin. For instance, those may be the start of forest management strategies and when applicable to forest resource conservation plans. In other words, concrete actions to reduce deforestation/degradation.

For sectoral mitigation projects in the energy and transport sectors and other greenhouse gas projects, the same start date rules are defined by the Clean Development Mechanism³⁰.

Holders of GHG mitigation initiatives in the AFOLU sector may only certify and register under this Program, actions that start within the five (5) years before the validation³¹.

Retroactivity for sectoral mitigation projects in the energy and transport sectors is in the guidelines and methodological documents developed by PROCLIMA.

11.2 Land ownership

In the case of AFOLU projects, the GHG mitigation initiative holder shall demonstrate land tenure, as set out in CONPES 3859³², as well:

- (a) the owner is the one who holds the right in rem of ownership, as stated in a real estate registration document;
- (b) a person has a private immovable property who acts in the spirit of ownership with the conviction of being an owner, but without being able to demonstrate

³⁰ <https://cdm.unfccc.int/>

³¹ Validation begins once a commercial agreement has been signed with the OEC.

³² Departamento Nacional de Planeación. Consejo Nacional de Política Económica y Social. (junio, 2106). Documento CONPES 3859. POLÍTICA PARA LA ADOPCIÓN E IMPLEMENTACIÓN DE UN CATASTRO MULTIPROPÓSITO RURAL-URBANO.

compliance with the requirements of the real estate tradition to prove his legal ownership;

- (c) it is a holder (“*tenedor*” in Spanish) who uses and enjoys a property for which an owner's existence is recognized.

The initiative holder shall demonstrate that he or she holds land tenure on the property where the mitigation initiative activities are taking place, at least during the period of quantification of GHG reductions or removals. If the holder of the initiative does not represent the "holder," he shall demonstrate that he has an agreement with the holder of the land tenure right.

11.3 Methodologies for quantification and monitoring of GHG emission reductions and removals

11.3.1 Sectoral GHG mitigation projects

Sectoral GHG mitigation projects shall use a method:

- (a) developed by the PROCLIMA Certification Program, or;
- (b) approved by the Technical Committee of PROCLIMA and endorsed by the Program, or;
- (c) proposed and approved for use under the UNFCCC GHG mitigation mechanisms, applicable to Colombia³³, or;
- (d) prepared by a national public entity that has been reviewed by the Technical Committee of the Intersectoral Commission on Climate Change, or who designates the current national regulations.

Sectoral GHG mitigation projects, defined as GHG removal activities, should use methodologies that define a mechanism for managing the risk of leakage and non-permanence of GHG emission reductions and removals and managing uncertainty quantification of baseline and mitigation results. Likewise, they shall evaluate and demonstrate the relevance of the activities to develop concerning the soil suitability of the project implementation area.

³³ In the case of energy projects

11.3.2 REDD+ projects

The REDD+ projects holder shall use methodologies that meet the following characteristics:

- (a) developed by PROCLIMA 's Certification and Registration Program;
- (b) follow UNFCCC guidance on REDD+;
- (c) have a mechanism for managing the risk of leakage;
- (d) have a tool for managing the non-permanence risk;
- (e) have a mechanism for managing uncertainty in baseline quantification and mitigation results.

11.4 Baseline scenario

11.4.1 Sectoral GHG mitigation projects

The owner of the sectoral mitigation project should build the baseline scenario of his initiative, keeping consistent with emission factors, activity data, GHG emission projection variables, and the other parameters used for the construction of that scenario, following the methodology applied and ensuring that the identification of the project baseline does not lead to an overestimation of the mitigation results of the same, concerning public information.

11.4.2 REDD+ projects

The REDD+ project holder shall establish its baseline from the most updated REDD+ Forest Reference Level (FREL) that has been formally submitted by Colombia and evaluated by the CMNUCC, and that includes the geographic area of the project, the REDD+ activities, and the carbon stocks considered.

To verify GHG emissions reductions and removals generated from January 2020 onwards, the REDD+ project holder who has previously validated its baseline shall adjust and validate its baseline from the most current reference level. Baseline adjustment consists of the methodological reconstruction of the most updated reference level applicable to the project over the project's geographical area.

In the absence of the reference scenarios identified here, the REDD+ project holder shall establish its baseline scenario consistent with the methodology applicable to the project.

11.5 Additionality

Considerations of additionality and details on the demonstration of additionality are in PROCLIMA methodological documents. In general terms, the following applies.

11.5.1 Sectoral GHG mitigation projects

Is the effect of the GHG mitigation initiative or project activity to reduce anthropogenic GHG emissions below the level that would have occurred in the absence of the GHG mitigation initiative or project activity.

In the AFOLU sector, other than REDD+ projects, additionality is the effect of the project activity to increase actual net GHG removals by sinks above the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of project activity.

11.5.2 REDD+ projects

REDD+ project holders shall demonstrate a net benefit to the atmosphere in terms of reduced or removed GHG emissions and that the mitigation outcome would not have occurred in the absence of the initiative³⁴.

11.6 REDD+ Safeguards

The implementation of REDD+ activities can generate benefits for communities and the environment and reduce GHG emissions. However, there may be some social and environmental risks associated with their implementation. In this sense, REDD+ safeguards are measures aimed at preventing the impairment of fundamental social, economic, or environmental rights and the occurrence of negative impacts from the design and implementation of REDD+ activities. It also includes measures to improve the obtainment and distribution of benefits generated by REDD+ activities.

In the national interpretation of safeguards for REDD+, 15 safeguard elements have been defined in Colombia. They are numbered with a letter referring to the Cancun safeguard to which they correspond and a number identifying it. The national interpretation's safeguard elements can be organized into three themes: institutional, social, and cultural, and environmental and territorial.

³⁴ Res.1447/2018, p. 28

The holder of REDD+ projects shall demonstrate compliance with national REDD+ safeguards, including the definition of indicators for monitoring, reporting, and verification³⁵.

11.7 Additional requirements for oil palm cultivation

As noted in section 9.1 (above), PROCLIMA certifies GHG mitigation initiatives for oil palm crops developed in agricultural territories.

- I. The initiative holder shall demonstrate that the areas in which the GHG mitigation initiative activities take place:
 - (a) do not involve physical resettlement or economic displacement of the population;
 - (b) are not located on lands that require the free and sustained use of properties that are restored or in the process of restitution by third parties;
 - (c) are not situated on lands or territories over which there is a judicial dispute for the use of force or unlawful means of territorial appropriation;
 - (d) are not located in strategic, environmentally protected areas, which contradict environmental management plans.
- II. The GHG mitigation initiative holder shall demonstrate the fulfilling of the following special conditions:
 - (a) the activities of the GHG mitigation initiative matches with the Regional Transformation Action Plan (RTP) if they are in a PDET area;
 - (b) the holder of the effort does not impede ongoing land restitution processes or restitution claims.
- III. If applicable, the holder of the initiative shall present the following documentation as also when applicable to evidence:
 - (a) certification by the Municipal Planning Office, in respect of the Basic Land Use Plan (PBOT), Land Use Plan (POT), or Land Use Scheme (EOT), as applicable, demonstrating that the defined land use allows for project activities;
 - (b) certification by the competent environmental authority of the compatibility of the activities of the GHG mitigation initiative with the River Basin Management Plan - POMCA or with the respective Integrated Management Plan for Coastal Environmental Units - POMIUAC;

³⁵ Camacho A., Lara I., Guerrero R. D. 2017. "Interpretación Nacional de las Salvaguardas Sociales y Ambientales para REDD+ en Colombia" MADS, WWF Colombia, ONU REDD Colombia. Bogotá-Colombia.

- (c) certification from the Land Restitution Unit, demonstrating that the project is developed on land restitution sites to the communities, in case of communities with this characteristic participate in the project;
- (d) if the project boundaries are within the areas registered in the National System of Protected Areas, certification from the corresponding environmental authority demonstrating that the activities proposed in the GHG mitigation initiative are under the permitted activities within the protected area's land use categories;
- (e) certification by the Land Renewal Agency, which confirms that the GHG mitigation initiative matches with the PATR for the PDET area;
- (f) certification from the Regional Environmental Authority (CAR) confirming whether in the Environmental Information System for Colombia (SIAC), the property is in the Single National Registry of Protected Areas (RUNAP) or the Single Registry of Ecosystems and Environmental Areas (REAA);
- (g) the certification exported by the SIAC (<http://www.siac.gov.co/runap> and <http://www.siac.gov.co/reaa>).

IV. The GHG mitigation initiative holder shall consider an assessment of risks and impacts on water resources in the watershed in the area of the project. The water resource impact assessment should consider:

- (a) precipitation regimes;
- (b) basin and water bodies around influence;
- (c) affecting the quality of surface and groundwater bodies; and
- (d) affecting the availability of the resource to populations and ecosystems around the influence area.

The holder of the mitigation initiative shall contemplate water resource management plans, promotion of resources conservation, alternatives for efficient use of the resource (such as reducing freshwater consumption, reuse of water, and treatment before final disposal).

- V. GHG mitigation initiatives that develop oil palm crops shall comply with applicable national regulations on water resource management, including:
- (a) Guide for the efficient use and saving of water, Ministry of the Environment and Sustainable Development, 2018;
 - (b) Resolution 0883 of 2018. Which establishes the parameters and maximum permissible limit values for specific discharges into marine water bodies and other provisions;

- (c) Resolution 631 of 2015. This resolution establishes the parameters and maximum permissible limits for specific discharges into surface water bodies and public sewerage systems, as well as other provisions;
 - (d) Resolution 1207 of 2014 Adopting provisions related to the use of treated wastewater.
- VI. Additionally, in compliance with current regulations, the holder of the GHG mitigation initiative shall demonstrate, providing the necessary evidence, that the crop is under the register of the Colombian Agricultural Institute (ICA) and that:
- (a) has permanent technical assistance;
 - (b) follows a phytosanitary management plan for the harvest;
 - (c) uses inputs registered with the ICA;
 - (d) implements the management and technical control of official control pests, following the phytosanitary measures established by the Institute in Resolution No. 4170 of December 2, 2014.

Finally, holders of initiatives under this type of project shall dedicate 20% of the gross income from the sale of Verified Carbon Credits to watershed conservation and management actions. In turn, the activities proposed to comply with this requirement shall be included in the project document and contemplated in the monitoring plan.

11.8 Registration on the RENARE platform

The National Registry of GHG Emissions Reduction – RENARE (for its acronym in Spanish) is a technological platform of the MRV system to manage information at the national level of GHG mitigation initiatives the National Information System on Climate Change in Colombia. In turn, the National Registry of Programs and Projects for the Reduction of Emissions from Deforestation and Forest Degradation in Colombia - REDD+ projects are part of RENARE³⁶.

In compliance with the provisions of Article 10, chapter 2 of Resolution 1447 of 2018, or the rule that modifies or updates it, any holder of a GHG mitigation initiative in the national territory that requests certification, registration, and emission of Verified Carbon Credits with the PROCLIMA Program, shall register its mitigation initiative in the RENARE, from its feasibility phase, before the application for registration in PROCLIMA. Once the RENARE registry platform is available and in operation

³⁶ Article 10, Chapter 2 of Resolution 1447 of 1 August 2018

NOTE: If the standards' provisions are updated or changed, the requirements of the environmental legislation, at the time of application for certification with PROCLIMA, shall apply.

12 Requirements for other GHG projects

The requirements related to design, monitoring, validation, and verification that other GHG projects, in energy and waste sectors, shall comply with are those established by the Clean Development Mechanism, including definitions, methodologies, methodological tools.

Projects in the AFOLU sector shall comply with the provisions of this Program and with national legislation applicable to the project activities.

13 Special categories related to co-benefits

Generally, actions related to climate change mitigation bring additional benefits to reducing or removing GHG emissions. In this regard, the IPCC (2007)³⁷ notes that the term co-benefits *"reflects that most policies designed to address greenhouse gas (GHG) mitigation also have other, often at least equally important, justifications involved in the adoption of those policies."*

In the framework of this Program, the definition and measurement of co-benefits is not a mandatory requirement. However, holders of GHG mitigation initiatives or GHG projects can define additional actions on social and environmental components and show that they have confirmed a model of criteria and indicators to follow up and verify compliance.

Based on demonstrated compliance with co-benefits, mitigation initiatives described in 9.1.1 (Sectoral GHG mitigation projects) and 9.1.2 (REDD+ projects) may obtain a category based on compliance with the conditions described next.

The mitigation initiative or GHG project, which aims at reaching one of these categories, shall comply with the conditions defined for each of the four components that constitute the additional benefits (biodiversity conservation, benefits on communities, gender equity, and adaptation to climate change). The categories and conditions required to obtain a class are in section 13.2.

GHG mitigation initiative and other GHG projects holders should propose a model of criteria and indicators that would monitor each of the conditions and demonstrate

³⁷ Climate Change 2007: Working Group III: Mitigation of Climate Change

compliance with them. The monitoring plan should include a section that provides for the measurement and tracking of co-benefits.

13.1 Special categories components

13.1.1 Biodiversity conservation

The holder of the GHG mitigation initiative demonstrates that:

- (a) develops practical actions and measures to halt the loss of biological diversity, enabling ecosystems to continue to provide essential services;
- (b) sets objectives and activities in support of the Aichi Targets³⁸ for Biodiversity;
- (c) carries out restoration activities of degraded ecosystems in areas included in the Unique National Register of Protected Areas (RUNAP) or the Unique Register of Ecosystems and Environmental Areas (REAA), applicable to GHG mitigation initiatives;
- (d) demonstrates which High Conservation Values (HCV) are in the project area³⁹;
- (e) demonstrate the no presence of invasive species as a result of the project activities;
- (f) demonstrates that the project area is in areas where globally threatened species are present (according to the IUCN Red List⁴⁰) and that the mitigation initiative is taking action to conserve these species;
- (g) incorporates, in its administration and management systems, the traceability of raw materials from biodiversity.

13.1.2 Benefits related to the community

The benefits of communities should be real actions of public value creation and local development, emphasizing improving the communities' quality of life. This criterion should not consider the fact of generating employment as a co-benefit.

The holder of the GHG mitigation initiative or project demonstrates that:

- (a) identifies and strengthens mechanisms for social and community participation, at the local and regional levels;

³⁸ <https://www.cbd.int/aichi-targets/>

³⁹ Based on criteria defined by the High Conservation Value (HCV) network. <https://hcvnetwork.org/>

⁴⁰ <https://www.iucnredlist.org/>

- (b) implements sustainable production systems, combining production and conservation actions to generate local development;
- (c) considers pre-existing social conflicts and supports the development of efficient models with the management of post-conflict scenarios;
- (d) the initiative creates short and long-term benefits to small-scale productive projects with community members in the project area;
- (e) generates actions that improve the capacities and access to opportunities of community groups in vulnerable situations;
- (f) defines possible impacts on cultural, archaeological, or historical heritage and describes measures to prevent or mitigate such effects;
- (g) Under the GHG mitigation initiative, activities produce an average net increase in the income of local, low-income producers.

13.1.3 Gender equity

According to the Food and Agriculture Organization of the United Nations (FAO), it is clear that *"climate change has a more pronounced impact on women, especially indigenous and peasant women whose agricultural dependence, living conditions and marginalization expose them more to changes in climate, loss of diversity and pollution."*⁴¹

Also, according to López (2017)⁴², *"international agreements on forests, biodiversity, and climate change mention the need to mainstream gender, all of which is required by Article 2, which calls on States Parties to appropriate the principle of equality between men and women (...)to ensure a remedy for discrimination against women"*.

In this context, the holder of the GHG mitigation initiative or GHG project demonstrates that he considers the determinants set out in the gender-related policy framework:

- (a) Law 731/02 on rural women, or the one that applies;
- (b) Policy Guidelines for Women's Equity 2012, or the one that applies;

⁴¹ <http://www.fao.org/family-farming/detail/es/c/335922/>

⁴² Salvaguardas y Género - Documento de Recomendaciones. Diana López Consultora de Género para el Programa ONU REDD Colombia. Marzo de 2017.

It also demonstrates that it includes among its activities, strategies, or actions that support the goals related to the SDG *"achieving gender equality and the empowerment of women and girls"*⁴³:

- (a) to ensure the full and active participation of women and equal opportunities for leadership at all levels of decision-making in the project area;
- (b) support actions that give women the right to equal economic resources and access to ownership and control of land and other property, financial services, inheritance, and natural resources by national laws;
- (c) ensure gender equality and the empowerment of women and girls at all levels, within the project's scope.

13.1.4 Climate change adaptation

- I. The holder of the GHG mitigation initiative or GHG project demonstrates that:
 - (a) considers one or more of the activities proposed in the National Climate Change Policy;
 - (b) improve conditions for the conservation of biodiversity and its ecosystemic services, in the areas of influence, outside the project boundaries (per example, natural cover in areas of environmental interest);
 - (c) implementation of activities that generate sustainable and low-carbon productive landscapes;
 - (d) proposes areas with restoration processes in areas of specific environmental importance;
 - (e) designs and implements adaptation strategies based on an eco-systemic approach;
- II. The initiative or project holder demonstrates that it develops either actions or measures to adapt to climate change, such as:

⁴³ Goals adapted (at project level) from the document: Camacho, A., López, D., Ome, E., Yepes, A., García, P., Leguía, D. & Rodríguez, M. 2018. BOSQUES, GÉNERO Y REDD+: Un insumo para Bosques Territorios de Vida-Estrategia Integral de Control a la Deforestación y Gestión de los Bosques. Programa ONU-REDD Colombia. Bogotá, 2018. In: http://americalatinagenera.org/newsite/images/cdr-documents/2019/02/PNUD_GENERO_25012019.pdf

- (a) agricultural, forestry, and fisheries production systems better adapted to high temperatures, droughts, or floods, to improve competitiveness, income, and food security, especially in vulnerable areas;
- (b) integrated actions that assist in the efficient use of soil, including, for example, the conservation of existing natural cover, use consistent with the vocation and agro-ecological conditions of the territory, family farming, and agricultural technology transfer that increases competitiveness by reducing vulnerability to climate change;
- (c) reduction of GHG emissions from agricultural activities, compared to the non-project scenario (per example., replacement of pastures for livestock feed and use of planting methods that reduce emissions from crop management);
- (d) actions directly related to climate change adaptation measures, such as use and management of seeds resistant to temperature change, water management through rainwater harvesting as also when applicable to recycling, drainage, and irrigation, planting around watercourses to prevent erosion, soil management with practices that reduce compaction, and techniques to reduce fertilizer use.

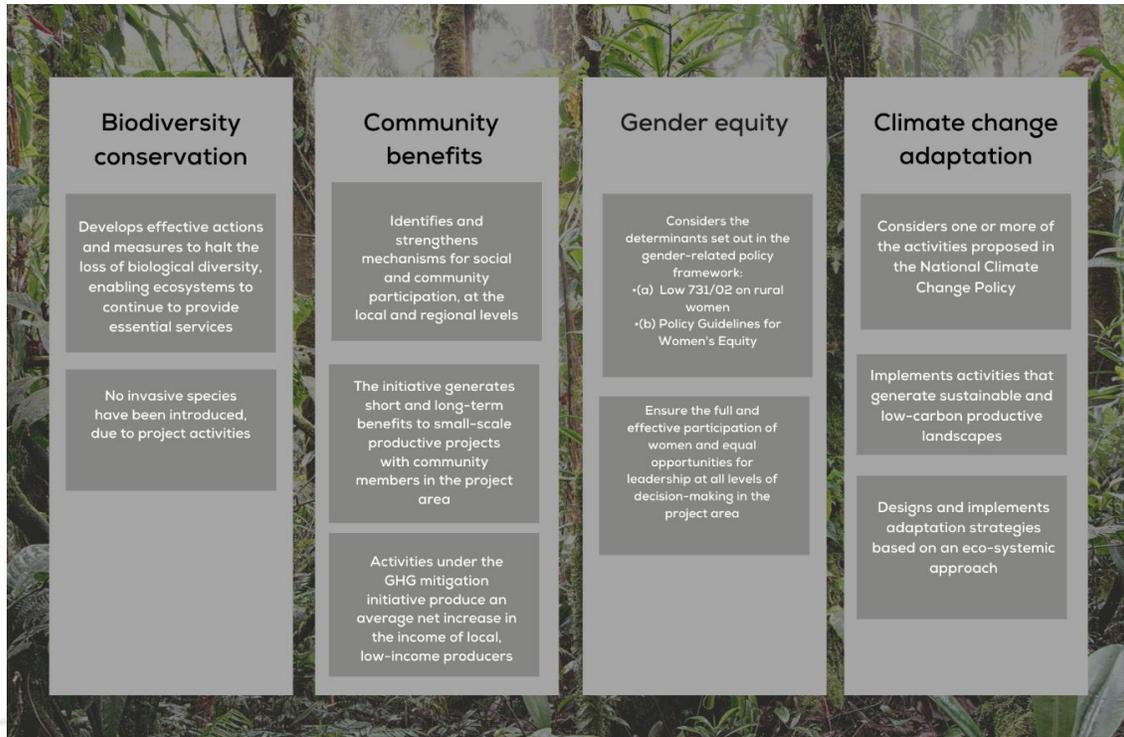
13.2 Categories and additional benefits (co-benefits)

13.2.1 Category 1. Orchid

Orchids are the most diverse and evolving group of flowering plants on the planet, with about 25,000 to 30,000 species worldwide, of which 4,270 are native to Colombia, and 1,572 are endemic. Colombia's national flower is the *Cattleya trianae* orchid⁴⁴. Figure 1 shows the requirements to obtain the Orchid Category.

⁴⁴ Castellanos-Castro, C., y Torres-Morales, G. (Eds.) 2018. Guía para la identificación y el cultivo de algunas especies de orquídeas nativas de Cundinamarca. Pontificia Universidad Javeriana, Jardín Botánico de Bogotá “José Celestino Mutis”, Corporación Colombiana de Investigación Agropecuaria Corpoica, Instituto de Investigación de Recursos Biológicos Alexander von Humboldt, Gobernación de Cundinamarca. Bogotá D.C., Colombia. 192 p. In <http://repository.humboldt.org.co/handle/20.500.11761/34286>

Figure 1. Orchid category requirements



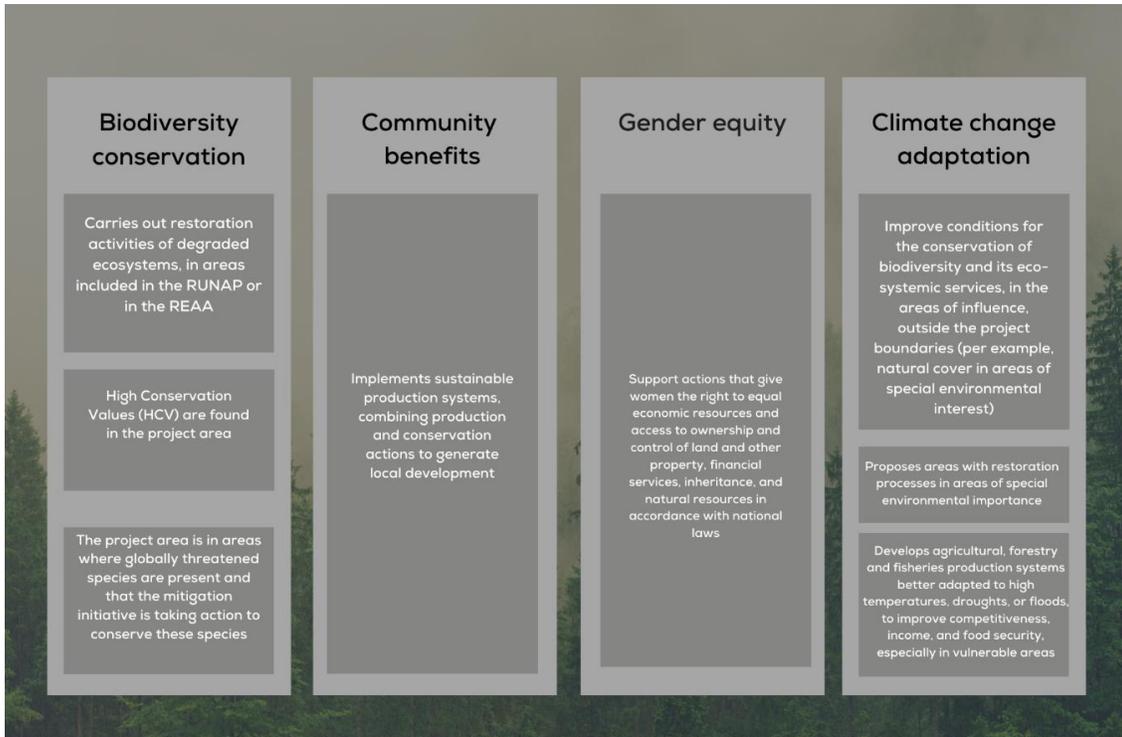
Source: PROCLIMA, 2021.

13.2.2 Category 2. Wax Palm

The Wax Palm (*Ceroxylon quindiuense*) grows in one of the most threatened ecosystems globally, the Tropical Foggy Forest. The *Ceroxylon quindiuense* palms constitute one of the most spectacular landscapes of the Colombian Andes. Despite representing Colombia's national tree, the species was categorized as endangered (EN) by Galeano & Bernal (2005). Although there are still large populations in some sectors of the central mountain range, their habitat has been considerably reduced, and it is estimated that their populations have decreased by more than 50% in the last three generations (210 years)⁴⁵. Figure 2 shows the requirements to obtain the Wax Palm Category.

⁴⁵ Ministerio de Ambiente y Desarrollo Sostenible. 2015. Plan de conservación, manejo y uso sostenible de la palma de cera del Quindío (*Ceroxylon quindiuense*), Árbol Nacional de Colombia. Textos: Bernal R., G. Galeano, M. J. Sanín. Ministerio de Ambiente y Desarrollo Sostenible - Universidad Nacional de Colombia, Bogotá. 80 pp. In: https://www.minambiente.gov.co/images/BosquesBiodiversidadyServiciosEcosistemicos/pdf/Programas-para-la-gestion-de-fauna-y-flora/Plan_de_conservaci%C3%B3n_manejo_y_uso_sostenible_de_la_palma_de_cera_del_Quind%C3%ADo.pdf

Figure 2. Wax palm requirements



Source: PROCLIMA, 2021.

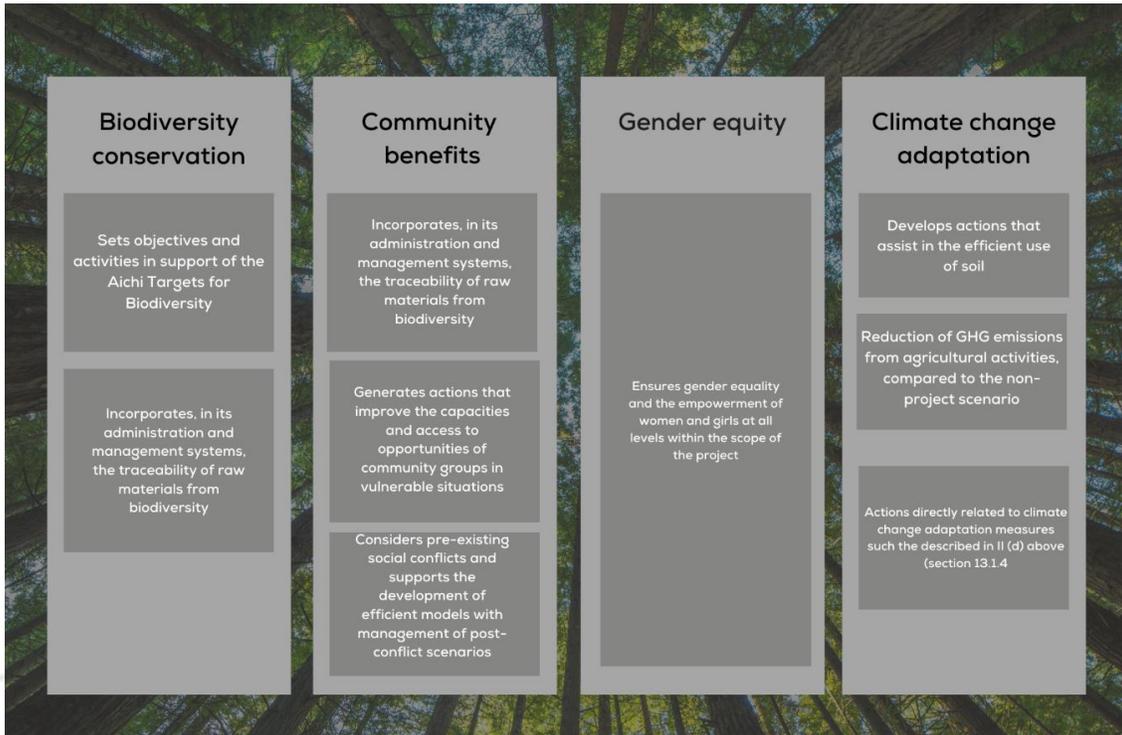
13.2.3 Category 3. Andean Condor

The Andean Condor (*Vultur gryphus*), the sun's messenger, is considered the most giant and most massive flying bird globally⁴⁶. It is also one of the birds that fly at the highest altitudes, fly using the vertical thermal updrafts of warm air, and reach up to 6500 meters of height; then, it can glide for hundreds of kilometers almost without moving its extended wings. The natural distribution of Andean Condor covers the Andes Mountains, from southern Tierra del Fuego (Argentina and Chile) to western Venezuela. One of its significant habitats is in the Colca Canyon (Peru). The Andean Condor is considered a near-threatened species by the UICN (International Union for Conservation of Nature),

⁴⁶ Ministerio de Ambiente, Vivienda y Desarrollo Territorial. Sin fecha. Programa nacional para la conservación del cóndor andino en Colombia. Plan de acción 2006-2016. 32 pp. In: https://www.minambiente.gov.co/images/BosquesBiodiversidadyServiciosEcosistemicos/pdf/Programas-para-la-gestion-de-fauna-y-flora/4023_100909_prog_conserv_condor.pdf

threats to the population include habitat loss and secondary poisoning⁴⁷. Figure 3 shows the requirements for the Andean Condor category.

Figure 3. Requirements for the Andean Condor category



Source: PROCLIMA, 2021

14 Validation and verification

Under this Program, no VCC is issued for reductions or removals of GHG emissions that have not been validated and verified by a Conformity Assessment Body (CAB).

Initiative and projects holders shall ensure, in all cases other than other greenhouse gas projects (defined in section 9.1.3 of this document), that their validation and verification processes are carried out by a body independent of the GHG certification program and, they shall ensure that the CAB meets all requirements related to accreditation with the authorities, as defined.

⁴⁷ <https://birdscolumbia.com/>

The start of the GHG mitigation initiatives' validation process should take place no later than five years after the start date of the effort. Verifications can be annual but shall be carried out every five years at most.

CABs are responsible for conducting an objective assessment and issuing a validation or verification opinion concerning the information submitted to them by the mitigation initiative's holder and the other criteria defined by this Program.

The scope of validation, as also when applicable to verification, should include the following:

- (a) the boundaries or scenarios of the GHG project and its baseline scenarios;
- (b) physical infrastructure, activities, technologies, and processes of the GHG organization or project;
- (c) GHG sources sink as also when applicable to reservoirs;
- (d) types of GHGs;
- (e) areas or instances of the project if it is a grouped project;
- (f) periods;
- (g) evaluation of co-benefits;
- (h) indicators related to DSGs;
- (i) the monitoring plan.

The CAB should examine the data and information on GHGs, to develop evidence to evaluate the project's GHG opinion. This review should follow a sampling plan.

The CAB shall confirm whether the GHG project meets the validation or verification criteria defined by this Program.

When assessing the material discrepancy, the CAB should consider the principles of the standards (ISO or those that apply) or the PROCLIMA Program.

Validation and verification of grouped projects shall include analysis of the project's conformity with bundled projects' requirements under this Program.

14.1 Validation

Validation is the systematic, independent, and documented process for assessing a GHG initiatives and projects and baseline against defined criteria to verify that it meets the requirements specified in existing standards and as stipulated by this Program.

When GHG mitigation initiative or project holders request validation of the initiative or project, they shall submit a GHG claim to the CAB. They shall provide all information required by the CAB to carry out the validation process.

The validation body, contracted by the GHG mitigation initiative holder, shall evaluate the documentation and information related to the design of the initiative and shall determine whether the initiative holder complies with all the provisions of this Program and the others that apply to it, examining, among other aspects, the following;

- (a) GHG mitigation goals and results;
- (b) the adequate use of an appropriate methodology;
- (c) the assessment of uncertainty and the conservative approach;
- (d) the baseline scenario and reference levels;
- (e) the maximum GHG mitigation potential for REDD+ projects subject to national accounting;
- (f) compliance with the additionality criteria of the GHG initiative or project;
- (g) ownership and rights over carbon;
- (h) assessment of environmental and social aspects;
- (i) criteria and indicators relating to co-benefits;
- (j) the project's contribution to sustainable development goals;
- (k) the stakeholder's consultation;
- (l) compliance with national legislation;
- (m) the design of a monitoring plan contemplates everything related to the quantification and follow-up of GHG emission reductions and removals under the methodology applied.

Similarly, the validation body shall carry out the validation process under the guidelines established for this purpose by the GHG mitigation mechanisms or the ISO 14064-3 standard, as appropriate.

Once it ends the information assessing and carried out all necessary procedures, the validation body shall inform the initiative holders of its decision to validate the GHG mitigation initiative or project. The notification to the initiative operators should include:

- (a) the confirmation of the validation and the date of submission of the validation report to the Certification Program, or
- (b) an explanation of the reasons for rejection if the mitigation initiative, judging from the documentation, does not qualify for validation

Suppose the validation body determines that the GHG mitigation initiative meet all requirements to be certified. In that case, the CAB shall submit a registration request contained in a validation report that should include the project document and project design documentation, either the quantification of GHG emission reductions or removals and, where appropriate, the conclusion on co-benefits and compliance with the indicators defined by the holder of the initiatives concerning the SDGs.

14.2 Verification

Verification is the systematic, independent, and documented process for assessing the GHG claim against the verification criteria.

Per the provisions of ISO 14064-3, the verification body should consider the following:

- (a) conformity with applicable verification criteria, including the principles and requirements of relevant GHG standards or programs in the scope of verification;
- (b) information and documentation on GHG project planning, including procedures and criteria for the project, baseline, quality control and assurance, risk management, monitoring, and reporting;
- (c) any significant changes, since the last reporting period or its validation, in the methods or principles of the GHG project;
- (d) emissions, removals, emission reductions, and removal enhancements reported in the baseline and the GHG project;

- (e) any significant changes in GHG emissions removals, emission reductions, and removals improvements since the last reporting period or since the validation of the Project;

14.3 Specific considerations for validation and verification of GHG mitigation initiatives

14.3.1 Sectoral GHG mitigation projects

In all cases, the CAB shall additionally consider the following criteria for the validation and verification of sectoral GHG mitigation projects:

- (a) The level of assurance of the validation and verification of the sectoral GHG mitigation project should not be less than 95%;
- (b) The material discrepancy in the data supporting the sectoral GHG mitigation project baseline and the estimate of GHG emission reductions or removals may be up to $\pm 5\%$;
- (c) The consistency of the sectoral GHG mitigation project baseline by the national regulations in force as also when applicable to the methodology applied, as appropriate;
- (d) The quantification of mitigation results against the validated baseline shall follow the provisions of the current national regulations, as also when applicable, the used methodology, as appropriate;
- (e) The evaluation of co-benefits and the sustainable development objectives, when applicable.

14.3.2 REDD+ projects

For REDD+ projects, the CAB shall consider the following validation and verification criteria:

- (a) the level of assurance of validation and verification of the REDD+ project shall not be less than 95%;
- (b) the material discrepancy of the data supporting the project baseline and the estimate of GHG emission reductions or removals may be up to $\pm 5\%$;
- (c) the consistency of the REDD+ project baseline with the FREL shall be according to the current regulations or the appropriate methodological construction for the project;

- (d) the quantification of mitigation results against the validated baseline, either per the provisions of the current national regulations or the methodology applied, as appropriate;
- (e) The evaluation of the co-benefits and the indicators related, as applicable, to the sustainable development objectives.

14.4 Validation or verification opinion

Once validation or verification is complete, the CAB shall issue the corresponding opinion, which shall comply with the following:

- (a) address the intended users of the GHG validation and/or verification opinion;
- (b) describe the level of assurance of the validation and/or or verification opinion;
- (c) describe the objectives, scope, and criteria for validation or verification;
- (d) explain whether the data and information supporting the GHG claim are hypothetical, projected as also when applicable to historical;
- (e) be accompanied by the GHG statement made by the responsible party;
- (f) include the CAB's conclusion on the GHG validation and/or verification opinion, including any qualifications or limitations;
- (g) include the mitigation results, by calendar year;
- (h) add an end on criteria and indicators related to co-benefits, and;
- (i) include a judgment on the project's contribution to sustainable development objectives.

15 Conformity Assessment Bodies

Mitigation initiatives and other GHG projects should be subject to validation and verification processes by an independent third party to ensure that they employ methodologies for quantifying GHG emissions reductions or removals that are verifiable within the framework of ISO 14064-3.

The validation and verification processes shall be carried out by a GHG Conformity Assessment Body (CAB), which complies with the legislation's requirements in force. The

others defined by the Certification and Registration Program for GHG Mitigation Initiatives - PROCLIMA.

The CAB shall issue a validation/verification opinion, indicating that the GHG emission reductions or removals follow the guidelines defined in ISO 14064-2 and the results obtained in the verification carried out under ISO 14064-3 or those that adjust and update them.

For verifications conducted under international accreditation schemes, the verification body shall issue a verification opinion indicating that the GHG emissions reductions or removals follow the methodology defined in ISO 14064-2 and the results obtained from verification conducted under ISO 14064-3 or those that adjust and update them.

Regarding GHG mitigation initiatives, the conformity assessment body shall be accredited by the National Accreditation Body of Colombia - ONAC, or by an accreditation body that is a signatory member of the International Accreditation Forum (IAF) that has in its offer of services the GHG Emissions Validation and Verification Body accreditation program under the requirements of ISO 14065. This last option is valid until there is a Mutual Recognition Agreement (MLA) following the provisions of Decree 1595 of 2015⁴⁸.

For the other greenhouse gas projects, bodies accredited by the Clean Development Mechanism (CDM) Executive Board as a Designated Operational Entity (DOE) may carry out validation and verification processes under the requirements of ISO 14065, when the national legislation (in the country where the project is being developed) does not establish any other condition.

Once this period has expired, only verifications carried out by accredited bodies by the applicable standards in force is accepted.

Conformity Assessment Bodies, which carry out validation/verification of mitigation initiatives or GHG projects, shall demonstrate the following:

- (a) its accreditation under the requirements of ISO 14065 and all the provisions of the legislation in force;

⁴⁸ Decreto 446 de 21 de marzo de 2020. Por el cual se modifica el artículo 2.2.11 .1.2 del Capítulo 1 del Título 11 de la Parte 2 del Libro 2 del Decreto 1076 de 2015, y se adiciona un artículo al Capítulo 1 del Título 11 de la Parte 2 del Libro 2 del Decreto 1076 de 2015, en lo relacionado con la acreditación de organismos de verificación de reducciones de emisiones y remociones de gases de efecto invernadero (Ministerio de Ambiente y Desarrollo Sostenible).

- (b) the scope of their certification includes the GHG mitigation activities subject to the validation and verification process;
- (c) has enough professionals who demonstrate the necessary ethical conduct to perform all the functions required for validation and verification;
- (d) the designated auditors in charge of validations and verifications have experience in the sector and type of project;
- (e) has documented internal procedures for the performance of its function's methods for the allocation of responsibilities within the organization;
- (f) has the appropriate competence to perform the tasks specified in the legislation in force and the provisions described in this Program;
- (g) ensures the necessary expertise on environmental issues relevant to the verification of GHG mitigation initiatives / GHG projects and quality assurance in conformity assessment;
- (h) has knowledge of the technical aspects of GHG mitigation initiatives / GHG projects and methodologies for quantification and monitoring of GHG emission reductions and removals, including competence to assess baselines and national reference levels, as well as maximum mitigation potentials;
- (i) has procedures for handling complaints, appeals, and disputes.

Furthermore, CABs shall work in an independent, reliable, non-discriminatory, and transparent manner, respecting applicable national legislation and complying with the following requirements;

- (a) have a documented structure, which protects its integrity, with provisions to ensure the impartiality of its operations
- (b) have appropriate arrangements to safeguard the confidentiality of information obtained from GHG mitigation initiative holders;
- (c) demonstrate that they have no actual or potential conflict of interest with the operators of the GHG mitigation initiatives for whose validation or verification;
- (d) make available to ProClima, upon request, information obtained from GHG mitigation initiative holders. Information classified as confidential shall not be disclosed without the written consent of the provider unless required by national legislation;

- (e) data used to determine additionality, as defined in this Program, select baselines, reference levels, and maximum mitigation potentials, and their application shall not be considered confidential.

15.1 Certification and Registration of Verified Carbon Credits (VCC)

Once the CAB has completed the verification process, it shall submit, to this Program, the verification opinion, ensuring that, during a specified period, the mitigation initiative or GHG project has achieved the GHG performance (per example, emissions, removals, emission reductions, GHG removal increases) as declared by the initiative / GHG project holder. The result of the certification process by the Program is a formal written statement issued by PROCLIMA.

Only carbon credits that a CAB has previously verified are certified, advancing the process of validation and subsequent verification or confirmatory verification, following the guidelines established for this purpose by the GHG mitigation mechanisms, the ISO 14064-3 Standard, or that which adjusts or updates them, as well as with the definitions of the PROCLIMA Program.

The registry includes the issuance of Verified Carbon Credits from a validated and verified project.

16 Other GHG programs

Mitigation initiatives or GHG projects registered in other GHG programs may apply for certification and registration in PROCLIMA, provided they meet the following conditions:

- (a) the GHG emissions reductions or removals generated by the project have not been, and not be, accounted for as also when applied to trade under the program from which they originated;
- (b) The project registration has been withdrawn in the registration system of the standard from which the project comes;
- (c) The reductions or removals generated by the project are not part of another registered project, PROCLIMA or other GHG programs;
- (d) GHG mitigation initiatives or projects shall demonstrate compliance with the requirements established in the national legal framework, as well as compliance with the rules and procedures established by PROCLIMA;

- (e) GHG mitigation initiatives or projects shall comply with the " ProClima Project Cycle." ⁴⁹

For registration and VCC emission, mitigation initiatives or GHG projects shall carry out verification as defined by PROCLIMA and based on the PROCLIMA methodology applicable to the project (if any).

The start date of the GHG mitigation initiative or project is earlier than the date described in section 11.1 of this document, the start date that meets the program's criteria or standard from which the project originates shall be valid. However, this date may not be earlier than one year before 2010.

The conformity assessment body shall do the verification under the PROCLIMA Validation and Verification Manual. The Verification opinion shall include a justification of the conformity of the validation of the GHG mitigation initiative or project, ensuring that it complies with applicable regulations and procedures established by PROCLIMA.

17 Registry platform

PROCLIMA has a public registry that allows for the certification and assignment of a unique serial of verified GHG emission reductions or removals.

To carry out registration in the PROCLIMA system, the GHG mitigation initiative holder shall provide the following documentation:

- (a) information about the project and the owner of the initiative;
- (b) GHG Registration Authorization;
- (c) project Description Document;
- (d) report and validation opinion;
- (e) monitoring report;
- (f) report and verification opinion;
- (g) other documents, if necessary.

⁴⁹ PROCLIMA. 2021. PROCLIMA Project Cycle. Version 2.0. January 29, 2021. Bogotá, Colombia. 17 p. <http://www.proclima.net.co>

Only the holders of the initiatives, or whoever is authorized by the holder of the action to carry out the procedures required for this purpose, can apply for registration of mitigation initiatives.

Registration can be requested once the validation process has concluded. The holder of the initiative can carry out the validation and the first verification of the project simultaneously. In this case, the CAB shall issue a single validation and verification report; however, they shall issue their respective declarations (validation and verification).

Projects participating in other international GHG registration programs may apply for registration under the PROCLIMA Program, provided they meet the conditions established by this program.

18 Public information

The information registered under the Program is public except for the one classified as reserved under Article 24 of the Code of Administrative Procedure and Administrative Litigation, or that which modifies or replaces it.

19 Transition plan

Holders of GHG mitigation initiatives have a three-month transition period for using the updated version, starting from its publication.

This document also complies with the documents referenced in this and other materials that make up this Program.

ANNEX A. GLOSSARY OF TERMS⁵⁰

Accreditation

Third-party attestation related to a conformity assessment body conveying formal demonstration of its competence to carry out specific conformity assessment tasks.

[SOURCE: ISO/IEC 17000:2004, 5.6]; [ISO/IEC 17011:2017(en), 3.1]

Adaptation to climate change (Climate change adaptation)

Process of adjustment to actual or expected climate and its effects

Note 1 to entry: In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities.

Note 2 to entry: In some natural systems, human intervention can facilitate adjustment to expected climate and its effects.

[SOURCE: ISO 14090:2019, 3.1]

Adaptive capacity

Ability of systems, institutions, humans, and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences

[SOURCE: Intergovernmental Panel on Climate Change, IPCC Fifth Assessment Report: Climate Change 2014 (AR5)]; [ISO 14080:2018(en), 3.1.3.5.]

Adaptive management

Process of iteratively planning, implementing and modifying strategies for managing resources in the face of uncertainty and change

Note 1 to entry: Adaptive management involves adjusting approaches in response to observations of their effects and changes in the system brought on by resulting feedback effects and other variables.

[SOURCE: IPCC, 2014, ISO 14090:2019(en), 3.3]

⁵⁰ Some terms and definitions not found in this glossary are contained in the Program's methodological documents

Additionality

Is the effect of the GHG mitigation initiative or project activity to reduce anthropogenic GHG emissions below the level that would have occurred in the absence of the GHG mitigation initiative or project activity.

In the AFOLU sector, other than REDD+ projects, additionality is the effect of the project activity to increase actual net GHG removals by sinks above the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of project activity.

Source: Adapted from Glossary CDM terms. Version 10.0

Agricultural lands

Agricultural territories are those lands dedicated mainly to the production of food, fiber, and other industrial raw materials, whether they are useful or not for cultivation, grazing, rotation, rest, or as fallow. It includes areas devoted to permanent and temporary crops, pasture areas, and different agricultural zones, where livestock can also share it and agriculture.

Agriculture, Forestry and Other Land Use (AFOLU)

The sector comprises either greenhouse gas emissions or removals attributable to project activities in the agriculture, forestry, and other land uses sectors.

Agroforestry culture

Areas occupied by arrangements or combinations of crops of different species, with others of herbaceous, shrub, or tree habits, where the main characteristic of the coverage is that the increase in detail does not imply the subdivision into pure units because these shares the same area, alternated by furrows or rows of trees with crops or trees with grasses.

Attestation

Issue of a statement, based on a decision, that fulfilment of specified requirements has been demonstrated.

Note 1 to entry: The resulting statement, referred to in this document as a “statement of conformity”, is intended to convey the assurance that the specified requirements have been fulfilled. Such an assurance does not, of itself, provide contractual or other legal guarantees.

Note 2 to entry: First-party attestation and third-party attestation are distinguished by the terms declaration, certification and accreditation, but there is no corresponding term applicable to second-party attestation.

[SOURCE:ISO/IEC 17000:2020(en), 7.3]

Baseline scenario

For a project activity (in sectors other than AFOLU), the scenario for the GHG mitigation project that reasonably represents the anthropogenic emissions by sources of GHGs that would occur in the absence of the GHG mitigation project activity.

For an AFOLU project, the scenario for the GHG mitigation project that reasonably represents the sum of the changes in carbon stocks in the carbon pools within the project boundary that would occur in the absence of the GHG mitigation project.

Source: Adapted from Glossary CDM terms. Version 10.0

Carbon dioxide equivalent (CO₂e)

Unit for comparing the radiative forcing of a GHG to that of carbon dioxide

[SOURCE: ISO 14064-2:2019(en), 3.1.15.]

Carbon credit

Measurable and tradable unit, accounted for a GHG mitigation project. When verified and listed in the registry system of PROCLIMA, it is called a Verified Carbon Credit (VCC). It is equivalent to one metric ton of carbon dioxide equivalent.

Carbon fraction

For the AFOLU sector projects, those are the tons of carbon per ton of dry biomass.

Carbon pools

Above-ground biomass, below-ground biomass, litter, dead wood and soil organic carbon. This definition applies to AFOLU project.

Certification

Third-party attestation related to an object of conformity assessment, with the exception of accreditation.

[SOURCE: ISO/IEC 17000:2020(en), 7.6.]

Certification body

Third-party conformity assessment body operating certification schemes

Note 1 to entry: A certification body can be non-governmental or governmental (with or without regulatory authority).

[SOURCE: ISO/IEC 17065:2012(en), 3.12]

Certification criteria

Set of standards, rules, or properties to which an asset must conform in order to be certified to a certain level.

Note 1 to entry: Certification criteria are defined by a certification policy. Certification criteria can be specified as a set of certification properties that must be met.

[SOURCE ISO/IEC/IEEE 24765:2017(en), 3.526]

Certification scheme

Conformity assessment system related to management systems to which the same specified requirements, specific rules and procedures apply.

[SOURCE: ISO/IEC 17021-1:2015(en), 3.15]

Claim

Information declared by the client.

Note 1 to entry: The claim is the object of conformity assessment by validation/verification.

Note 2 to entry: The claim can represent a situation at a point in time or could cover a period of time.

Note 3 to entry: The claim should be clearly identifiable and capable of consistent evaluation or measurement against specified requirements by a validation body/verification body.

Note 4 to entry: The claim can be provided in the form of a report, a statement, a declaration, a project plan, or consolidated data.

[SOURCE: ISO/IEC 17029:2019(en), 3.1]

Clean Development Mechanism (CDM)

Article 12 of the Kyoto Protocol defines the clean development mechanism: *"The purpose of the clean development mechanism is to assist Parties not included in Annex I in achieving sustainable development and in contributing to the ultimate objective of the Convention, and to assist Parties included in Annex I in achieving compliance with their quantified emission limitation and reduction commitments under Article 3"*.

Clean Development Mechanism (CDM) projects

They are a type of sectoral GHG mitigation project that includes GHG emission reduction or removal activities eligible for the Kyoto Protocol's Clean Development Mechanism – CDM.

Co-benefits

A policy or measure aimed at one objective could have positive effects on other purposes, regardless of the net impact on overall social welfare. Co-benefits are often subject to uncertainty and depend, among other factors, on local circumstances and implementation practices. Co-benefits are the same named as secondary benefits.

Conformity Assessment

Demonstration that specified requirements are fulfilled.

Note 1 to entry: The process of conformity assessment as described in the functional approach in Annex A can have a negative outcome, i.e. demonstrating that the specified requirements are not fulfilled.

Note 2 to entry: Conformity assessment includes activities defined elsewhere in this document, such as but not limited to testing, inspection, validation, verification, certification, and accreditation.

Note 3 to entry: Conformity assessment is explained in Annex A as a series of functions. Activities contributing to any of these functions can be described as conformity assessment activities.

Note 4 to entry: This document does not include a definition of “conformity”. “Conformity” does not feature in the definition of “conformity assessment”. Nor does this document address the concept of compliance.

[SOURCE: ISO/IEC 17000:2020(en), 4.1]

Conformity Assessment Body

Body that performs conformity assessment activities and that can be the object of accreditation.

Note 1 to entry: Whenever the term “conformity assessment body” is used in the text, it applies to both the applicant and accredited conformity assessment bodies, unless otherwise specified.

[SOURCE: ISO/IEC 17000:2004, 2.5, modified — The words “and that can be the object of accreditation” have been added to the definition and the Note to entry has been added; [ISO/IEC 17011:2017(en), 3.4]

Content of carbon dioxide (CO₂)

Ratio of the volume of carbon dioxide to the total volume of dry gaseous products in which it is present.

Note 1 to entry: The carbon dioxide content is expressed as a percentage volume fraction.

[SOURCE: ISO 22968:2010(en), 3.4.1]

Other definition: The carbon content refers to the carbon content's weight to the total weight of the fuel molecule. All fossil fuels are composed chemically of links between carbon and hydrogen molecules mainly. During combustion, these bonds are broken, therefore, generating CO₂ and water molecules principally. Hence, there is a direct relationship between the carbon content and the amount of CO₂ emitted by combustion, and the carbon fraction is the way to quantify it.

Crops and planted trees

Those correspond to the coverage occupied by spatial arrangements where crops coexist with tree plantations for all types of production (wood, firewood, fruit trees, resins.); where the main characteristic of the coverage is that the increase in detail does not imply the subdivision into pure units, because these shares the area, alternated by furrows or rows of trees with crops.

Data quality

Degree to which the characteristics of data satisfy stated and implied needs when used under specified conditions.

[SOURCE: ISO/IEC 25012:2008, definition 4.3]

Forest (Natural Forest)

“Forest” is a minimum area of land of 0.05-1.0 hectares with tree crown cover (or equivalent stocking level) of more than 10-30 per cent with trees with the potential to reach a minimum height of 2-5 meters at maturity in situ. A forest may consist either of closed forest formations where trees of various stores and undergrowth cover a high proportion of the ground or open forest. Young natural stands and all plantations which have yet to reach a crown density of 10-30 per cent or tree height of 2-5 meters are included under forest, as are areas normally forming part of the forest area which are temporarily

unstocked as a result of human intervention such as harvesting or natural causes but which are expected to revert to forest.⁵¹

Forest Reference Emission Levels (FREL)

These are baselines measured in tons of carbon dioxide equivalent that indicate the amount of GHG emissions expected in the absence of REDD+ initiatives, calculated for a national or subnational area, for one or more REDD+ activities and one or more carbon pools⁵².

Forestry plantation

They are covers constituted by plantations of arboreal vegetation, made by the man's direct intervention with forest management aims. In this process, forest stands start by planting and when applicable seeding during the forestation or reforestation process to produce wood (commercial plantations) or environmental goods and services (protective plantations).

Greenhouse gas emission (GHG emission)

Release of a GHG into the atmosphere

[SOURCE: ISO 14064-3:2019(en), 3.3.2.]

Greenhouse gas emission or removal factor (GHG emission or removal factor)

Coefficient relating GHG activity data with GHG emissions or GHGremovals

[SOURCE: ISO 14064-3:2019(en), 3.1.3]

Greenhouse gas emission reduction (GHG emissions reduction)

Quantified decrease in GHG emissions between a baseline scenario and the GHGproject.

[SOURCE: ISO 14064-3:2019(en), 3.4.8.]

GHG mitigation

According to the Intergovernmental Panel on Climate Change, mitigation is a human-made intervention to reduce the sources or enhance the sinks of greenhouse gases defined

⁵¹ The Marrakech Accord. CP7/D11. <https://unfccc.int/sites/default/files/resource/docs/cop7/13a01.pdf>. The biodiversity initiative holder shall use the definition that applies.

⁵² Res.1447/18

as natural or human-made carbon reservoirs, reducing the amount of CO₂ in the atmosphere.

GHG mitigation initiative

These are programs, projects, actions, or activities developed at national, regional, local, and applicable to a sectorial level whose purpose is to reduce emissions, avoid emissions, remove and capture GHGs. Initiatives are GHG emission reduction initiatives or GHG removal initiatives. These initiatives may be sectoral or REDD+.

GHG mitigation results

These are quantifiable GHG emissions reductions and removals generated by the implementation of a GHG mitigation initiative.

Greenhouse gas inventory (GHG inventory)

List of GHG sources, GHGsinks and GHGreservoirs and their quantified GHG emissions and GHGremovals

Note 1 to entry: An inventory is established to cover a defined period of time.

[SOURCE: ISO 14064-3:2019(en), 3.4.4.]

Greenhouse gas project (GHG project)

Activity or activities that alter the conditions of a GHG baseline and which cause GHG emission reductions or GHG removal enhancements.

[SOURCE: ISO 14064-3:2019(en), 3.4.1.]

GHG removal activities

These are GHG mitigation actions, in the AFOLU sector, based on agricultural and forestry activities such as silvopastoral systems (grasses and planted trees), agroforestry systems (agroforestry crops), commercial plantations (forest plantations), and other landscape management tools. Oil palm crops are a GHG mitigation action if palms grow and occupied areas other than natural forest or natural vegetation cover other than forest.⁵³

⁵³ The names in parentheses correspond to the definitions contained in CORINE Land Cover.

GHG removal forestry activities can also include actions leading to the restoration of degraded ecosystems, such as (a) ecological restoration, (b) ecological rehabilitation, and (c) ecological recovery.

GHG statement

Factual and objective declaration that provides the subject matter for the verification or validation.

Note 1 to entry: The GHG statement could be presented at a point in time or could cover a period of time.

Note 2 to entry: The GHG statement provided by the responsible party should be clearly identifiable, capable of consistent evaluation or measurement against suitable criteria by a verifier or validator.

Note 3 to entry: The GHG statement could be provided in a GHG report, GHG project plan or CFP study report. "CFP study report" is defined in ISO 14067:2018, 3.1.1.5.

[SOURCE: ISO 14064-3:2019(en), 3.4.3]

Greenhouse Gases (GHG)

A gaseous component of the atmosphere, both natural and anthropogenic, absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, atmosphere, and clouds. Some of the GHGs are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and Sulphur hexafluoride (SF₆), as defined by the UNFCCC.

Greenhouse gas removal

Withdrawal of a GHG from the atmosphere by GHG sinks

[SOURCE: ISO 14064-1:2018(en), 3.1.6]

Grouped Project

Grouped projects are those projects in which the addition of new areas (in the case of projects in the AFOLU sector) and instances (in the other industries) is allowed after the GHG mitigation project's validation. That is, projects that can expand without the need for a new validation of the project description. These projects shall comply with the grouping conditions defined by PROCLIMA.

Holder of the initiative

It is the natural or legal person, public or private, responsible for the formulation, implementation, monitoring, and registration of a GHG mitigation initiative.

Intended user

Individual or organization identified by those reporting GHG-related information as being the one who relies on that information to make decisions

Note 1 to entry: The intended user can be the client, the responsible party, GHG program administrators, regulators, the financial community or other affected interested parties, such as local communities, government departments or non-governmental organizations.

[SOURCE: ISO 14064-2:2019(en), 3.3.1]

Landscape management tools (LMT)

Landscape management tools are landscape elements that constitute or enhance habitat, increase functional connectivity, or simultaneously fulfill these functions for native biodiversity. Landscape management tools may include biological and conservation corridors and living fences.

Leakages

Those are the potential emissions that would occur outside the project boundaries due to the GHG mitigation initiative's activities. Leakage means the net change in anthropogenic emissions by sources of greenhouse gases (GHG) that occurs outside the project boundary and is measurable and attributable to the project activity.

Level of assurance

Degree of confidence in the GHG statement

Note 1 to entry: Assurance is provided on historical information.

[SOURCE: ISO 14064-3:2019(en), 3.6.5]

Materiality (Relative importance)

Concept that individual or the aggregation of errors, omissions and misrepresentations could affect the greenhouse gas assertion and could influence the intended users' decisions.

Note 1 to entry: The concept of materiality is used when designing the validation or verification and sampling plans to determine the type of substantive processes used to

minimize risk that the validator or verifier will not detect a material discrepancy (detection risk).

Note 2 to entry: The concept of materiality is used to identify information that, if omitted or misstated, would significantly misrepresent a GHG assertion to intended users, thereby influencing their conclusions. Acceptable materiality is determined by the validator, verifier or GHG program based on the agreed level of assurance.

[SOURCE: ISO 14064-3:2006, definition 2.29]; ISO 14066:2011(en), 3.4.11.

Oil palm crop

According to the definition of CORINE Land Cover, adapted for Colombia, the palm crop is the cover composed of oil palm (*Elaeis guineensis* Jacq.), a perennial plant with a solitary trunk and pinnate leaves belonging to the Arecaceae family, which can reach heights of up to 12 m. This category includes other species of oil palms used in Colombia.

Other greenhouse gas projects

These are the other GHG projects that can be certified and registered with PROCLIMA. These types of projects include activities in the energy (non-renewable energy sources) and waste sectors. Also, activities in the AFOLU sector.

Despite certification and registration in the PROCLIMA Program, GHG emission reductions from these GHG projects are not eligible for carbon neutral certification in Colombia.

Planted trees and grasses

The coverage is occupied by spatial arrangements where pastures, destined for livestock, grow together with tree plantations destined for all types of production (wood, firewood, fruit trees, resins, and others.). It is the so-called silvopastoral system. This coverage's main characteristic is that the increase in detail does not imply the subdivision into pure units because these shares the same area alternating by furrows or rows of trees with pastures.

Permanence

It is the longevity of a carbon deposit and its stability, considering the handling and altering the environment where it occurs.

Quantification periods

The quantification period for reductions attributable to GHG mitigation initiatives is when the initiative operator quantifies the GHG emission reductions or removals

measured against the baseline or reference scenario to apply to the certification program to issue Verified Carbon Credits (VCC).

The date selected by the initiative holders as the start of the quantification period shall be later than or equal to when the initiative generates the first GHG emission reductions or removals. Quantification periods shall not exceed the operational period of the project.

REDD+

It is an international mitigation mechanism framed in the decisions of the CMNUCC, whose objective is to reduce emissions and remove GHGs through the implementation of activities to reduce emissions from deforestation, forest degradation, and other forestry activities.

REDD+ Activities

These are GHG mitigation actions that lead to the removal or reduction of GHG emissions from deforestation and degradation of natural forests, namely:

- (a) Reducing emissions from deforestation;
- (b) Reducing emissions from forest degradation;
- (c) Conservation of forest carbon stocks;
- (d) Sustainable management of forest; and
- (e) Enhancement of forest carbon stocks

Reference Level on forestry emissions (RLFE)

Those are the baselines measured in tons of carbon dioxide equivalent that indicate the amount of GHG emissions expected in the absence of REDD+ initiatives, calculated for a national or subnational area, for one or several REDD+ activities and one or several carbon pools.

Register

List issued by a certification body, an authority or another registration organization, for certificate holders or persons meeting predetermined criteria.

Note 1 to entry: A register can be publicly available or for in-house purposes.

[SOURCE: ISO/IEC TS 17027:2014(en), 2.65]

Responsible party

Person or persons responsible for the provision of the GHG statement and the supporting GHG information.

Note 1 to entry: The responsible party can be either individuals or representatives of an organization or project and can be the party who engages the verifier or validator.

[SOURCE: ISO 14064-1:2018(en), 3.4.3.]

Restoration

According to the National Plan for Ecological Restoration (MADS, 2015)⁵⁴, restoration is an interdisciplinary strategy, which articulates scientific knowledge to respond to management processes and ecosystem management to the needs of restoring degraded ecosystems and prevent future damage.

The restoration includes interventions such as (a) ecological restoration, (b) environmental rehabilitation, and (c) environmental recovery.

Ecological restoration consists of restoring the degraded ecosystem to a condition like the pre-disturbance ecosystem concerning its composition, structure, and functioning. Besides, the resulting ecosystem shall be a self-sustaining system and shall guarantee species conservation, the ecosystem in general, and most of its goods and services.

Ecological rehabilitation aims to bring the degraded system to a system similar or not to the pre-disturbance system, which shall be self-sustaining, preserve some species, and provide some eco-systemic services.

Ecological recovery aims to recover some eco-systemic services of social interest. Generally, the resulting ecosystems are not self-sustaining and do not resemble the pre-disturbance system.

Risk

Effect of uncertainty.

Note 1 to entry: An effect is a deviation from the expected – positive or negative.

Note 2 to entry: Uncertainty is the state, even partial, of deficiency of information related to, understanding or knowledge of, an event, its consequence and likelihood.

⁵⁴ Ministerio de Ambiente y Desarrollo Sostenible. 2015. Plan Nacional de Restauración: restauración ecológica, rehabilitación y recuperación de áreas disturbadas. Bogotá, D.C.: Colombia. 92 p.

Note 3 to entry: Risk is often characterized by reference to potential events (as defined in ISO Guide 73:2009, 3.5.1.3) and consequences (as defined in ISO Guide 73:2009, 3.6.1.3), or a combination of these.

Note 4 to entry: Risk is often expressed in terms of a combination of the consequences of an event (including changes in circumstances) and the associated likelihood (as defined in ISO Guide 73:2009, 3.6.1.1) of occurrence.

[SOURCE: ISO 9000:2015, 3.7.9, modified — Notes to entry 5 and 6 have been deleted];
[ISO 19011:2018(en), 3.19]

Sectoral GHG mitigation project

It is a GHG mitigation initiative that includes GHG emission reduction or removal activities other than REDD+, developed at the subnational and sectoral levels. These initiatives demonstrate their mitigation results within the framework of meeting national climate change goals established under the UNFCCC.

Source, sink, or reservoir of related GHG

It is a source, sink, or reservoir of GHGs. It includes energy or material flows into, out of, or within the project.

Stakeholder (Interested party)

Person or organization that can affect, be affected by, or perceive itself to be affected by a decision or activity.

Note 1 to entry: To “perceive itself to be affected” means the perception has been made known to the organization.

Note 2 to entry: The terms “interested party” and “stakeholder” are used interchangeably.

[SOURCE: ISO 14001:2015, 3.1.6, modified — The admitted term “stakeholder” and Note 2 to entry have been added; ISO 14006:2020(en), 3.1.7.].

Start date

The start date for GHG mitigation initiatives is when activities that result in actual reductions/removals of GHG emissions begin. That is when the implementation, construction, or real action of a GHG initiative begins.

For sectoral GHG mitigation projects, based on GHG removal forestry activities and oil palm cultivation, this start date corresponds to the time on which site preparation, the

establishment of planting/cultivation, the commencement of restoration activities, or other actions related to the start of mitigation initiative activities begins.

For REDD+ projects, the start date is when the activities proposed by the project to demonstrate reduced emissions from deforestation and forest degradation begin. It may be, for example, the start of forest management strategies as also when applicable to forest resource conservation plans. In other words, concrete actions to reduce deforestation.

For sectoral GHG mitigation projects in the energy and transport sectors, the same start date rules are defined by the Clean Development Mechanism.

GHG initiative holders may only certify and register, in this Program, initiatives whose start date is within five (5) years before the validation. The validation starts once signed a commercial agreement with the CAB.

Transparent and prudent

Establishing a baseline transparently and prudently means that assumptions are explicit, and decisions are informed. In the case of uncertainties about the values of variables and parameters, establishing a baseline is considered prudent if the resulting baseline projection does not lead to an overestimation of the emission reductions attributable to a GHG mitigation initiative (in case of doubt, use the values that generate a lower baseline projection).

Uncertainty

Parameter associated with the result of quantification that characterizes the dispersion of the values that could be reasonably attributed to the quantified amount

Note 1 to entry: Uncertainty information typically specifies quantitative estimates of the likely dispersion of values and a qualitative description of the likely causes of the dispersion.

[SOURCE: ISO 14064-1:2018(en), 3.2.13]

Validation

Process for evaluating the reasonableness of the assumptions, limitations and methods that support a statement about the outcome of future activities

[SOURCE: ISO 14064-2:2019(en), 3.4.3]

Validation body

Body that performs validation.

Note 1 to entry: A validation body can be an organization, or part of an organization.

[SOURCE: ISO/IEC 17029:2019, 3.4, modified — Note 2 to entry has been added.]; [ISO 14065:2020(en), 3.3.26]

Validity of mitigation results

It is the calendar year for which a GHG mitigation initiative obtains and measures its results.

Verification

Systematic, independent and documented process for the evaluation of a greenhouse gas assertion against agreed verification criteria

Note 1 to entry: In some cases, such as in first-party verifications, independence can be demonstrated by the freedom from responsibility for the development of GHG data and information.

[SOURCE: ISO 14064-3:2006, definition 2.36].

Verification body

Body that performs verification.

Note 1 to entry: A verification body can be an organization, or part of an organization.

[SOURCE: ISO/IEC 17029:2019, 3.5, modified — Note 2 to entry has been added.]; [ISO 14065:2020(en), 3.3.27]

Verification / validation opinion

Formal written declaration to the intended user that provides confidence on the GHG statement in the responsible party's GHG report and confirms conformity with the criteria.

[SOURCE: ISO 14064-3:2019(en), 3.6.18.]

Vulnerability

Propensity or predisposition to be adversely affected

Note 1 to entry: Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.

Note 2 to entry: Vulnerability is the degree to which an ecological, social and economic system is susceptible to, or unable to cope with, adverse climate change impacts, including climate variability and extremes.

[SOURCE: ISO 14090:2019, 3.15, modified — Note 2 to entry has been added.]; [ISO/TS 14092:2020(en)]

Document history

Document Type

Standard. Certification and Registration Program of GHG Mitigation Initiatives and Other Greenhouse Gas Projects.

Version	Date	Nature of the document
1.0	December 10, 2019	Initial version – It is the document submitted to public consultation.
2.0	April 7, 2020	Updated version – After public consultation
2.1	May 12, 2020	Updated version – Project types Grouped projects Other GHG programs Some definitions and terms
2.2	July 22, 2020	Updated version – Minor editorial changes
2.3	October 19, 2020	Updated version – Inclusion of waste handling and disposal activities
3.0	May 13, 2021	Updated version – Additions and clarifications on other greenhouse gas projects Conformity Assessment Bodies Transition plan