



# Guide to COLCX Program terms and definitions

*Version 2.0*



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## Acronyms and abbreviations

<b>AFOLU</b>	Agriculture, Forestry and Other Land Use
<b>CO<sub>2</sub></b>	Carbon Dioxide
<b>CO<sub>2</sub>e</b>	Carbon dioxide equivalent
<b>SOC</b>	Soil Organic Carbon
<b>CH<sub>4</sub></b>	Methane
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>PDD</b>	Project Design Document
<b>GHG</b>	Greenhouse Gases
<b>HFC's</b>	Hydrofluorocarbons
<b>LMT</b>	Landscape Management Tools
<b>IDEAM</b>	Institute of Hydrology, Meteorology and Environmental Studies ( <i>Instituto de Hidrología, Meteorología y Estudios Ambientales</i> )
<b>NFI</b>	National Forest Inventory
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>ISO</b>	International Standardization Organization
<b>CDM</b>	Clean Development Mechanism
<b>MRV</b>	Monitoring, Reporting and Verification
<b>NDC</b>	Nationally Determined Contribution
<b>N<sub>2</sub>O</b>	Nitrous Oxide
<b>FREL</b>	<i>Forest Reference Emission Levels</i>
<b>SDG</b>	Sustainable Development Goals
<b>VVB</b>	Validation and Verification Bodies
<b>GWP</b>	Global Warming Potential
<b>FEMP</b>	Forest Establishment and Management Plan
<b>GHGMP</b>	Greenhouse Gas Mitigation Projects
<b>RENARE</b>	National Registry for Greenhouse Gas Emission Reductions
<b>PMR</b>	Project Monitoring Report
<b>AS</b>	Agroforestry Systems
<b>GIS</b>	Geographic Information System

## 1. INTRODUCTION

The guide of terms and definitions has been developed based on the concepts relevant to the *COLCX Certification Program*, allowing a complete understanding of the technical and administrative documentation that is part of the COLCX Program.

This guide applies to all stakeholders of the COLCX Program and serves as a general framework for users to broaden their understanding of the rules and requirements that apply to the certification of mitigation initiatives and their results.

The guidance considers guidance derived from the ISO 14064:2019, ISO 14065:2020, ISO/IEC 17029:2019 series of standards, the Intergovernmental Panel on Climate Change (IPCC), the United Nations Framework Convention on Climate Change (UNFCCC), and other applicable national and international standards.

## 2. COLCX PROGRAM TERMS AND DEFINITIONS

- **Additionality:** A condition that considers that the GHG emission reductions or removals achieved by a mitigation initiative would not have occurred in its absence, thus generating a net benefit to the atmosphere compared to its baseline. Alternatively, it means that by implementing the mitigation initiative, fewer GHG emissions are generated than would have occurred otherwise. Also, additionality considers that the proposed GHG mitigation initiative would not have taken place without the incentives provided by certifying mitigation results under the COLCX Program.
- **Eligible area:** Project areas that meet every condition established by this methodology.
- **Protected Area:** A geographic space subject to legal use restrictions because its objectives are to conserve ecosystem attributes and their services over the long term. Its definition may vary depending on the legal framework of each country, as well as the activities permitted within these areas.
- **Biomass:** All biological material, including organic residues and waste, may or may not be used as an energy source. For the purposes of this methodology, biomass refers to that stored in various ecosystem and agroecosystem reservoirs such as forest plantations, agroforestry systems, fruit crops, African oil palm plantations, or forest restoration areas. These reservoirs are categorized as Aboveground Biomass, Belowground Biomass, Litter, Deadwood, and Soil Organic Carbon (SOC).
- **Forest:** A land cover that meets specific threshold values for attributes such as minimum mapping unit, canopy cover density, and minimum height of “in situ” biotypes. These thresholds vary depending on national regulations. According to the Kyoto Protocol, area thresholds range from 0.05 ha to 1.0 ha, canopy cover must exceed 10%, and tree height should be between 2 to 5 meters<sup>1</sup>. If the country where

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<sup>1</sup> UN-REDD (2023). Glosario. In <https://www.un-redd.org/glossary/forest>



the GHGMP is implemented does not have an official forest definition, the following shall apply: *“A land area predominantly covered by trees, which may also include shrubs, palms, bamboos, herbs, and lianas. It has a minimum canopy cover of 30%, a minimum in situ canopy height of 5 meters, and a minimum area of 1.0 hectare”*. Any definition excludes planted forests<sup>2</sup>.

- **Certification:** Refers to the process by which a mitigation initiative is assessed and certified to ensure compliance with the criteria and requirements established by the COLCX Program, with the aim of certifying both its activities and its GHG emission reduction or removal results.
- **Co-benefits:** Positive externalities and additional benefits beyond the reduction and/or removal of GHG emissions. These benefits are sometimes not directly identified during project formulation due to their intrinsic nature.
- **COLCERS:** Also known as carbon credits under the COLCX Program. They are the sole tradable instrument within the carbon market under this framework, designed to contribute to the increase of GHG removals. COLCERS are traded as: project-based verified removals and/or reductions, voluntary verified removals and/or reductions, and emission allowances. COLCERS adhere to conditions, principles, and requirements that ensure transparency, security, and efficiency in their buying and selling.
- **Carbon Credit:** An intangible representation of one metric ton of carbon dioxide equivalent (tCO<sub>2</sub>e) reduced or removed by a mitigation initiative, whose results have been verified and certified according to the guidelines of a standard, program, or framework. Within the COLCX Program, this is referred to as a COLCER.
- **Criteria:** A rule, guideline, or instruction that defines and establishes the requirements for carrying out a process or activity. These are selected and applied for the planning and implementation of a mitigation project. The selected criteria are later used as reference for objectively confirming proper implementation during validation and/or verification stages.
- **Dendrometry:** The study of forest measurements through the determination of the volume of forest elements, considering both the trees and their parts that may be harvested, as well as the magnitude and volume of forest products<sup>3</sup>.
- **Double accounting:** A situation where the same greenhouse gas (GHG) removal or reduction is accounted for, issued, claimed, or used by more than one entity or project, either within the COLCX program or between COLCX and other certification programs. This includes the repeated use of the same reduction to demonstrate compliance with mitigation targets at the national or international level, which undermines the integrity and uniqueness of COLCERS.
- **Verification Statement:** A document that confirms the authenticity of the CO<sub>2</sub> removals generated by a project and may define the corresponding tCO<sub>2</sub>e that will

<sup>2</sup> Taken from the Law 1931 of 2018

<sup>3</sup> Romahn De La Vega, C. F., & Ramírez Maldonado, H. (2010). Dendrometría. Texcoco: Universidad Autónoma de Chapingo, División Ciencias Forestales.

later be issued as carbon credits. This statement is issued by a third party duly accredited in the host country<sup>4</sup>.

- **Carbon Dioxide (CO<sub>2</sub>):** A gas that occurs naturally and as a byproduct of the combustion of fossil fuels and biomass, land-use changes, and other industrial processes. It is the principal anthropogenic greenhouse gas (GHG) affecting the Earth's radiative balance. It is used as the reference gas against which other GHGs are measured and therefore has a Global Warming Potential (GWP) of 1. (Based on Resolution 1447, 2018).
- **Carbon Dioxide Equivalent (CO<sub>2</sub>e):** A unit of measurement that expresses the global warming potential of each GHG in terms of the amount of CO<sub>2</sub>. (Based on Resolution 1447, 2018)
- **Project Design Document (PDD):** A document in which the proponent describes the mitigation initiative and reports how it complies with the criteria and requirements of the carbon standard or certification program.
- **Allometric Equations:** Mathematical formulas used to estimate the volume and/or biomass of trees. These estimates are based on the relationship between physical characteristics (e.g., height, DBH—Diameter at Breast Height) and the amount of biomass accumulated through photosynthesis. Allometric equations may be developed for homogeneous forest stands or individual species. However, they cannot be generally applied across different physiographic and environmental conditions, as they are site-specific.
- **GHG Emission:** The release of greenhouse gases into the atmosphere.
- **Baseline Emissions:** GHG emissions that occur or are expected to occur under the baseline scenario.
- **Epidometry:** The study of the growth and increase of trees over time, conducted using models and techniques that consider age, diameter growth, height, and tree volume.
- **Baseline Scenario:** Also known as the reference scenario, it represents the current and/or projected conditions in a given area in the absence of a GHGMP (Greenhouse Gas Mitigation Project). It includes the identification of GHG sources, carbon stocks, and sinks, both present and expected, to allow comparison with the actual GHG mitigation achieved through the implementation of a project oriented to this end.
- **Pioneer or Heliophilous Species:** Plant species that typically appear during early successional stages, characterized by traits such as shade intolerance, short lifespan, early and abundant reproduction, rapid growth, and a normal diameter distribution pattern<sup>5</sup>.
- **Early Successional Stages:** The initial phases of ecological succession, typically dominated by pioneer species—ecological guild of the ephemeral heliophilous species—that exhibit high potential for initiating natural regeneration and the eventual establishment of forest cover over time.

<sup>4</sup> Adapted from MHCP decree 926 of 2017

<sup>5</sup> Gallegos, A., Gonzales, G., Hernández, E., & Castañeda, J., (2008). Determinación de gremios ecológicos de ocho especies arbóreas de un bosque tropical de Jalisco, México. V Simposio Internacional sobre Manejo Sostenible de los Recursos Forestales. SIMFOR.

- **Carbon Standard:** Schemes that define criteria, principles, and requirements used as benchmarks for certifying mitigation initiatives and their results. These standards may be based on international norms such as ISO 14064 or similar and typically include a public registry system to manage initiatives and verified GHG reductions or removals. Carbon standards may be voluntary or mandatory and can be national or international in scope.
- **Project Start Date:** The date on which the GHG mitigation activities begin, which must fall within five (5) years prior to the signing of the validation service agreement with a Validation and Verification Body (VVB).
- **Carbon Fraction:** A numerical factor assigned to each component (e.g., soil, trees) that allows the calculation of stored carbon. Each tree species has distinct growth-related factors, which vary depending on the geographic region.
- **GHG Emission Source:** A physical process that directly releases greenhouse gases into the atmosphere. In the forestry sector, wildfires and excessive use of nitrogen-based fertilizers are considered major sources of GHG emissions.
- **Carbon Leakage:** A phenomenon in which new sources of GHG emissions arise in areas not included in the CO<sub>2</sub> removal project, due to shifts in demand, supply of associated goods or services, or physical displacement. These may occur at various points in time after the project start date<sup>6</sup>.
- **Greenhouse Gases (GHG):** Gaseous components of natural or anthropogenic origin, that absorb and emit infrared radiation at specific wavelengths, contributing to global warming. These include CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, HFC, PFC, SF<sub>6</sub>, among others<sup>7</sup>.
- **Uncertainty:** A phenomenon related to quantified results that reflects the probable dispersion of the data collected. It defines the likely range of measurement outcomes.
- **Mitigation Initiative:** Refers to programs, projects, actions, or activities aimed at reducing, avoiding, removing, or capturing GHG<sup>8</sup>.
- **Baseline:** The scenario that reflects the GHG emissions that would occur in the absence of a mitigation initiative.
- **Litter:** The topmost layer of soil, where the decomposition of organic matter occurs, nutrients are distributed, and soil carbon accumulation processes take place.
- **Mitigation:** Human activity aimed at reducing GHG emissions through actions or initiatives involving GHG sinks or reservoirs.
- **Monitoring:** Periodic and standardized activities aimed at determining, characterizing, and evaluating the removals that have occurred or may occur as a result of implementing a mitigation project (i.e., increases or decreases in GHG removals).
- **Forest Emissions Reference Level (FERL):** Baseline levels measured in tons of CO<sub>2</sub> equivalent that indicate the expected GHG emissions in the absence of REDD+ initiatives. These levels are calculated for a national or subnational area, covering one

<sup>6</sup> Adapted from ISO 14064-2:2019

<sup>7</sup> Ballesteros, H. O. B., & Aristizábal, G. L. (2007). Información técnica sobre gases de efecto invernadero y el cambio climático. Bogotá DC: nota técnica del IDEAM.

<sup>8</sup> Adapted from resolution 1447 of 2018.



or more REDD+ activities and one or more carbon pools. (Based on Resolution 1447, 2018).

- **Validation and Verification Bodies (VVB):** Independent entities responsible for carrying out the validation and verification processes of GHG mitigation initiatives. A VVB conducts objective assessments and issues validation, or verification statements based on the information provided by the initiative owner, in accordance with the criteria defined by GHG certification programs or carbon standards and the national government<sup>9</sup>.
- **Results-Based Payment or Similar Compensation:** An economic instrument specifically designed for the carbon credit market, whereby carbon credits are issued to project owners based on the amount of CO<sub>2</sub> captured through an established land cover (such as forest plantations, agroforestry systems, or fruit tree crops, as applicable under this methodology).
- **Project Participant:** The individual or organization involved in the project, either as the landowner or as the person/entity responsible for performing other technical or operational activities within the planning and implementation of the GHG project.
- **Project Lifetime:** The entire duration or operational lifespan of the project.
- **GHG Certification Program:** A set of rules involving the adoption of carbon standards for the certification of mitigation initiatives and their outcomes.
- **Initiative Proponent:** A natural or legal person, public or private, who undertakes the formulation, implementation, or monitoring of the mitigation initiative and handles the certification process and its outcomes before the COLCX Program. The proponent may also be the legal owner of the mitigation initiative.
- **Grouped or Umbrella Project:** A collective project that aggregates several individual properties (each with its own GHG reduction or removal activities) into a larger project. Each participating property must demonstrate the presence of forest plantations, agroforestry systems, or fruit tree crops through the required documentation. While the grouped properties must share similar regional environmental conditions, significant intrinsic variations may occur when measured at a finer scale.
- **Global Warming Potential (GWP):** The warming effect over time produced by the release of a specific GHG, expressed in comparison to the warming effect of CO<sub>2</sub>.
- **REDD+ Project:** A type of GHG mitigation project implementing REDD+ activities, covering a clearly defined subnational geographic area. The project proponent may be a public or private entity, the latter within the scope of its legally assigned functions. These initiatives report mitigation results in alignment with the goals of the Comprehensive Strategy for Deforestation Control and Forest Management, as well as national climate change targets under the UNFCCC. (Based on Resolution 1447, 2018).
- **REDD+:** A mitigation mechanism aimed at reducing or removing GHG emissions through the implementation of activities that reduce deforestation, forest degradation, and other forest-related actions.

<sup>9</sup> Taken from Resolution 1447 of 2018 of Colombia

- **GHG Reduction:** A decrease in the amount of GHG, calculated as the difference between the emissions projected in the baseline scenario and the emissions generated in the scenario with the implemented mitigation initiative.
- **Registration:** The act of recording and accounting for mitigation initiative information within the framework of compliance with the criteria and requirements of the carbon standard or certification program.
- **GHG Removal:** The withdrawal of greenhouse gases (GHGs) from the atmosphere.
- **Project Monitoring Report (PMR):** A document through which the proponent describes the implementation of the mitigation initiative and reports the monitored data in compliance with the proposed monitoring plan, including the quantification of the actual GHG reductions or removals achieved.
- **Carbon Reservoirs:** Elements other than the atmosphere that have the capacity to accumulate, store, or capture atmospheric CO<sub>2</sub>. Carbon reservoirs include oceans, soil, and forest cover.
- **Mitigation Results:** Refers to the GHG reductions or removals effectively achieved by an implemented mitigation initiative.
- **Withdrawal:** The retirement of carbon credit from an account within the registry system for the purpose of transfer or cancellation.
- **Risks:** The result of the combination of threat and vulnerability that may directly affect life, health, ecosystems, species, and economic, social, and/or cultural assets. Risks exist regardless of whether the future outcome of an action is known. In reforestation activities, typical risks include natural events such as wildfires, pest outbreaks, and forest diseases.
- **Carbon Sinks:** Plants, oceans, or soils that remove CO<sub>2</sub> from the atmosphere, store it, and retain it within their composition.
- **Land Tenure:** The legal way a parcel of land is “held” or “possessed.” It implies that the titleholder has a set of rights and obligations that make the tenure effective. This can be in the form of ownership or lease<sup>10</sup>.
- **Initiative owner:** A natural or legal person, public or private, who holds the legal ownership of the mitigation initiative before the COLCX Program. The owner may also act as the proponent of the mitigation initiative.
- **Property or landowner:** The legal owner of the area or plot where the reforestation project is located, as identified according to land tenure. This person or entity has carried out the silvicultural actions to establish the reforested cover.
- **Project Owner:** The individual or organization that has full control and responsibility over the GHG project seeking compensation for CO<sub>2</sub> removal. The owner may be the landholder or another party representing and assuming control of the project.
- **Transfer:** The movement of carbon credit from one account to another within the same registry system or to an external registry system.
- **Land Use:** The arrangements, activities, or cultural traditions practiced and prevailing on a given land cover. The designation of land use according to its vocation recognizes the land's natural capacity to support sustainable characteristics, as

<sup>10</sup> Bruce, J. W. (2000). Conceptos sobre tenencia de la tierra. Land Tenure Center, University of Wisconsin-Madison.

evaluated through a biophysical baseline. In Colombia, land use is categorized into five classes: agricultural, livestock, agroforestry, forestry, and conservation<sup>11</sup>.

- **Validation:** A systematic, independent, and documented assessment process of a mitigation initiative against the criteria and requirements defined by a carbon standard or certification program. It determines whether the mitigation initiative complies with aspects such as additionality, estimated GHG reductions or removals, regulatory compliance, and baseline construction, among others.
- **Change in Carbon Reserves:** The result of implementing projects, plans, or actions aimed at removing CO<sub>2</sub> from the atmosphere, progressively reducing its presence as plant biomass grows and thereby contributing to climate change mitigation.
- **Verification:** A systematic, independent, and documented assessment process of the results achieved by a mitigation initiative against the criteria and requirements defined by a carbon standard or certification program. Based on monitored data, it determines the quantity of GHG reductions or removals achieved during the monitoring period.
- **Initiative Lifetime:** The period between the start and closure of the project.

### 3 FINAL CONSIDERATIONS

The terms and definitions contained herein apply to all documents and formats used by the program for the certification of mitigation initiatives and their results and should be publicly available for formulation and evaluation by a VVB or the COLCX Program in accordance with the *COLCX Procedure for the Mitigation Initiative Cycle* and the *COLCX Standard for the Certification of Mitigation Initiatives*.

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#### History of the Document

Version	Date	Description
1.0	13/07/2023	Initial version.
2.0	23/05/2025	Initial version update.

<sup>11</sup> IGAC. (2012). Conflictos de uso del territorio colombiano. Escala 1:100.000. Bogotá (Colombia).