

CCC+ Standard

**Certified Carbon Calculation +
CCC+ (V2-0) EN**



14/06/2024

Version 2 14-06-2024

Title:	Certified Carbon Calculation +
Approval date:	14/06/2024
Standard code:	CCC+(V2-0) EN
Scope:	International
Date of last version:	14/06/2024
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Version Control

Publication Date: 14/06/2024

Effective date: 14/06/2024

Version	Description	Date
V1-0	First version of the CCC+ Standard.	06/06/2021
V2-0	Updating some concepts.	14/06/2024

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CCC+ REFERENTIAL

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Introduction

The Certified Carbon Calculation (CCC+) is a certification developed by Certis, with its own formula for calculating the annual carbon balance of production units, thus obtaining a real value, not an estimated one, taking into account the result of the cultivation practices carried out the previous year.

The purpose of this certification is not only to show that the producer/manager/customer is concerned about the environmental results of their management, seeking to reduce emissions and increase carbon sequestration through changes in their management decisions, but also to enable agricultural production units, even those without a forestry component, to contribute to national and global carbon neutrality targets.

This certification also allows producers who have annual carbon sequestration balances to place products on the market that are identified as such and to make products available to the end consumer that are the result of more sustainable management and that consist of the principles of sustainability: Social, Environmental and Economic. In this way, consumers themselves can make an individual contribution to the carbon neutrality targets through their choices, as well as encouraging continuous improvement in the management of production units.

This reference defines the requirements for calculating the carbon balance of an agricultural, livestock, farming and/or forestry production unit. The entity that owns the reference is CERTIS. This standard is a dynamic document that can be updated and improved on an ongoing basis, at the suggestion of either the client, CERTIS or other interested parties. The decision to change it will always be made by the holder of the standard.

The CCC+ certificate obtained by each production unit allows access to the carbon market, through the equivalence of carbon credits, whose fundamental principles are:

- Credibility;
- Additionality;
- Permanence;
- Effectiveness;
- Monitoring;
- Transparency;
- Sustainability.

This reference identifies and clarifies the necessary data to be provided to CERTIS for the annual calculation of the carbon balance.

REGULATORY BASES

Any production unit that applies for the control of the CCC+ Referential implicitly undertakes to respect the legislation, directives and regulations applicable in its field of activity.

This Standard shall apply without prejudice to the various international, Community and/or national provisions, governing the health, safety and general regulatory compliance of the production unit.

The Portuguese Environment Agency (APA) in Portugal has issued a decree establishing the Voluntary Carbon Market in Portugal, which sets out the rules and defines its requirements and procedures, with the aim of promoting GHG emission mitigation projects, mobilization and adherence, environmental and socio-economic co-benefits with the aim of achieving sustainable development.

REGULATION

1. SCOPE AND DEFINITIONS

1.1. Scope

This Referential is applicable to:

- a) any production unit: forestry, agricultural, livestock and/or agricultural;
- b) any geographical location anywhere in the globe – with the respective need to adapt the standard values used, according to the specificities of the type of crops/species to the region concerned (to be carried out by CERTIS).

1.2. Definitions

For the purposes of this document, the following terms have the meanings defined below:

Audit - Systematic, independent and documented process to obtain and evaluate, in an objective manner, evidence that determines whether the unit in question (e.g. production unit), complies with the audit criteria of the CCC+ Referential established for the unit.

Certification – An act by which an independent third party asserts that it is reasonably realistic to expect a product or service, duly identified, to conform to the specified Referential.

Production unit – physical space geographically delimited by the limits of ownership and by the same type of management.

Registration - Document that expresses results obtained or provides evidence of the activities carried out.

Verification - Confirmation, through objective evidence, that the requirements for a specific use or application have been met.

2. CCC+ ACCESSION REQUIREMENTS

2.1. Requirements

In order to be able to proceed to the application for the CCC+ Certification, the following information is required from the production unit:

- Annual soil analyses (by homogeneous areas and by crops)
- P3 in PDF format and Shapefile of the production unit (for calculating biomass using a satellite system);
- Annual and updated field notebook with information on:
 - Total area of the production unit
 - Areas by types of culture
 - Livestock numbers (by species)
 - Operations carried out throughout the year
 - Fertilization
 - Harvests (production of each crop)
- Input invoices: fertilizers, fuel, electricity (grid consumption and renewable energy, if applicable), purchase of hay, purchase of feed, etc.)
- Output invoices: sale of animals, sale of wood, sale of hay, ..., renewable energy fed into the grid (renewable energy sold into the grid, if applicable)
- Social requirements: the client must take into account the rights and obligations set out in national legislation.

2.2. Certification document (certificate)

2.2.1. The CCC+ certificate is issued annually and is valid for one year.

2.2.2. The certificate will be issued in the name of the company or individual, depending on the contractor and taking into account the company's permanent certificate and ownership of the production unit in question.

2.2.3. The certificate must contain the following elements:

- Data of the entity / organization / company (name, tax address and Vat number)
- Logo (not mandatory)
- Production unit data (location – district, total area, carbon units obtained by the calculation formula expressed in tons of carbon equivalent for the total area of the production unit subject to certification:
 - Value of the initial carbon stock (January of year 0 of the certificate)
 - Value of the carbon balance (December of year X of the certificate)
 - Accumulated carbon stock (December of year X of the certificate)
- Date on which the certification is granted (date of issue) and validity of the certificate²;
- Certificate Number;
- When the same entity has more than one production unit, the main numbering is the same, but each production unit will have a sequential number placed in brackets (e.g. CERTIS.CCC+.009(1)2023; CERTIS.CCC+.009(2)2023; CERTIS.CCC+.009(3)2023).

2.2.4. The certificate shall only be issued or issued concurrently with the certification decision, with compliance with the certification requirements and after the contract has been signed by the CERTIS Certification Department.

2.2.5. After each certificate has been issued, the certificate issued and the respective carbon values, as well as the respective information on the certified production unit, will be publicly available on the official Certis website, in order to maintain transparency in the Voluntary Carbon Market. In terms of sales, only 90% of the average of the last 5 years is registered for sale (to cover the error associated with the readings).

2.3. Complement to the certificate

The CCC+ certificate is accompanied by a report presenting a set of emergency indicators, which is intended to support the decision of the production unit manager, allowing an approach from the perspective of continuous improvement in the performance of the unit as a whole and on behalf of the culture.

3. COMMUNICATION RULES ASSOCIATED WITH THE USE OF THE MARK

3.1. Product labelling

Once the unit has been assessed and if the carbon balance is positive (sequestration), the products produced in the unit can be authorized to be labeled, on an ongoing basis, whenever the annual balance is carbon sequestration, with the information that the product was produced in a production unit that has sequestered carbon.

These products must comply with national and EU legislation, as well as the product specifications. Product labeling is defined in ANNEX I - Procedure for labeling CCC+ products.

4. CALCULATION METHODOLOGY

4.1. Carbon balance calculation formula

The CERTIS calculation formula was developed by a team of experts, transposing the experience in scientific research to the real needs in the production units, respecting the principles of the IPCC (Intergovernmental Panel on Climate Change) and the APA (Portuguese Environment Agency);

For the calculations, the calendar year (January 1 to December 31) is considered. The formula includes:

- Specific data of each production unit - all inputs and outputs over a period of 1 year (January to December), covering all emission values and carbon sequestration in all cultural operations of the production unit throughout the year;
- Biomass value of the plant component - calculated by satellite (in cases where the plant component has a height greater than 1 meter from ground level) or with values taken from scientific literature (verified and referring to each type of crop/species).

In the audit process, CERTIS must have access to the following information:

- annual soil analyses (by homogeneous areas and by crops);
- Shapefile of the production unit (for biomass calculation through satellite system)
- Annual and updated field notebook with reactive information to:
 - Total area of the production unit;
 - Areas by types of culture;

- Animal numbers (by species, weights and ages);
- Fertilization;
- Pruning;
- Production (total annual quantity);
- Energy expenditure (fuel, electricity, gas, biomass, among others);
- External and internal workers and their working hours.

4.2. Emergy indicators

The calculation of the production unit carbon balance is complemented with environmental indicators that allow a more complete characterization of the environmental performance of the production unit. Namely, regarding the management of the available water, the efficiency of use of the resources allocated to the unit, the general impact of the activity on the natural environment and the degree of dependence on renewable and non-renewable inputs.

This more comprehensive environmental assessment is carried out using emergy assessment, a method developed in the USA by Howard T. Odum, and which has been widely applied in agricultural systems, all over the world, with special emphasis on the countries of Latin America, China, African countries, and Europe. This is considered a very robust method of assessing the environmental performance of the systems, since it is based on quantitative data of the environmental variables that affect them, instead of using qualitative methods with a high degree of subjectivity.

Therefore, in addition to the data requested above, it will also be necessary to provide the life cycle of the machinery used in the production units.