

When do I request certification?

There are three possibilities:



1. Design phase

In the design phase of your construction project, you can already quantify your potential carbon storage using the **calculation tool** and ensure that your design stores as much carbon as possible. However, you cannot yet obtain a certificate because it is not certain that your construction project will be realised.

2. Construction phase

You have a finalised design and a building permit. You can now apply for a certificate.



You will make agreements with the certifier regarding the evidence you still need to provide and what happens if your construction project is unexpectedly delayed or different materials end up being used. You can already receive a preliminary certificate that can be used for, e.g., pre-purchases.



3. As built phase

Your construction project has been completed. A verification process takes place to confirm that the carbon storage has indeed occurred. After positive verification, your certificate becomes fully usable. Congratulations, you have delivered a proven climate performance.

Frequently Asked Questions

I Who owns the CO₂?

The party responsible for ensuring that carbon is stored in the building creates the climate value. This party determines that a biobased product is used in the building instead of a conventional material. This is not always the owner of the physical building/material that stores the carbon. If the controlling party is not the building owner, they must contractually define with the owner of the building/material who claims the value of the carbon storage. This is necessary to prevent double counting.

I Who validates and verifies?

The certifier, such as **Oncra**, validates the data you deliver (is it all in the correct format?). An independent organisation verifies whether the carbon storage has occurred and if the numbers are accurate. Both the certifier and the verifier operate according to standards set by (inter)national standardisation institutes (NEN, ISO). European rules to control carbon storage are in development, see footnote 3 (CRCF).

I What is Oncra?

Oncra stands for 'Open Natural Carbon Removal Accounting' and is a non-profit certifier established by **Climate Cleanup** in partnership with ASN Bank, Dutch provinces, and in accordance with ISO rules and the European Carbon Removal Certification Framework. The team behind Oncra has written this guide. Oncra is open, meaning that the data collected in this process can also be used for other certification processes.

I What does certification cost?

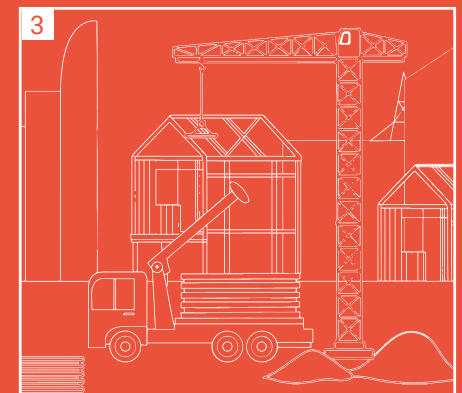
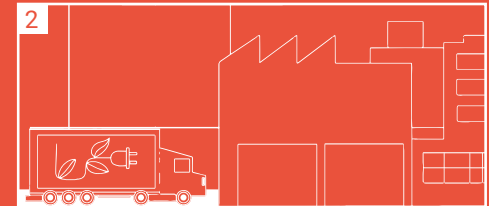
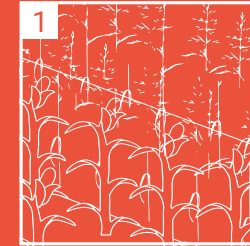
Certification costs vary. **Oncra** operates on a non-profit basis and only charges certification fees (a few euros per tonne of claimed or sold CO₂ stored) when the storage has actually led to financial value. The idea behind this is that pioneers should not be burdened with additional costs, and rapid scaling is needed to quickly reverse climate change.

I Where can I find more detailed information?

The certification protocol for Biobased Construction can be found at www.climatecleanup.org/constructionstoredcarbon/protocol. The underlying calculation method for Construction Stored Carbon can be found at www.constructionstoredcarbon.org.

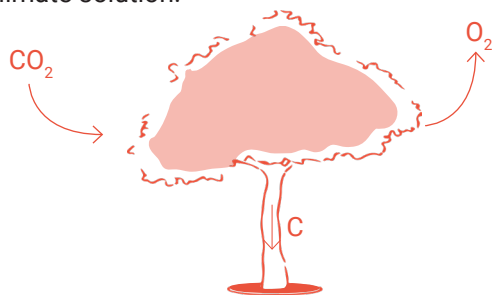
STARTERS GUIDE

Quantify, appreciate and certify the sequestration of CO₂ in buildings.



How is carbon stored in buildings?

Plants and trees absorb CO₂ from the air. By constructing buildings using plant-based (or 'biobased') materials, the CO₂¹ remains stored. This CO₂ no longer contributes to global warming. The 'biobased' building thus becomes a climate solution.



This brochure explains how to quantify, appreciate, and certify the amount of CO₂ stored in a biobased building (or material).

1 quantify

How do you quantify the amount of CO₂ stored in a building? The CO₂ is contained in the biobased materials. So, you need to know the quantity of these materials, which you can obtain from the building's bill of materials.

The weight of a material multiplied by the CO₂-density of the material yields the amount of stored CO₂.

This calculation is described in a metric report developed by **ASN Bank** and **Climate Cleanup**. To apply this metric to your entire bill of materials, an **open Excel calculation tool** has been created.

1. CO₂ is stored in the form of carbon. Each quantity of carbon in a biobased material can be converted back to a quantity of CO₂ that has been removed from the air. For every 44 grams of CO₂, there are 12 grams of carbon. So, every 12 grams of carbon corresponds to 44 grams of CO₂ removed from the air. The remaining O₂ is oxygen that the tree or plant has exhaled. Carbon and CO₂ are therefore used interchangeably throughout this document.

[the metric]



[the tool]



[the protocol]



2 appreciate

How can carbon storage also gain financial value? The climate damage caused by 1000 kg of CO₂ in the atmosphere amounts to approximately €875². By removing a tonne of CO₂ from the air and storing it in biobased materials, you create €875 worth of societal value. This achievement can be rewarded in three ways:

- 1 Governments can subsidise carbon storage as an effective implementation of climate, nature, and nitrogen policies.

For example, by subsidising €250 per tonne of CO₂ stored in biobased materials, €875 of climate damage can be prevented. This €250 incentive is often sufficient to cover the current additional costs of using biobased materials compared to conventional construction materials. Carbon storage may also be rewarded by the EU through the ETS (Emission Trading System) from 2026 onwards.

- 2 You can also include carbon storage in your own accounting. This is beneficial for your reputation, provides a sense of accomplishment for yourself and your employees, and helps achieve sustainability goals as reported according to the CSRD (Corporate Sustainability Reporting Directive).

- 3 Companies can pay for your carbon storage and can present this as a "contribution to climate action" to the public.

3 certify

To prove the carbon storage in your building, it can be certified. This means you receive a certificate indicating the amount of CO₂ stored in the biobased products used in your building.

2. <https://oncra.org/en/province-of-utrecht-decides-on-e875-ton-co2-price/>

This certificate can be used for (financial) appreciation of your carbon storage. To realise the financial value of CO₂ capture in your building, follow these steps:

1. Gather your bill of materials

Make a list of all biobased products in your building that have a first-use lifespan of at least 35 years. The list must include the biobased products and their quantities (in kg, m² or m³).

2. Use the calculation tool

Input the products and their quantities into the **Excel calculation tool**. The tool matches the products to publicly available, verified product data (such as Environmental Product Declarations, EPDs).

3. Submit justification

Fill in the **project submission form** for your building. You also add substantiation and evidence to this form, such as a calculation of the Environmental Performance of your building (Dutch: MPG). You can also justify the expected total lifespan of the biobased products used in your building.

4. Request certification

Submit both the filled in calculation tool and the submission form to **Oncra** or a different certifier. They will validate your certification request and make sure your data is verified according to the European regulation on carbon removal certification³.

5. Realise financial value

After positive validation and verification, you sign a contract and receive a certificate for your building. You can use this to substantiate carbon removal claims and realise financial value for your carbon storage.

3. EU Carbon Removal Certification Framework (CRCF)