

Carbon

Soil Carbon Check

Prove and claim carbon capture

Soil is a powerful tool. It stores more than three times the amount of CO₂ compared to the air, forests and other vegetation. Farmers and growers hold the key to this. Tilling the soil less often or sowing green manures are measures they can take to improve the carbon storage. Soil Carbon Check offers insight in how much carbon is stored, in the quality of the soil carbon and how to improve the soil carbon content.

Central in soil health

Soil organic carbon is often considered as the most important element of soil health because of its effect on physical (e.g., soil workability, water holding capacity, root penetrability), chemical (e.g., K-, Ca-, Mg-binding capacity) and biological (e.g., soil biodiversity, soil workability, disease suppression, N and S mineralization) components of soil health.

However, the amount and development of soil carbon is also of major importance in relation with global warming - the more CO₂ (in the form of carbon) is in the soil, the less CO₂ is in the air. Reducing global warming and producing sufficient, healthy food are the big challenges of the 21st century. One of the climate goals of the Paris Climate Agreement (COP21) is therefore to store atmospheric carbon dioxide in the soil up to 4 per 1000 per year.

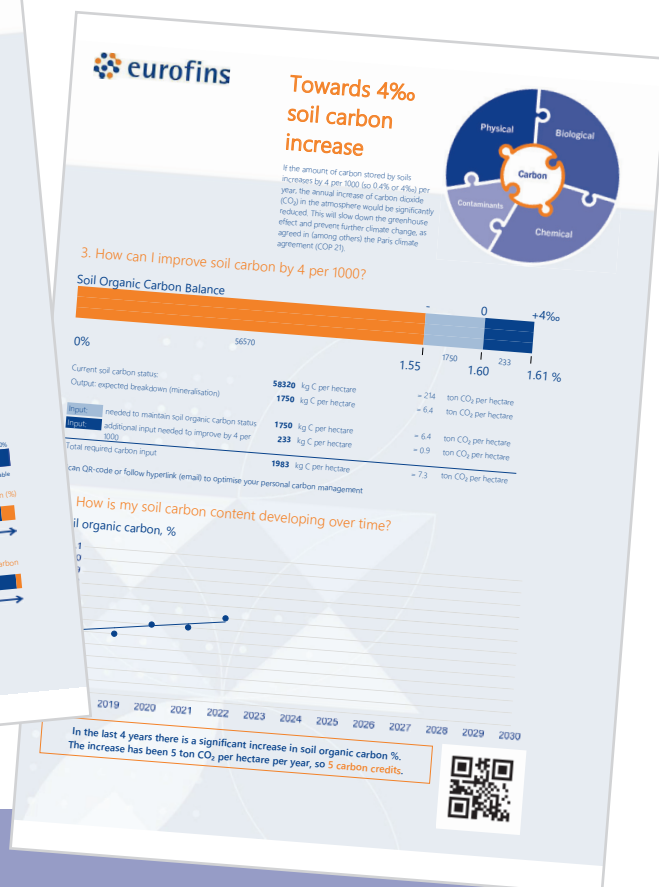
Source of extra income

Society recognizes the potential of soil as a storage vessel for CO₂. Various systems are being developed to reward farmers for their efforts to capture CO₂. For example, farmers can earn carbon credits by offsetting CO₂ emissions from industry.

Eurofins Agro has developed the **Soil Carbon Check** for this purpose - an unique, specific soil test that provides insight into the amount of CO₂ captured in the soil.

The report answers 4 questions:

1. How much carbon is captured in my soil?
2. How stable is my soil carbon?
3. How can I improve soil carbon by 4 per 1000?
4. How is my soil carbon content developing over time?



Capture CO₂ - how to do it?

- 1. Soil Carbon Check**
 - Determine the baseline situation of the soil
- 2. Measures to take**
 - Improve crop rotation.
 - Provide additional organic matter by applying animal manure or compost.
 - Sow a green manure crop and prevent the soil from being fallow.
 - Leave crop residues (roots, stems etc.) on the land as much as possible.
 - Ensure optimal crop growth by fertilization tailored to the crop and the soil. Use soil and crop analyses for this.

No carbon is built up without sufficient

amount of essential nutrients like N, S, P, but also K, Mg, Ca and micro nutrients.

- 3. Carbon storage over time**
 - Carry out the annual Soil Carbon Check and follow the development of carbon storage. The build-up will be slow, but perseverance wins the day!
- 4. Benefit from the evidence**
 - Show the results of Soil Carbon Check to your customers or other partners in the chain.
 - Use the report to profit from carbon credits and exploit a new source of income.

Carbon

The Soil Carbon Check enables all parties in the agri-food chain to claim and prove carbon capture for sustainable food and feed production.

Soil Carbon Check is part of the Soil Health Solutions of Eurofins. Providing insight in optimal soil fertility, including water holding capacity, soil biodiversity, essential nutrients, carbon storage and potential pollution.

