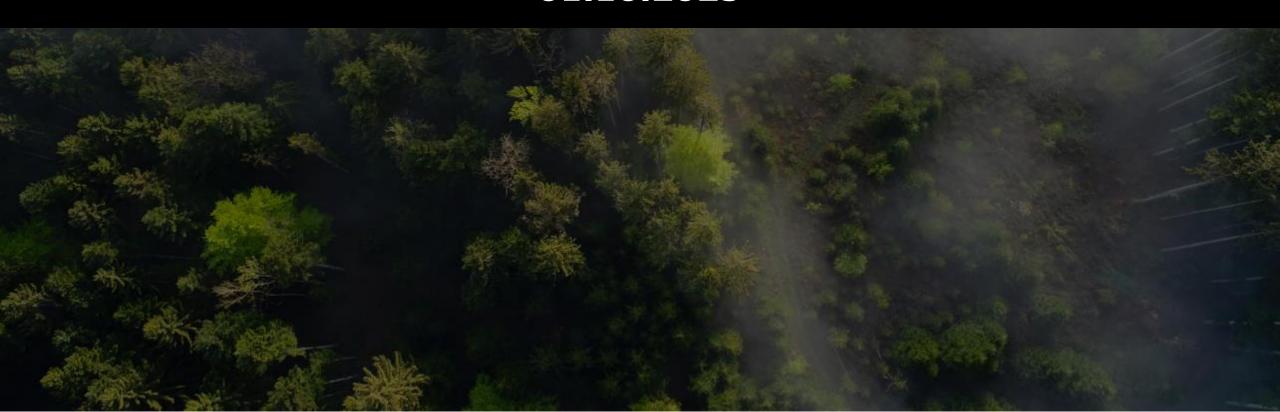


# Webinar: Tracking to the C-Sink

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## **Key updates**

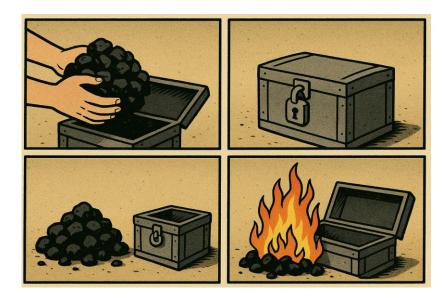
- Valid from October 15<sup>th</sup>, 2025 for Biochar C-sinks.
- Biochar no longer needs to be tracked all the way to the end-point if it has been blended into a C-sink matrix authorized for diffuse C-sinks.
- All matrices in the category "Biological Matrix" are authorized for diffuse C-sinks.
- End-point tracking remains possible at any time and is strongly recommended.

Origin	Matrix	ID	Controlling period in years	Diffuse C-sink authorized	the state of section to be about
	Compost	B-01		✓	
	Solid Manure	B-02		✓	



### **Essential conditions for the issuance of a C-sink**

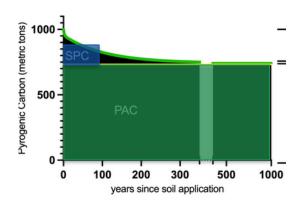
#### Minimal risk of reversal



Safe embedding of the biochar into a matrix

# Scientific accessibility of the matrix

There must be sufficient knowledge about the matrix available to reliably model the degradation of the semi-permanent carbon fraction in biochar.





## **Spatial distribution matters**

When large amounts of biochar are concentrated in a single location, the risks increase:

#### Risk of reversal

Fire or soil erosion could release a substantial portion of the stored carbon back into the atmosphere.

#### Modelling accuracy

Local soil conditions may differ from the assumptions used in persistence models, which could affect reliability.

If biochar is applied in small, well-distributed amounts – as a rule of thumb, one tonne  $CO_2e$  per hectare per year – these risks become negligible, since small deviations average out.



## Let's look at an example

#### **Slurry**

- About 0.5 % biochar
- Soil application of 40 m<sup>3</sup> per hectare per year
- $0.5\% \times 40 \text{ m}^3 = 0.2 \text{ tonnes of biochar}$  per hectare annually
- corresponding to roughly 0.6 t CO<sub>2</sub>e
- 0.6 t CO<sub>2</sub>e < one tonne CO<sub>2</sub>e per hectare per year



For several matrices, diffusivity is inherent in the nature of the matrix. Regardless of the sales units, no tracking is necessary to be considered a diffuse C-sink.



## **Voluntary tracking**

Not mandatory, but strongly encouraged.

- More information for C-sink storytelling.
- Increased legal certainty regarding local regulations or marketplace requirements.
- Improved traceability and long-term transparency.



End year

Start year

Representation in the Global C-Sink Registry

Total: 0.104 t CO.e Retired: 0.006 t CO.e

#### Soon to be released:

- Display at a glance whether a sink has been tracked all the way to its final end-point or only up to product (or matrix) incorporation
  clear and visible quality marker
- Option to update geolocation of a C-sink



diffuse

Locations and Quantities



#### Matrix Positive List for Biochar C-sinks

B – Biological Matrix

Min – Mineral Matrix

Mat – Materials

S – Soil

LF – Landfill

W – Waste Water

G – Geological storage



#### **Biological Matrices**

- For products with a clear application recommendation on the label (e.g., fertilizer or feed additive), this recommendation is sufficient as evidence of diffuse application.
- For intermediate products (B-02, B-03, B-04, B-05), documentation must provide that the matrix will ultimately end up in a soil-based application.
- Note: If the biochar is already embedded in a biological matrix (e.g., feed, fermentation residues) and is applied according to dosage recommendations, it is considered a diffuse sink – even in the case of later soil application

#### **Mineral Matrices**

- Once biochar has been incorporated into the matrix, the carbon sink can be registered as a diffuse carbon sink.
- Important: If the biochar is intended to be used under the Construction C-sink Standard, it must be tracked through to the building.



#### **Materials**

Tracking up to the point of application is sufficient.

#### **Waste Water**

- Tracking up to the point of application (waste water treatment plant)
- additional documentation that the matrix will ultimately end up in a soil-based application (e.g. disposal contract)

#### **Geolocation Requirement:**

Geolocation is mandatory for the following cases:

- Direct soil application of biochar\*,
- Landfilling,
- Geological storage



#### \*Unprocessed biochar

Can also be recognized as incorporated into a matrix if the First C-sink Owner provides annual proof that there is no risk of alternative use other than soil application.

#### This means:

- There is no economic incentive to apply the biochar differently, since its price is significantly higher than the market price for charcoal. For this, detailed knowledge of the group of recipients and their fields of activity is required.
- The delivery note can be combined with this documentation and serves as proof of incorporation into the matrix.



## Thank you for the attention!

Are there questions?

If they occur later, please contact <a href="mailto:service@carbon-standards.com">service@carbon-standards.com</a>

