



**CARBON STANDARDS**  
international

# Next Generation of biochar quality and carbon removal standards

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# WBC

## Next generation of biochar quality standards

### WBC-Agro

Safe use for soils. Extended feedstock positive list incl. Animal byproducts and biosolids. Option for micronutrients (e.g. Zn, Cu).  
 $\Sigma 8$  PAH < 1mg/kg

### WBC-Material

Not for soil application. Only industrial B2B trade authorized. No heavy metal thresholds. All feedstock including mixed waste under specific conditions allowed.  
 $\Sigma 8$  PAH < 4mg/kg

### WBC-Premium

Suitable for all applications. Highest quality made from plant biomass, low condensates, low heavy metals, low H/C ratio.



# WBC

## Next generation of biochar quality standards

### Positive list of permissible biomasses for the production of biochar

World Biochar Certificate, Version 1.11

36\_702EN

#### Feedstock

Origin	Feedstock	ID	WBC Premium	WBC Agro	WBC Material	Special requirements and notes
<b>Agriculture:</b> biomass from agricultural farms, including both residues and biomass deliberately cultivated for biochar production.	Annual energy crops (e.g. corn, rape, sugar beets, sunflowers) grown specifically for energy or material biomass use.	Ag-01	✓	✓	✓	For C-sink certification, the amount of fertilizer used must be declared.
	Perennial energy crops (e.g. miscanthus, marbled silphylia, meadow cuttings) grown specifically for energetic or material biomass use	Ag-02	✓	✓	✓	For C-sink certification, the amount of fertilizer used must be declared.
	Woody biomass from short rotation plantations (SRC)	Ag-03	✓	✓	✓	For C-sink certification, the amount of fertilizer used must be declared.
	Tree, vine and shrub pruning	Ag-04	✓	✓	✓	Particular attention to be paid to heavy metals from crop protection spraying.
	Harvest residues such as straw, cabbage, leaves, stalks, husks	Ag-05	✓	✓	✓	Particular attention to be paid to heavy metals from crop protection spraying.
	Old straw and grain dust	Ag-06	✓	✓	✓	Observe worker's protection in case of heavily dusty biomasses.
	Vegetables	Ag-07		✓	✓	Only residual and waste materials that cannot or can no longer be used as animal feed.



# Biochar Tool

## Next generation of biochar quality standards

V1.9


**BIOCHAR TOOL**

English


 [Name]

[← Back to module overview](#)

Batch list &gt; Batch detail page

 test Active Certified Info

Download certificate

Pause batch

Close batch

Operator	Batch ID	Production unit ID (PU ID)	Standards	Certification Class	Start date	End date	Certification from
Operator GmbH	ba000015	pu000118	EBC	Agro Organic	01-01-2024	31-01-2024	12-01-2024

Batch Info

Sample

Production Period

History

Files

Stock

Communication

Certificate

Basic details

BASIC DETAILS

Batch Feedstock

Batch Production

Batch Output

Batch Emissions

Batch title test	Start of Batch Production 01-01-2024	End of Batch Production 31-01-2024
Production unit Stöcken 01	Standards EBC	Certification Class Agro Organic



Created by [Name]

# **WBC – a standard small and big producers**

## **Next generation of biochar quality standards**

- **The Biochar Tool simplifies your daily business**
- **Jus pick your certified system from the list..**
- **Just manage all production data in it...**
- **Starter-Packages for consulting, audit and certification**



# Global C-Sink

The next generation of carbon removal standards

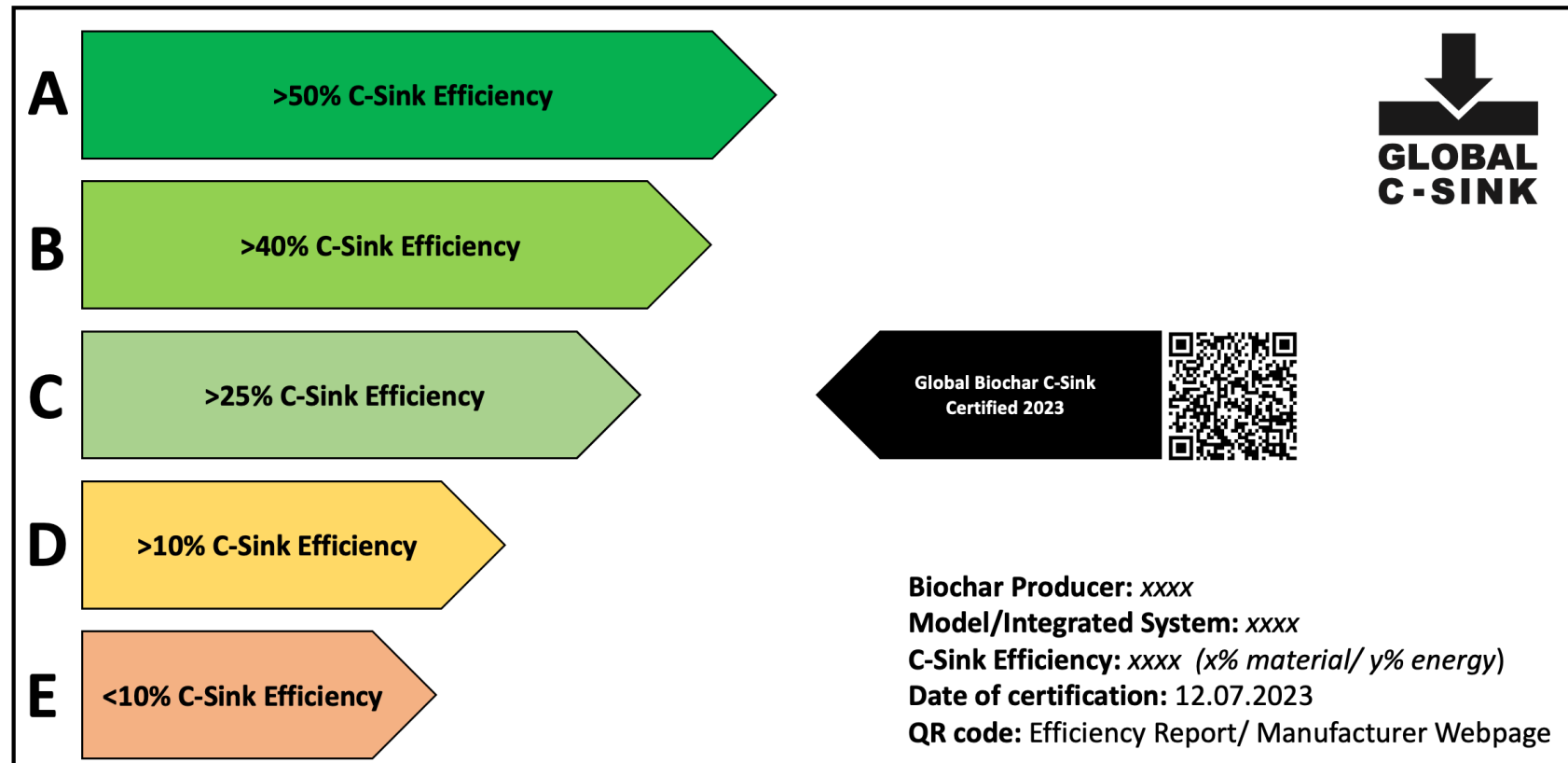


**BIOCHAR  
C-SINK**

# Efficiency label for C-Sink efficiency

## The next generation of carbon removal standards

### Global Biochar C-Sink Efficiency Label



# C-Sink Sports

The next generation of carbon removal standards



  
**BIOCHAR  
C-SINK**



# Flying C-Sinks



# Flying C-Sinks



# Global Artisan-Sink

The next generation of carbon removal standards

  
**ARTISAN  
C-SINK**

# Global Tree-Sink

The next generation of carbon removal standards



# Biochar C-Sink registration – soil application

## The next generation of carbon removal standards



**Biochar** ✔ Realised

Stock ID: 1542

Date of sink establishment: 03-05-2023  
 Issue date: 03-05-2023

Amount CO <sub>2</sub> eq in tonnes	Amount C	Emission backpack	Standard
0.463 t CO <sub>2</sub> e	0.126 t C	Compensated	Global Artisan C-Sink

- Visualisation of **actual C-Sink** value - yearly
- Visualisation of **long-term C-Sinks** and **temporary C-Sinks**
- **Retirements** of C-sinks

Biochar


 **VIEW QR CODE**

### PERSISTENCE CURVE

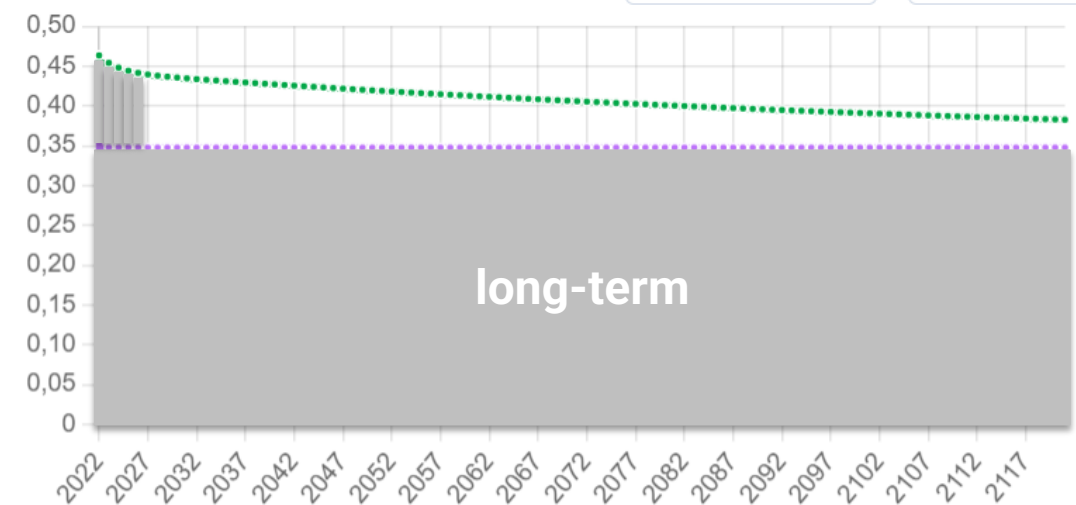
Interval: 2 selected ▼

Start year

End year

Total: **0.463 t CO<sub>2</sub>e** | Retired: **0.013 t CO<sub>2</sub>e**










# Tree C-Sink – registration of a reforestation


## The next generation of carbon removal standards






**Tree** ✔ Realised

Stock ID: 5891

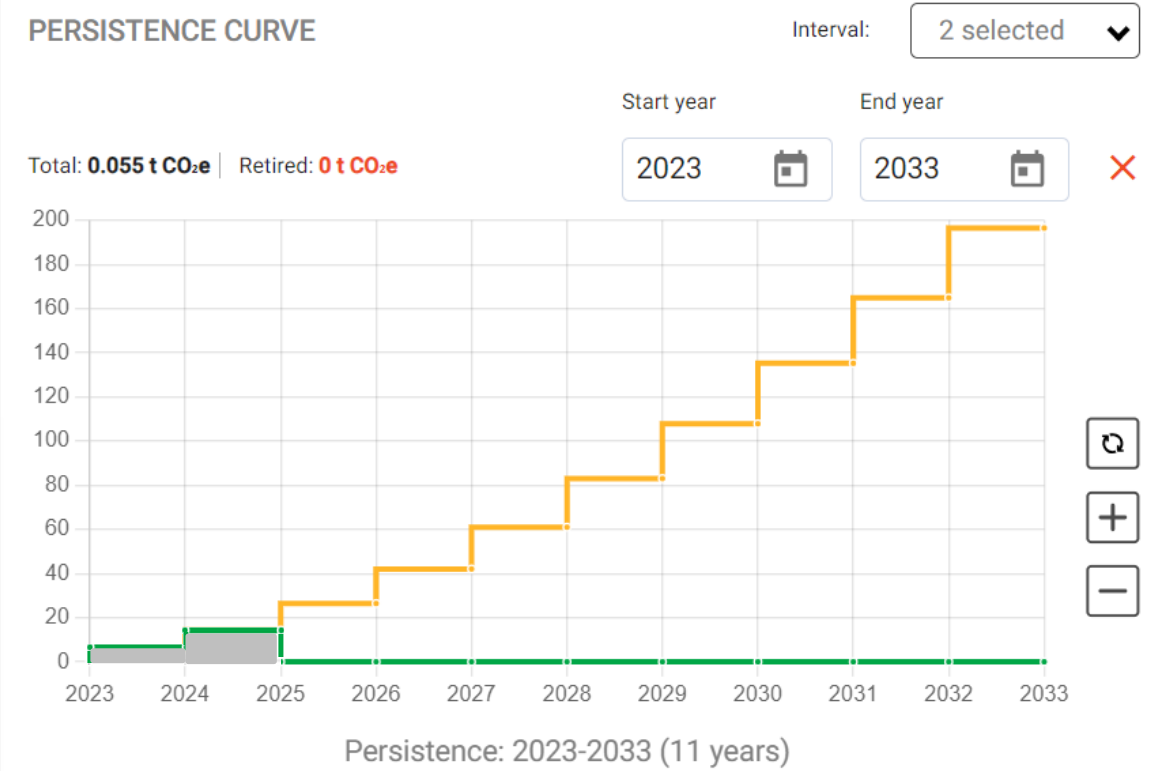
 Date of sink establishment: 04-12-2023

 Issue date: 04-12-2023

Amount CO <sub>2</sub> eq in tonnes	Amount C	Emission backpack	Standard
0.055 t CO <sub>2</sub> e	0.015 t C	0 t CO <sub>2</sub> e	Global Tree C-Sink

- Visualisation of **active C-sink** value - Global Cooling
- Visualisation of **expected C-sink curve** - Security for long-term contracts with buyers
- **Retirements** of C-sinks

Tree



# Global Cooling

The base of the new carbon sink economy



**GLOBAL  
COOLING**

# Planetary Carbon Recycling

## Global Cooling with Temporary C-sinks

- Carbon from biomass and carbon that is recovered and synthesized directly from the atmosphere and oceans will become the future basis of the global economy
- Most future C-sinks will be temporary – Flying C-Sinks as example...





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international

# QUESTIONS?

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