EBC C-Sink – Clarification for compensation of EBC C-Sink potentials

1. EBC C-Sink Potential

Under the EBC C-Sink standard, a factory-gate potential for biochar was established for each batch (with a 365-day production cycle under consistent production settings) at the start of its duration. The information provided by the producer, including the average transport distance of biomass, fossil fuel consumption for biomass preparation, and electricity consumption of the pyrolysis unit, was used to create a Life Cycle Assessment (LCA), which was then checked for plausibility. The resulting emissions were subtracted from the carbon content of the biochar converted into CO2e which equals the compensation of these emissions, and resulted in the value "C-sink potential". Therefore, the EBC C-Sink potential represents the estimated removal potential of the biochar from that batch and was issued by the validation and verification body (VVB) or certification body (CB) at that time. This system allowed for continuous verification and issuance of C-sinks.

Upon closing the batch, actual values for the parameters became available, enabling a verification of the estimated potential. During this verification, it was possible to find that the potential had been overestimated, indicating that more emissions occurred up to the factory gate than anticipated, resulting in insufficient emissions being deducted from the potential.

The VVB/CB issued a finding report, and producers were required to compensate for the discrepancies based on the verified potential and the amount of biochar that was classified as a C-sink. They needed to provide proof of this compensation by the next on-site inspection. The measures stipulated by the CB for the producer were similar to:

*To offset the difference of 0.11 t CO2eq per ton of biochar, this difference must be multiplied by the amount of biochar sold from batch baxxxxxx (ba-xx-xx-x-x), which has become a carbon sink. The resulting number in tons of CO2eq must be compensated through carbon sinks. Appropriate documentation must be provided at the next inspection. Example: Difference of 0.03 t CO2eq per ton of biochar * 100 t of sold biochar = 3 t CO2eq that need to be offset.*

2. Appropriate documentation

By "appropriate documentation," it is meant that the producer must provide evidence of the amount of C-sinks issued for the batch, the corresponding quantity of biochar, and the certification of retirement for the resulting required offset.

As of June 1, 2025, no new EBC C-sinks can be issued. However, C-sinks based on EBC C-Sink potential are still being issued, and up until this date batches remained active with an open verification of the actual numbers.

To address the findings related to the EBC C-Sink potential, producers have a few options: they can either retire unsold EBC C-sinks credits, or utilize CINK1000+ issued in the Global C-Sink Registry. The producer shall consult with former EBC C-Sink Brokers or C-Sink Traders for any availabilities, prices and buying procedures.

In all cases, the reason for retirement should be stated as "Compensation for EBC C-Sink Potential for batch baXXXXXX/ba-xx-xxx-x-x."

2.1. Retirement information required

The reason for the retirement (either in the system of the EBC C-Sink Broker or in the Global C-Sink registry) is predefined by CSI, as well as other settings.

In the graphic below, the settings and inputs are defined.

The year of emission is determined by the year when the batch was closed (either in the EBC Portal or in the Biochar Tool) and the verification of actual emissions by the VVB/CB occured.