## **LUFTHANSA GROUP**

## CO2-REMOVAL WITH BIOCHAR



**Project Partner:** 

SQUAKE.earth GmbH Brunnenstraße 19-21, 10119 Berlin contact@squake.earth www.SQUAKE.earth **Project Country:** Canada

**Certification Standard:** 

Puro.earth

**Project Region:** North America

15,000 t

CO<sub>2</sub>-Impact in Tons per Year:

**Project Type:** Biochar

Dioonal

## **Project Description:**

The project in Ontario, Canada, prevents the release of carbon from decaying trees by converting biomass from landfills into biochar, which sequesters the carbon content of the wood for centuries. To permanently sequester the carbon content, biomass from landfills, such as clean waste wood and forest residues, is heated in a non-pyrolytic process at twice the temperature of conventional pyrolytic processes. This produces biochar with a carbon content of 80-90%, which stores carbon for more than 100 years.

As an environmentally friendly alternative, biochar replaces peat moss and fertilisers as soil amendments. Unlike peat moss, which releases  $CO_2$  when harvested, biochar promotes plant growth and supports microorganisms, reducing reliance on soil-degrading fertilisers. When biochar is incorporated into the soil or into animal feed, it increases crop and dairy yields, thus also counteracting food shortages. The water-storing properties of biochar improve water management by mitigating drought risks.





Climate Action



## Achieved SDGs



Clean Water and Sanitation

13 action



Life on Land