

TRUSTED  
CARBON

Precision Science Based  
Carbon Removal Credits

Dibrova Farms

Rivne, Ukraine





# About Dibrova Farms

Ukrainian hemp farmers persist despite challenges brought by war. Roman Fedorowycz, a Michigan native who grows hemp for fiber and multiplies Ukrainian cultivation seed varieties which his company, Dibrova Farms Ltd., exports to the USA and other markets.

Dibrova Farms have registered with the Hemp Carbon Standard and this innovative program uses a highly accurate quantification methodology that utilizes remote sensing technology to precisely measure CO<sub>2</sub> sequestration in the biomass and roots of the plant. Hemp Carbon Standard has been designed specifically to harness the immense potential of industrial hemp as a natural climate solution.

# Project Owner Details



**URL in Registry :**

<https://registry.trustedcarbon.org/project-detail?id=10>

**ID Number :** 0010

**Name of Registrant :** Roman Federowycz

**Email :** officedibrovafarms@ukr.net

**Contact Person :** Roman Federowycz

**Location :** Rivne, Ukraine

# Project Details

Industrial Hemp is not Cannabis and has no drug related properties, it is a completely different plant.

Industrial hemp does however have a major role to play in our fight against global warming as it is an amazing carbon sink and exceptionally versatile in producing sustainable products like Hempcrete and biodegradable plastic substitutes



**Project type** - Sustainable Agriculture

**Credit Type** - Carbon Removal

**Country** - Ukraine

**Province** - Rivne

**Project status** - Under verification

**Registry** - Trusted Carbon

**Methodology** - Hemp Carbon Standard

**Crediting period** - 01/05/2023 - 23/10/2023

**Expected Volume** - 2425 tCO2e

# Co-Benefits & SDG's

## Co-benefits:

- Regenerative agriculture
- Improved crop yields from soil remediation
- Storage of CO<sub>2</sub> in soil
- Elimination of the use of fossil-based fertilisers.
- Soil decontamination and absorption of pollutants
- Sustainable end-product use
- Creation of green jobs
- Expanding Biodiversity

## Project SDG's

**6** CLEAN WATER AND SANITATION



**8** DECENT WORK AND ECONOMIC GROWTH



**9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



**11** SUSTAINABLE CITIES AND COMMUNITIES



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



**15** LIFE ON LAND



# Economic Acceleration Impact

The income earned by carbon removal providers fuels their expansion, magnifying their impact on the climate and hastening the transition to a net-negative carbon economy. Moreover, local communities, which rely on the economic prosperity of farmers, benefit through increased job opportunities.



# About Trusted Carbon

## Our Purpose:

Trusted Carbon was founded with a singular vision: to elevate the standards of determining CO2 claims tied to carbon credits. In a world facing the pressing challenges of climate change, we understand the imperative nature of ensuring accurate and trustworthy carbon credit attributions.

## Our Solution:

At Trusted Carbon, we've pioneered cutting-edge methodologies that harness the power of advanced technology. This allows us to achieve a heightened level of precision that businesses can trust.

## Strict Validation:

Offering the utmost trust and credibility is paramount to our operations. We have meticulously crafted a strict validation process for adding methodologies to our registry. This ensures that every method we endorse aligns seamlessly with the rigorous standards set by the International Council for the Voluntary Carbon Market (ICVCM).



# Quantification Methodology

## CO2 Quantification Methodology for ISO Verification of the Hemp Carbon Standard

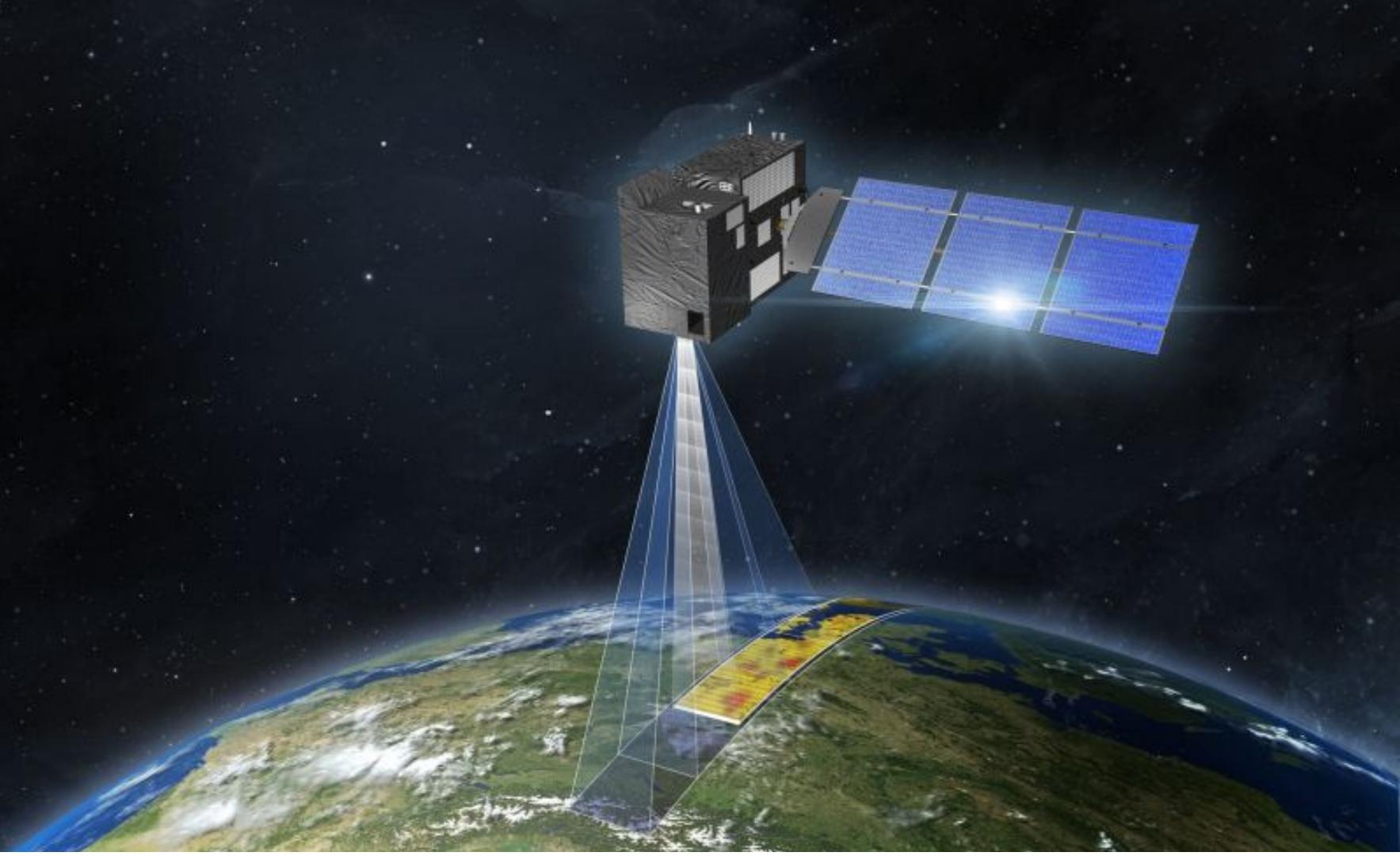
The CO2 quantification methodology for ISO verification of the Hemp Carbon Standard aims to establish a rigorous and transparent process for determining the net sequestration of CO2 during the growth cycle of industrial hemp crops. This methodology utilizes an MRV (Monitoring, Reporting, and Verification) system that combines Eddy Covariance Flux Towers, Sentinel satellite data, and a machine learning algorithm to accurately quantify the CO2 sequestration potential of hemp crops. The methodology ensures consistency, accuracy, and reliability in measuring and reporting carbon sequestration, providing a reliable basis for ISO verification.

### Eddy Covariance Flux Towers & Sentinel Satellite Data:

Continuously record CO2 flux data using the Eddy Covariance Flux Towers throughout the hemp crop growth cycle.

Obtain satellite imagery data from the European Space Agency's Sentinel program, specifically Sentinel-2 for high-resolution optical data and Sentinel-1 for synthetic aperture radar (SAR) data.

Pre-process the satellite data by removing atmospheric effects, geometric corrections, and radiometric calibrations.



# Project Lifecycle





## Validation

Control Union Certifications focuses on sustainable agriculture supply chains for food, feed, forestry, biomass, bioenergy, social compliance, and textiles. With a presence in 80+ countries, we manage global marketplace challenges.