TRUSTED
CARBON

Precision Science Based
Carbon Removal Credits

Tieszen Farms

South Dakota, USA

About Tieszen Farms

Located near Canistota, South Dakota, Tieszen Farms is a family farming operation producing corn, soybeans, alfalfa, orchard grass, and hemp. This fifth-generation farm, with history dating back to the 18th century in Europe, is owned by Eric and Amy Tieszen. The entire Tieszen family is involved in the business, with Eric being responsible for the farm’s vision, day-to-day operations, agronomy, and marketing; Amy handling finances, human resources, and administration; and Eric and Amy’s children, Ashley, Landon, and Katelyn, helping with the farm when not busy with school activities. The family, in addition to multiple key employees, is committed to the farm’s mission of maximizing productivity through trust, creative solutions, and mutually beneficial relationships. They see hemp as a key component to their transition to a more regenerative form of farming.

Project Owner Details

URL in Registry :
https://registry.trustedcarbon.org/project-detail?id=12

ID Number : 0012

Name of Registrant : Eric Tieszen

Email : etieszen@gmail.com

Contact Person : Eric Tieszen

Location : South Dakota, USA

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 - USA

Province - South Dakota

Project status - Under verification

Registry - Trusted Carbon

Methodology - Hemp Carbon Standard

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

Expected Volume - 1350 tCO2e

Co-Benefits & SDG’s

Co-benefits:

- Regenerative agriculture
- Improved crop yields from soil remediation
- Storage of C02 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

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.

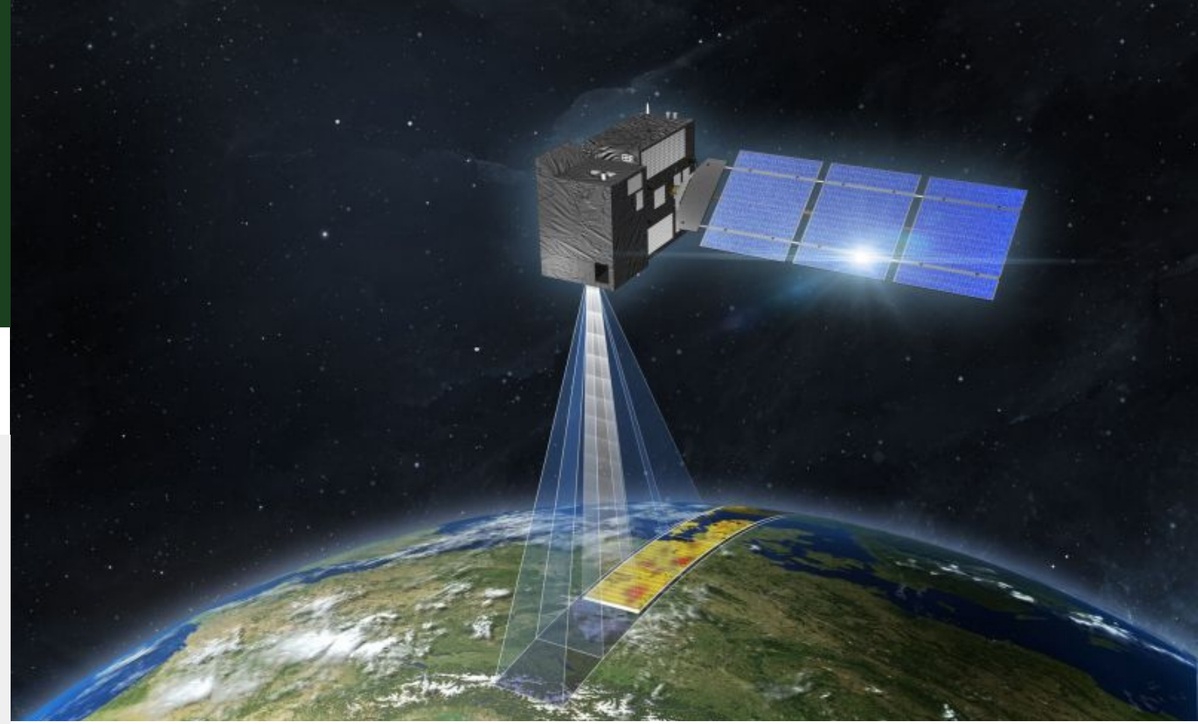
Our Solution:

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:

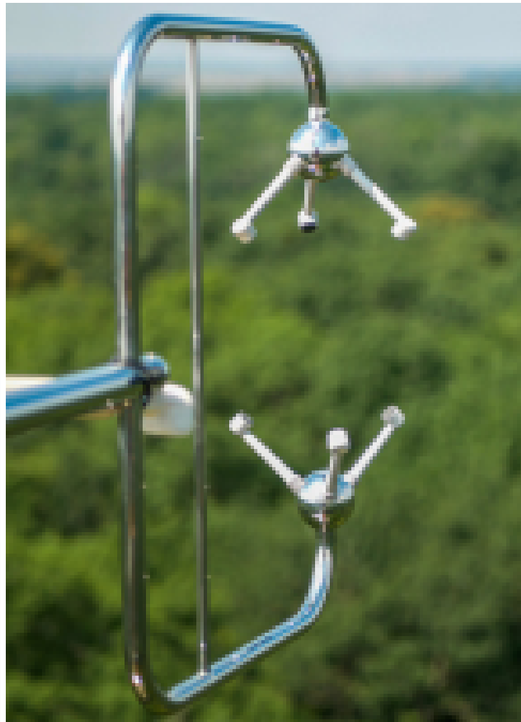
Offering the utmost trust and credibility is paramount to our operations. We have meticulously crafted a strict validation process for adding methodologies to our registry. This ensures that every method we endorse aligns seamlessly with the rigorous standards set by the International Council for the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