

TRUSTED
CARBON

Precision Science Based
Carbon Removal Credits

Siksika Irrigation Lands Corp

Alberta, Canada





About Siksika Irrigation Lands Corp

Siksika Group of Companies are proud partners with the Siksika Nation in developing sustainable business opportunities that give room for people and their passions to grow. Our commitment to long-term prosperity, environmental resource protection, and fiscal independence guide every decision that points the people of this land towards a brighter future.

Farming and ranching have been a legacy industry for many families on the Siksika Nation since the 1920's. Today, the Siksika Irrigation Land Corporation (SILC) and Siksika Farms companies continue to operate by managing over 5,000 irrigated acres and 3,700 dryland acres on the Siksika Nation. In recent years, Siksika Farms has started to grow industrial hemp for its many recognized sustainability benefits.

Project Owner Details



URL in Registry :

<https://registry.trustedcarbon.org/project-detail?id=4>

ID Number : 0004

Name of Registrant : Shane Brekaer

Email : shaneb@siksikaresource.com

Contact Person : Shane Brekaer

Location : Canada

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 - Canada

Province - Alberta

Project status - Under verification

Registry - Trusted Carbon

Methodology - Hemp Carbon Standard

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

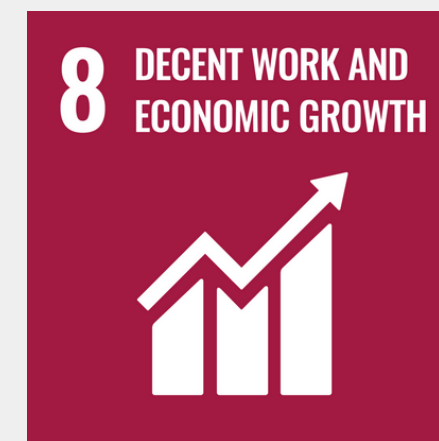
Expected Volume - 800 tCO₂e

Co-Benefits & SDG's

Co-benefits:

- Regenerative agriculture
- Improved crop yields from soil remediation
- Storage of CO₂ 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

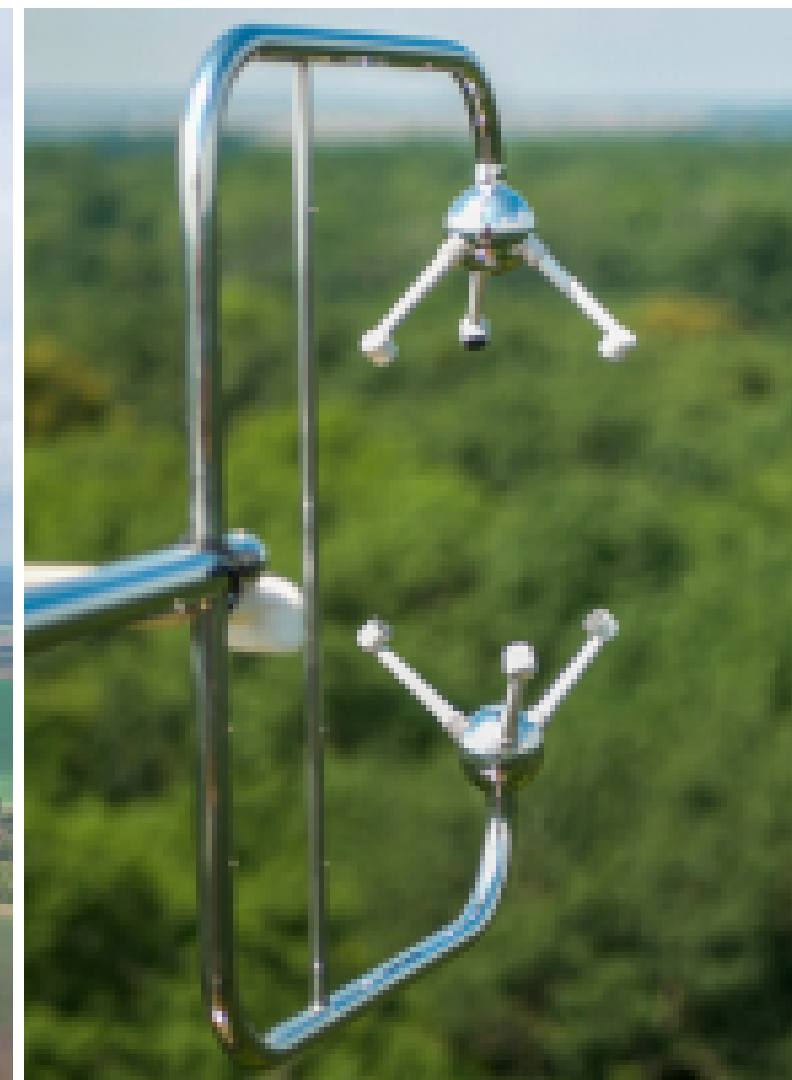
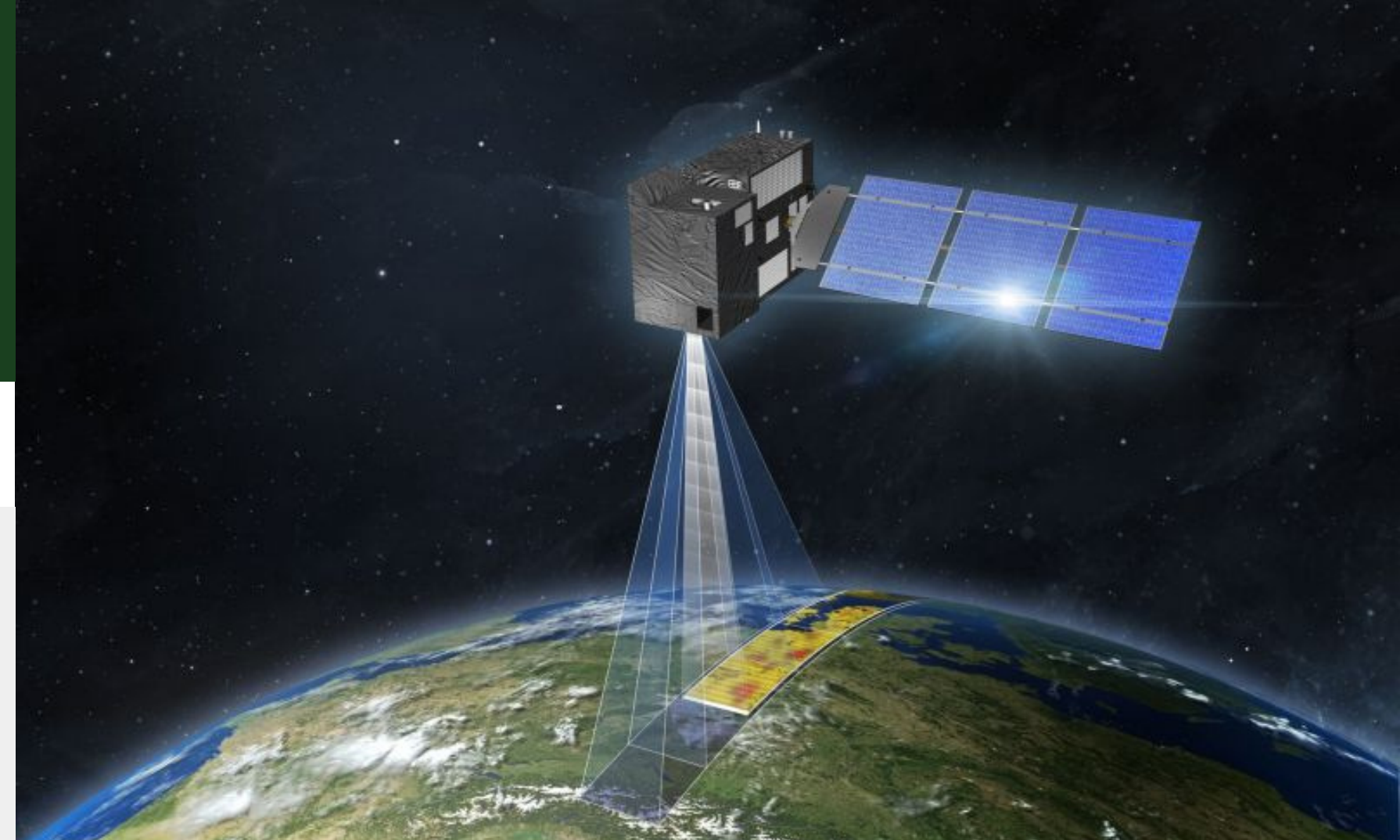
The CO2 quantification methodology for ISO verification of the Hemp Carbon Standard aims to establish a rigorous and transparent process for determining the net sequestration of CO2 during the growth cycle of industrial hemp crops. This methodology utilizes an MRV (Monitoring, Reporting, and Verification) 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.