Agrivoltaics

Innovative Designs that integrate Farming and Power Generation



Tannas Conservation Services Ltd.



ESRS Passive Solar Greenhouse





Forage Production Research being completed by TCS

BIOENGINEERING DESIGN

Regulatory Approvals – Complete Agricultural Impact Assessments and farm plans for AUC submission

Historical Assessments – We work with farmers and baseline information to assess the historical farm profitability and types of crops that have been grown on farms in the past.

Design – we create unique agrivoltaic designs. Our team has extensive farming experience as well as academic research experience and can integrate all types of farming practices into our agrivoltaic designs. We have designed grazing systems for sheep, cropping systems for cereal grains, oil seeds, annual forages, hay production and silage production. Our team has also designed berry, vegetable and greenhouse production.

On Farm Support – Our team has extensive experience working with farmers and can provide on going professional support and sign off on official monitoring requirements over the life of a project.

Construction and Reclamation Plans – Our team has built construction and reclamation plans for solar and wind projects and can provide all technical support including field and reporting to complete these required reports. With a full reclamation group at TCS we have a highly qualified team to support our clients needs.

Wetland Assessments – At TCS our wetland group overlaps our Agrivoltaics group allowing us to integrate the same professionals to complete field and office reporting. This provides efficiency to our clients



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Feature Projects

Alberta Utilities Commission Report

TCS personnel produced an expert report in 2023 for the Alberta Utilities Commission (AUC) on the subject of Agrivoltaics. Our team provided expert opinion on the potential to integrate farming practices into renewable projects and assessed the impact of renewable power generation could potentially have on agriculture in Alberta.

Dolcy Project

Working with Westbridge Energy, TCS provided a complete agrivoltaic plan for the Dolcy project. This project was partially on class 2 land and included a grazing management plan as well as hay production potential across the project. Our team was ale to show that grazing and hay production could be integrated into a profitable farming operation on a large scale solar farm.

PACE Projects

Working with PACE our team has created multiple Agrivolaic plans that have integrated annual crop production, hay production, grazing, and horticultural production such as berries. Over the past 2 years we have worked on multiple projects that have been approved with PACE across Alberta.

Experience

- We are the winners of the 2014 Emerald Awards and finalists for the 2015 ASTECH Awards with our restoration projects.
- TCS has over 40 years of experience working within the agriculture in Alberta including highly respected rangeland management professionals working across western Canada.
- Since 2023 when Alberta started requiring Agrivoltaic plans we have completed over 20 plans and participated in numerous hearings.
- Our team has extensive experience in grazing management, annual crop production, green house production and horticulture. We have a team of experts capable of addressing each type of agricultural production that our clients may want to engage with.
- Our team does not just make plans but has built innovative greenhouse systems such as the one below which utilizes solar hot water collection to heat the greenhouse.



The Tannas Conservation Services Advantage

Based throughout Alberta, Tannas Conservation Services has extensive experience working across western Canada. TCS has worked on hundreds of projects where we have surveyed over 2 million hectares of land in western Canada, from the Arctic Ocean to the US border. We have a highly trained and experienced team composed of technical experts in both the field and office. This ensures we provide each client with the best quality product.



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