BIO-ENERGY PROFILE



Canada's clean fuels sector offers a key opportunity to meet greenhouse gas reduction targets and transition to a low-carbon economy, while fostering investment, new economic growth, and supporting clean tech jobs across the country. Canada's clean liquid fuel sector aims to increase production capacity from 3 billion litres per year to 8.5 billion litres by 2030. The Alberta HUB region has the potential of supplying up to150 million litres/year, according to the Canadian Council for Sustainable Aviation Fuels.

Biomass

According to the Canada Energy Regulator and Statistics Canada, if primary energy contained within all biomass feedstocks is converted to end-use energy, that would be enough energy, including heating and electricity, for over 7 million households in Canada.

The agriculture-rich lands of the Alberta HUB region provide an excellent source of biomass feedstock such as wheat straw. This does not include the organic biomass generated by the livestock or the forestry sectors also located in the region.

There are over 3.2 million cultivated acres within the region that can be tapped into for biomass generation.

Bio-Economy Development Opportunity Zone Rating "A"

The Canadian Council for Sustainable Aviation Fuels (C-SAF), Alberta HUB, Town of Vegreville, Ecostrat and the BDO Zone Initiative are pleased to highlight an investment grade BDO Zone "A" rating for Vegreville. (October 1, 2024)

This rating for 455,000 bone dry tons per year of wheat straw extends a 120k-km (75 miles) from the center point of Vegreville. This covers the majority of the Alberta HUB region with the remaining portion of the region falling in the competition zone.

This BDO Zone is one of the highest wheat-yielding areas in the country with an average of 50.7 bushels/acre which is around 8% higher than the provincial average.

This "A" rating denotes a high prospective viability of feedstock supply and infrastructure and low expectations of default risk in the zone.

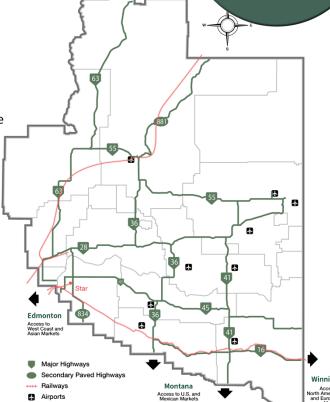
150 million litres

The potential litres/year of biomass-derived "clean liquid fuel" supplied by the Alberta HUB region.

3.2 million cultivated acres within the region

ALBERTA

An abundance of wheat, barley, and canola crop residue for biomass generation.



ALBERTA HUB REGION INVESTMENT OPPORTUNITIES

Alberta HUB Research and Development

Applied Research and business support is essential for your investment.

The Alberta HUB region is home to **InnoTech Alberta (Alberta Innovates)**, an R&D facility that supports innovation in the bio-economy sectors including clean tech, agri-food and advanced materials. Innotech has 600 acres for plot research for cereal crops, hemp, flax and other specialty crops.

Lakeland College welcomes industry partnerships for applied research opportunities through its Crop Research and Bioenergy research facility and the Renewable Energy Learning Centre.

Portage College supports sectors such as energy and agriculture with applied research, ensuring a skilled workforce and fostering innovation.

Bioeconomy Development Opportunity Zone 'A' Rating

This rating confirms:

- the capacity of strong support for new biobased plant operations;
- a long history of wheat production supported by experienced growers;
- limited competition for wheat straw; and
- wheat growers' support and willingness to participate.

BDO Zone & Competitive Zone

The BDO Zone is delineated by a 120-km drive distance from Vegreville where the wheat straw is assessed. The Competition zone refers to the geographic area from which the existing feedstock consumers can access wheat straw within a 240-km driving distance.

THE ALBERTA HUB INVESTMENT ADVANTAGE

Access to Markets

- Highways 41 and 36 are main North/South corridors connecting to U.S. and Mexican markets.
- Highway 16 connects the region east-west coast to strategic ports accessing Asian markets.
- CN and CPKC Rail both have secondary lines with direct rail access points in seven counties.
- · Ten regional airports.

Land

- The region covers 55,873 sq. km. over ten counties.
- Highly accessible & competitively priced commercial & industrial land & buildings are available.

Demographics

 A regional population of approx. 160,000 providing labour access and immediate market access to the Edmonton market with a population of well over 1.4 million (2021).

Quality of Life

- · Numerous active lifestyle choices.
- Excellent healthcare and educational systems.
- Several recreational activities for families and individuals.

Competitiveness

 Benefit from partnerships with our First Nations and Metis Settlements, where numerous investments opportunities thrive

Education

 Skilled labour is available regionally through post-secondary education at two Colleges: Lakeland and Portage as well as the University at Blue Quills. Close to 41,000 have a post-secondary certificate, diploma or degree in the region.



Northeast Alberta Information HUB Ltd. www.albertahub.com

Alberta HUB strives to provide current/accurate information but it is subject to change. Contact Alberta HUB for the latest information. Published: November 22, 2024

