Azure: The Future of Flying

Azure Sustainable Fuels is leading the clean energy transition by developing and building renewable fuels facilities to reduce CO_2 emissions derived from transportation.

We are developing facilities that will produce significant amounts of renewable fuels, including Sustainable Aviation Fuel ('SAF') to meet mandates related to reducing greenhouse gases produced by the transportation and aviation industry.

We are a privately held Canadian corporation which is solely focused on the development of renewable fuels, including SAF, to help achieve climate reduction goals.

The team's history in renewable fuels provides the knowledge base and relationships required to successfully develop the project.

Project Need

Azure identified the need for a domestic source of renewable fuels, including SAF to meet domestic and international CO_2 reduction targets (Net Zero 2050).

SAF allows aviation fuel users to emit up to ~80% less emissions compared to conventional fossil jet fuel.

~65% of the CO_2 reduction targets for the aviation sector are expected to come from the use of SAF. For Canada's aviation sector to maintain its competitiveness in the future, the adoption of SAF is essential.

What is Sustainable Aviation Fuel (SAF)?

- Sustainable Aviation Fuel (SAF) is a low-carbon, next generation aviation fuel, made from sustainably sourced, renewable feedstocks, including vegetable oils, animal fats and non-food crops.
  - **"Sustainable"** meaning, the feedstock can be continually and repeatedly resourced in a manner consistent with economic, social and environmental aims.
  - **"Low-Carbon"** meaning, when the SAF is combusted, there is a smaller, net release of carbon dioxide (CO_2) into the atmosphere.
- Azure's Facility will utilize a proven technology process that adds hydrogen to vegetable oil feedstocks to produce SAF. (American Society for Testing and Materials (ASTM) – Hydro-processed esters and fatty acids (HEFA)).
  - Only proven, commercial process to produce SAF.
- SAF has less greenhouse gas emissions than traditional, petroleum-based jet fuel due to the following:
  - Lower carbon footprint as agricultural crops absorb CO_2 from the atmosphere through growth.
  - The finished fuel produced contains fewer impurities and when combusted produces less sulfur dioxide and particulate emissions

Project Overview:

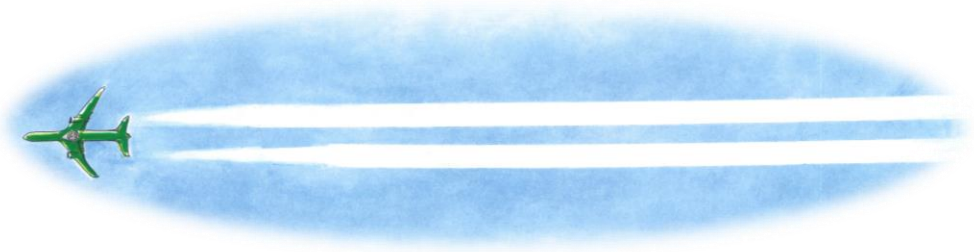
- First of its kind in Canada – Azure's production facility will produce approximately 570 million litres per year of renewable fuels, primarily SAF and with the ability to also produce varying volumes of Renewable Diesel and Renewable Naphtha to meet evolving market dynamics.
- Secure Domestic Market for Canadian Agricultural products – The Facility will process Canadian agricultural products such as canola, soybean oils, animal fats and used cooking oils.
- Emissions Reduction - The renewable fuels produced provide for the reduction of approximately 1.3 million tonnes per year of CO_2, which equates to displacing the annual emissions from ~300,000 cars each year.
- Significant Jobs - The Processing Facility requires approximately 1,500 construction jobs and 125 full-time positions during operations.
- Indigenous Reconciliation - Azure has developed an Indigenous Relations and Reconciliation Policy to outline its commitment to building meaningful, long-term, mutually beneficial relationships with Indigenous communities based on respect and understanding.
- Environmental Stewardship – As a greenfield facility, the Processing Facility will benefit from the latest technologies to ensure environmental standards are achieved.

Ontario Site Benefits

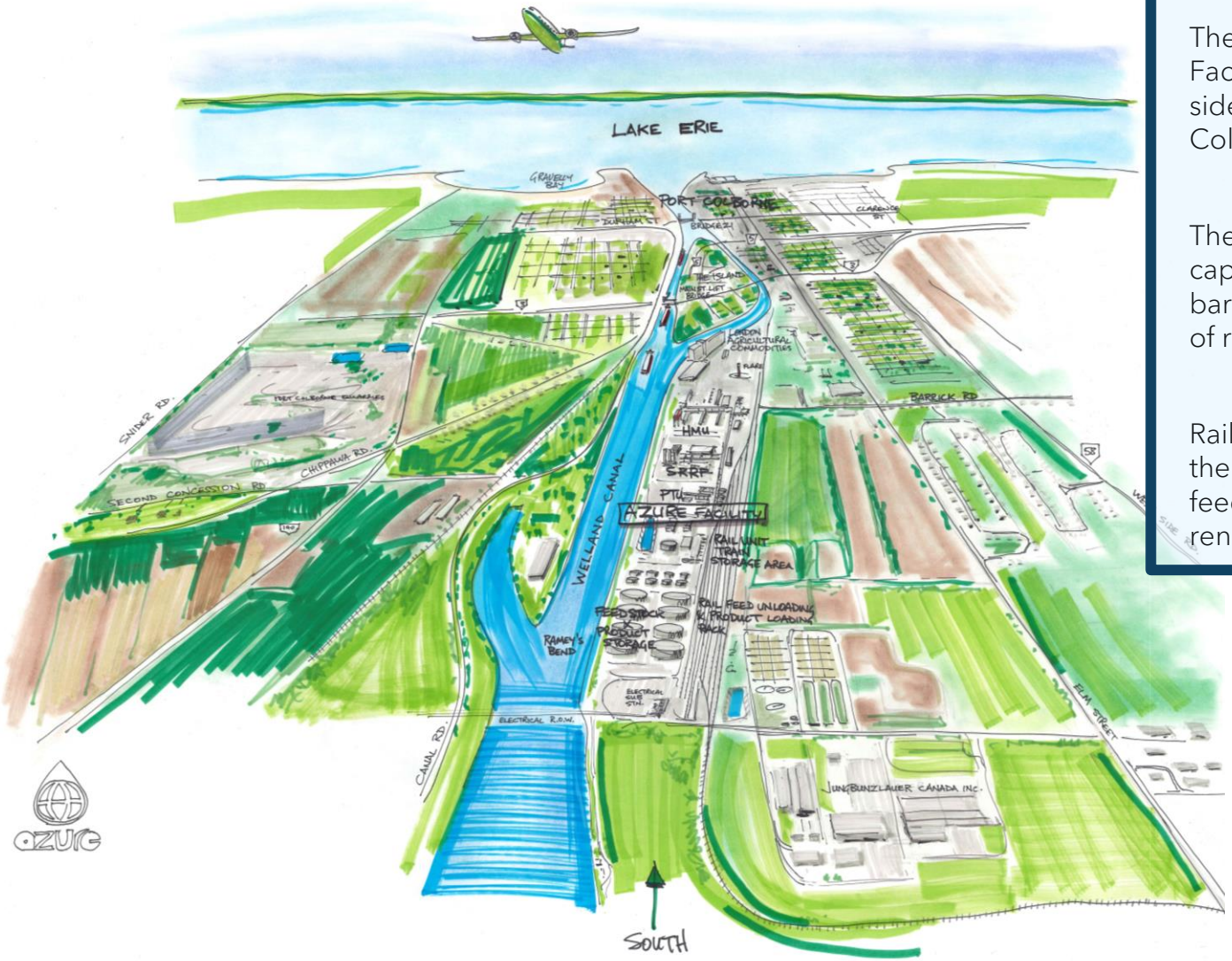
Proximity to Feedstock and End Market: Access to the St. Lawrence Seaway and Great Lakes unlocks new avenues for international trade for both feedstock and off-take delivery, along with leveraging off established pipeline, storage and blending infrastructure
Access to Rail: Multiple egress options with offsetting short line, seven days a week rail service and wharf access for feedstock delivery and fuel off-take.
Waterborne Access: With low water levels challenging the Mississippi River, increased Soy trade through the Great Lakes from the US. Being located on the Welland Canal opens large end markets across the Eastern USA with emerging SAF markets in the state of Illinois, Minnesota and New Mexico.
Well-Educated, Highly Skilled Workforce: Ontario, and the Niagara region provide a plethora of qualified candidates for both construction and operations.
Government Alignment: Provincial 'Made-in-Ontario' Plan establishes cleaner transportation fuels regulation with increased requirements for renewable content in transportation fuels. Transport Canada releases Canada's Aviation Action Plan in Q3 2022, along with the Ministry of Innovation, Science and Industry announce $350mm funding to help accelerate green transition of the aviation industry in Canada.
Local Demand: proximity to Pearson Airport, one of North America's busiest airports, and Canada's largest fuel user, helps streamline fuel distribution, ensuring a reliable and sustainable fuel source for the aviation industry.
Supporting Opportunities: Several announcements lately in the Niagara Region relating to clean fuels that could provide inputs to Azure's proposed Facility and further reduce carbon intensity and emissions.
Clean Power: Access to clean power further reduces project's carbon intensity.

Project Benefits

- Direct Employment
  - *Construction*: Azure will require ~1,500 skilled laborers and trades people for construction.
  - *Operations:* Azure will require ~125 full-time positions during operations. There will be a significant number of high-salaried jobs
- Indirect Employment
  - Agriculture: Azure plans to utilize Canada's agricultural resources for feedstock which will create direct demand of seed oils and incremental crushing capacity, and also the potential to support development of non-food grade cover crops that could be rotated for soil management and sold for economic benefit.
  - Logistics: The Facility will require meaningful rail volumes, as well as the potential to utilize the Welland Canal which will support incremental jobs within the major railways and shipping companies.
- Positive impact on Ontario economy
  - Azure will be able to create significant jobs and ancillary business opportunities related with constructing and operating the facility.



Location: Port Colborne, Ontario

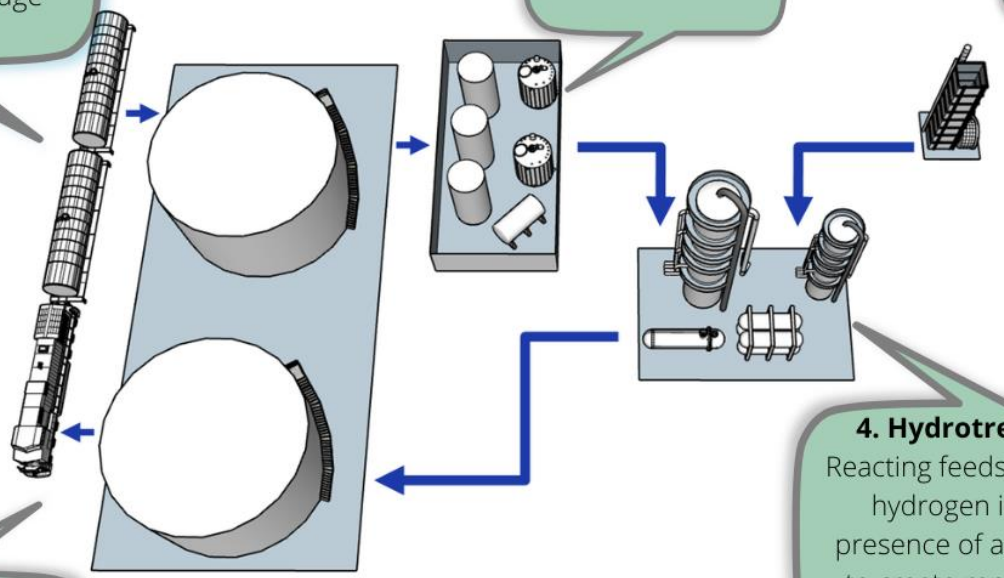


The Renewable Fuels Production Facility will be located on the west side of the Welland Canal in Port Colborne, Ontario off Barrick Road.

The Production Facility will be capable of producing 10,000 barrels or 570 million litres per day of renewable fuels.

Rail and the Welland Canal will be the primary mode of importing feedstocks and exporting renewable fuel.

Facility Overview



1.Import and Storage
Feedstock delivered by rail or pipeline and pumped to storage tanks.

2. Pre-Treatment
Feedstock treated for impurities

3. Hydrogen Manufacturing

Utilities
power, compressed air, water treatment, hot oil for distributing heat, power distribution, and telecommunications located on site to support the operations and maintenance of the production facility

4. Hydrotreating
Reacting feedstock and hydrogen in the presence of a catalyst to create renewable fuels

5. Export and Storage
Renewable Fuels pumped to storage tanks to await rail export

Engagement efforts to date:

May 2024: Initial meetings with key identified interested parties to introduce the project and gather feedback.

June 2024: Initial engagement packages sent to all identified interested parties

June – November 2024: Initial feedback received from identified interested parties

Ongoing: Responding to questions and concerns

Identified interested parties include:

- Indigenous groups
- Landowners
- Government agencies
- Local businesses
- Industry and industry groups

Through initial engagement, feedback has focused on:

- Job opportunities
- Environmental impacts
- Safety
- Loss of Use

Permitting

Environmental Effects Evaluation (Federal)

- Assessment of Environmental Effects, under Section 82 of the Impact Assessment Act
- Transport Canada will be the lead reviewer
- Environmental effects studied include Air Emissions, Species at Risk and Archaeology

Ministry of Environment, Conservation and Parks (Provincial)

- Environment Compliance Approvals for Air, Noise and Industrial sewage/wastewater

Risk Assessment (SLSMC)

- Risk Assessment for each stage of the project are required

Other Permits

- Waste Generator Registration*
- Storage Tank Registration*
- Other*

*To be completed as project gets further developed

Environmental Studies -

Between Q2 2023 and Q4 2024, Azure completed the following environmental studies to support provincial and federal applications:

- Terrestrial Field studies, including Species at Risk (SAR) and aquatic studies. During these studies, Bats and Spoon Leaf Moss were identified as Species at Risk. Azure is beginning discussions with Niagara Peninsula Conservation Authority and Ministry of Environment Climate and Parks to determine appropriate mitigation measures required for these species.
- Stage I Archaeology determined that there are no previously registered archaeological sites present on the property and therefore no further assessment is required.
- Environmental Site Assessments I and II. Results identified existing contamination from construction of the Welland Canal. This will be addressed prior to construction.
- Air Emissions and Noise and Vibration studies. These studies determined that baseline emissions from the Facility are not expected to exceed Ontario Air Quality Criteria. Facility noise and vibration levels are not expected to contribute significantly to the existing conditions.

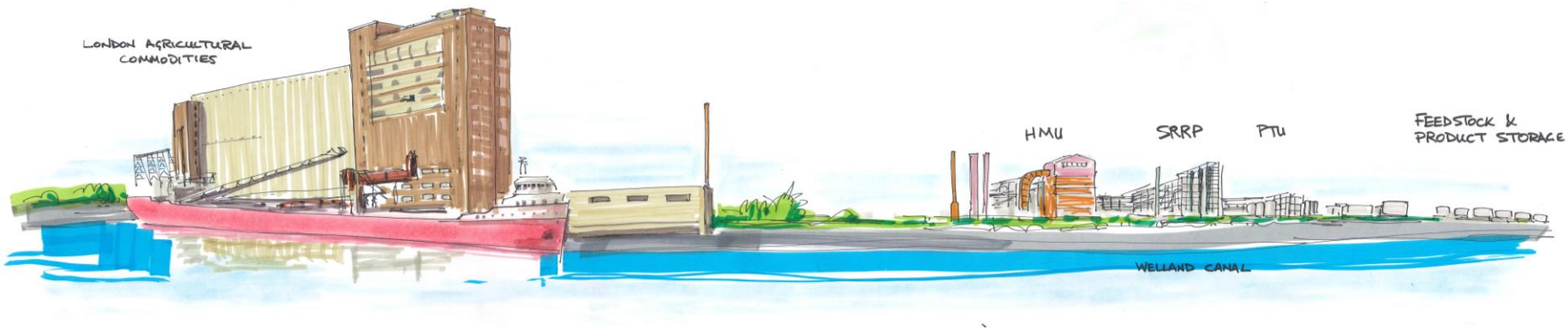
Risk Assessment

The St. Lawrence Seaway Management Corporation (SLSMC) requires a Risk Assessment prior to development on their land. The purpose is to assess risks to:

1. Safety of People
2. Navigation of Ships
3. Maintenance of Canal
4. Environment
5. Public Access and Agreement of Third Parties

Three Risk Assessments are required for the project: Pre-Construction, Construction and Decommissioning.

Azure and SLSMC are currently completing the Pre-Construction Risk Assessment.



Next Steps

- Environmental Effects Evaluation Project Description submission to Transport Canada.
- Front End Engineering and Design (FEED) expected to be completed by end of the year 2024. The FEED will provide further project definition to allow Azure to make a Final Investment Decision (FID) to proceed with detailed engineering and construction of the project.
- In conjunction with FEED, Azure will continue to advance formal commercial arrangements for the production facility, along with project financing.
- In the event of a positive FID, the project is expected to begin detailed engineering in 2026 and construction in 2027 with a start-up date in 2029.

Task Name	Duration	Start	Finish
Regulatory Permitting and Approval	365d	12/18/24	05/12/26
Front End Engineering & Design	411d	06/06/23	12/31/24
Final Investment Decision	0	09/14/26	09/14/26
Positive Final Investment Decision	849d	09/15/26	12/17/29
Detailed Engineering	450d	09/15/26	06/05/28
Construction	600d	06/14/27	09/28/29
Commissioning	125d	06/25/29	12/14/29
Start-up	0	12/17/29	12/17/29