

A photograph of a long train of silver oil tankers on tracks, receding into the distance under a clear sky. The train is positioned on the left side of the frame, and the tracks lead towards the horizon.

WESTERN CANADA OIL MARKET DIVERSIFICATION

APRIL 2025

Western Canada Oil Market Diversification

- Western Canadian provinces face immediate challenges in diversifying markets for its oil production
- Growing production in Western Canada requires access to new markets
- The USA market, recipient of 87% of Western Canada production today, is challenged by:
 - Regulatory and political hurdles in building infrastructure
 - Evolving supply and demand situation
 - More recently, tariffs
- An opportunity exists today for Canada to focus on growing an open and diversified market
- **Immediate and cost-effective expansion of overseas exports can be achieved through established supply chains, including transporting oil to the coast by rail**

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- Altex Energy Ltd. ("Altex") is a private company incorporated in Canada and headquartered in Calgary, Alberta
 - Altex has been a major western Canadian crude by rail provider since 2010 and has a proven record of assisting in the diversification of oil markets for its customers – including (with partners) moving Western Canada oil offshore from terminals on Pacific Ocean (USA and Cdn terminals), Atlantic Ocean (USA and Cdn terminals) and US Gulf Coast



Western Canada Oil Market Challenges

1. Maximizing Price for Produced Oil

- Moving produced oil (particularly undiluted heavy oil bitumen without addition of condensate) by rail can give crude oil producers a higher price for their product
- Also increases royalties and taxes for governments
- And is safer, more environmentally-friendly

2. Takeaway Capacity Constraints

- Historic pipeline infrastructure was built to move crude oil to markets in US Midwest & Ontario
- Challenges accessing new markets over the last decade in face of growing production and difficulty building new infrastructure (compounded by challenges with pipeline failures)

3. USA Demand for Canadian Oil

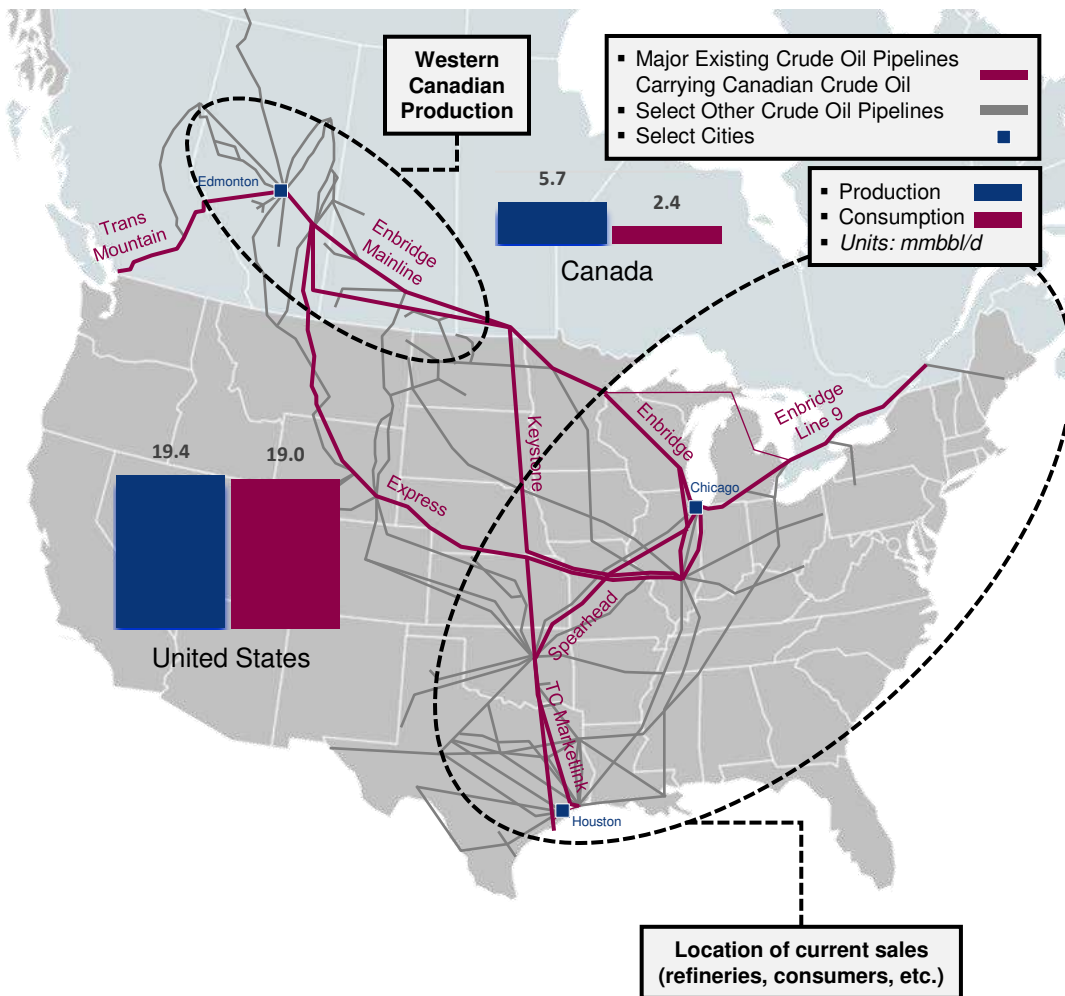
- With an increase in US production, demand for Canadian oil in those markets decreased and significant Canadian oil is now exported from North America via US Gulf Coast

4. Potential USA Tariffs

- Threatened tariffs would be highly detrimental to profitability of Western Canada production given the vast majority of oil is exported to the USA

Historic Western Canada Egress Problems

- Historic pipeline infrastructure was built to move crude oil to markets in US Midwest & Ontario (and volume for International/Quebec goes through USA)
- With an increase in US production, demand for Canadian oil in those markets decreased and significant oil is now exported to the USGC
- Canadian pipeline infrastructure developments have historically struggled to keep up with growing production in Western Canada, leading to pipeline apportionment and large price discounts in 2013 and 2019
- During periods of Canadian oil price discounts / high price differentials (low price for oil purchased in western Canada vs. a high price for oil in destination markets), demand for rail surged, and crude by rail operators like Altex help producers get their oil to market for the highest price



Source: CAPP, Energy Institute 2024

Oil Production vs. Consumption Challenges

1. Canada Production/Consumption

- Oil production growth in Western Canada has exceeded growth in Canadian consumption
- Increasingly, Western Canada production needs to be exported

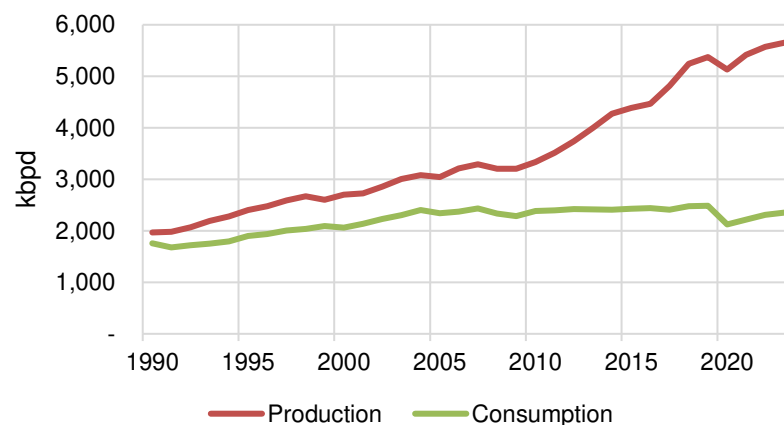
2. USA Production/Consumption

- Significant growth in USA oil production and stagnant consumption means USA has recently become a net exporting nation
- The USA doesn't need Canadian oil to the same extent as it did in the past

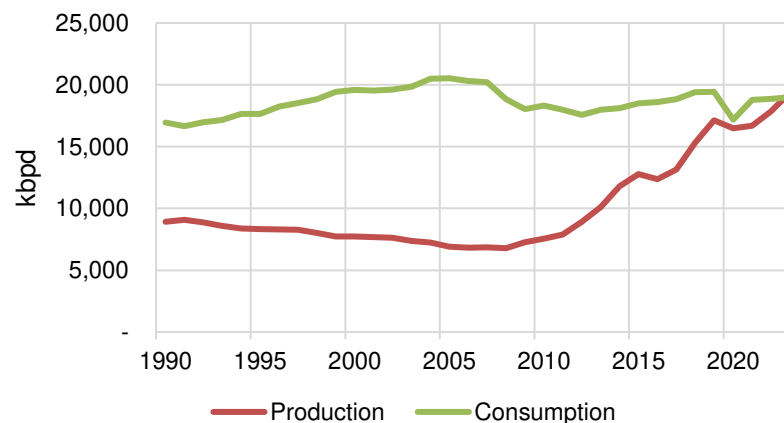
3. Infrastructure

- Essentially all movements of oil out of Western Canada go to the USA (including oil which eventually gets to Ontario or Quebec)
- The USA has built significant export facilities (effectively re-exporting "Canadian" oil)
- Threatened tariffs would be highly detrimental to profitability of production in Western Canada given the vast majority is exported to the USA

Canada Oil Production/Consumption



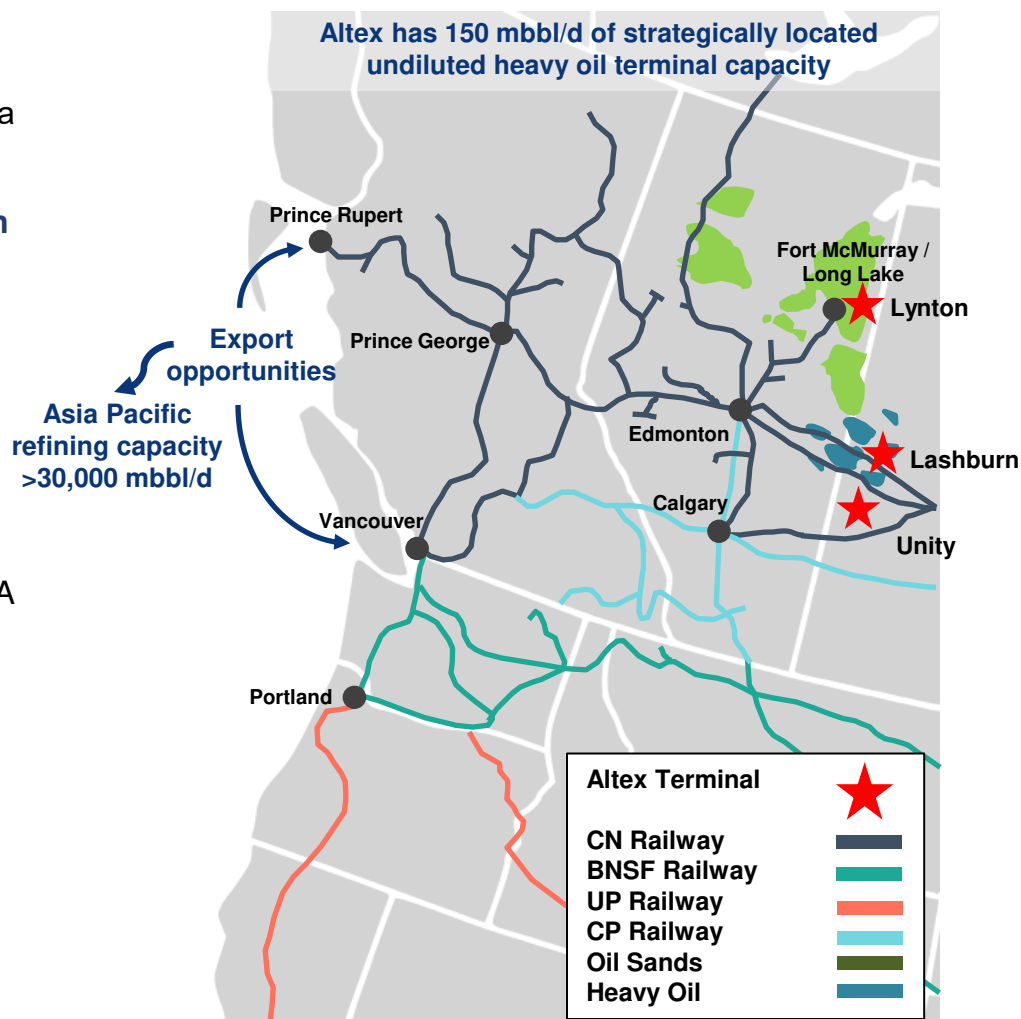
USA Oil Production/Consumption



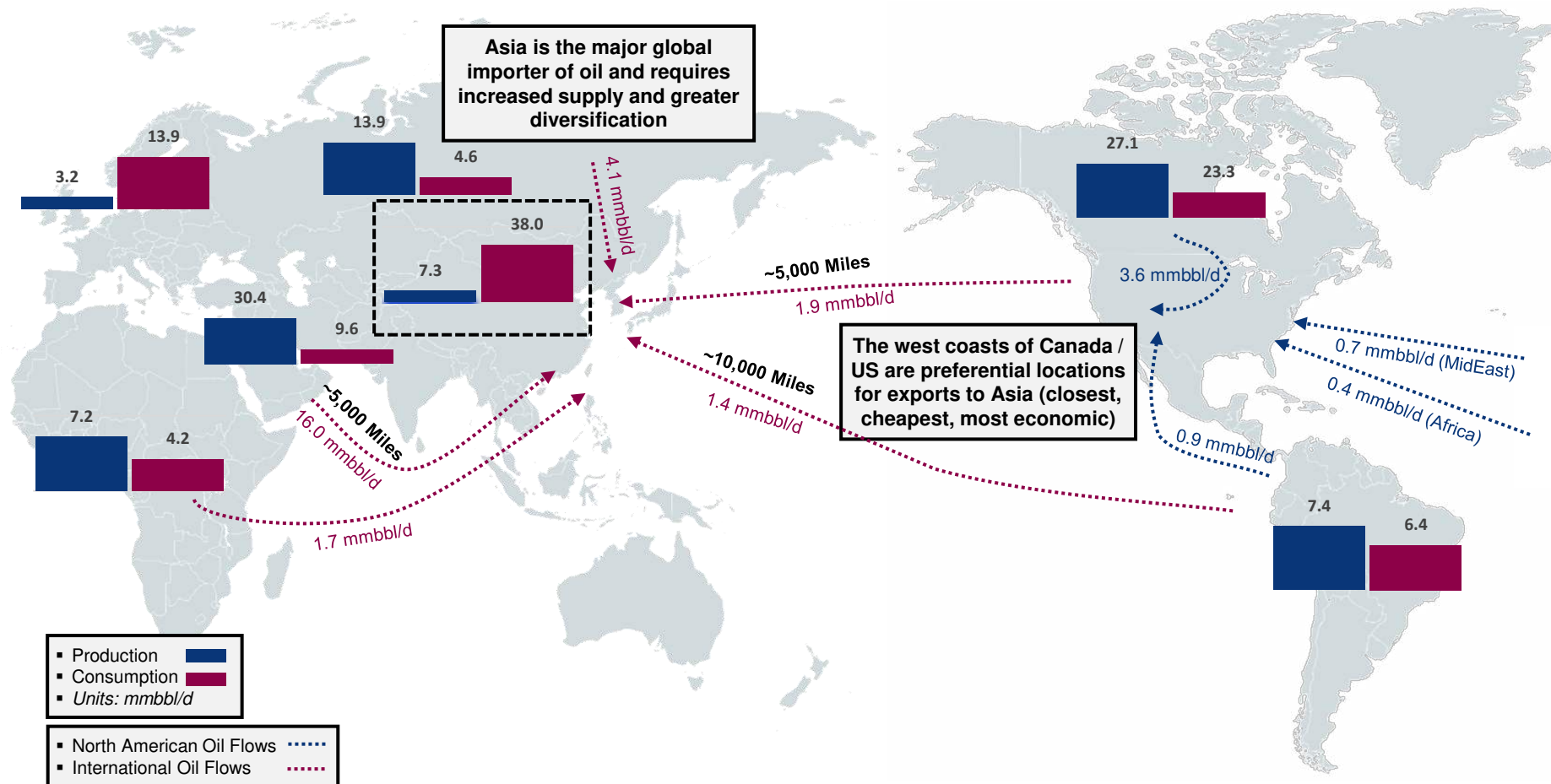
Source: Energy Institute 2024

Western Canada Needs Access to Other Markets

- Our oil production industry is over-reliant on the advantage of the USA market and our dependence on proximity to world's largest market has become a detriment
- We need to develop alternative markets as soon as possible, especially in face of threatened tariffs**
- East Asia is a close, large, net oil importing market and this market is accessible today with untapped infrastructure: **We can use Canada's rail system to access the west coast and global markets**
- Rail offers connectivity all over North America, including to the west coasts of Canada and the USA
- Accessing East Asia from the west coast offers significant advantages when compared to the US Gulf Coast, including:
 - Much lower transportation cost / better overall economics
 - Much shorter transit time (10 or 11 days from Canada compared to 20+ days from the US Gulf Coast)
 - Avoids the Panama Canal



Diversifying Markets for Canadian Crude Oil



The bigger challenge remains where to move Canadian barrels as the threat of US tariffs makes continued reliance on majority-US exports a much less economic prospect

Railway Fundamentals

- Rail can provide a method to get higher world oil prices for Canadian oil and NGL production
- Existing system provides access to all refining markets in North America
- Existing system provides access to tidewater where oil is exported to global markets
- World prices are higher than inland Canadian prices, providing incentive for inland producers and coastal buyers to find ways to access each other's markets
- Altex complements the rail system with its existing crude transloading terminals



<https://cnebusiness.geomapguide.ca/>

Rail Safety & Environmental Performance

- Rail has a long track record of safety and efficiency
- Rail has been shown by independent parties to have lower spilled volume and greater energy efficiency than other alternatives
- Rail infrastructure is already in place, minimizing surface and environmental footprint for incremental movements
- The type of oil typically moved by Altex (heavy oil) is less combustible, more viscous, and safer than other petroleum products often moved on rail or by pipeline
- Altex has developed rigorous safety standards and is an industry leader in health and safety policies

Comparative Statistics for Petroleum Product Release Rates from 2005 to 2009 (in Gallons)

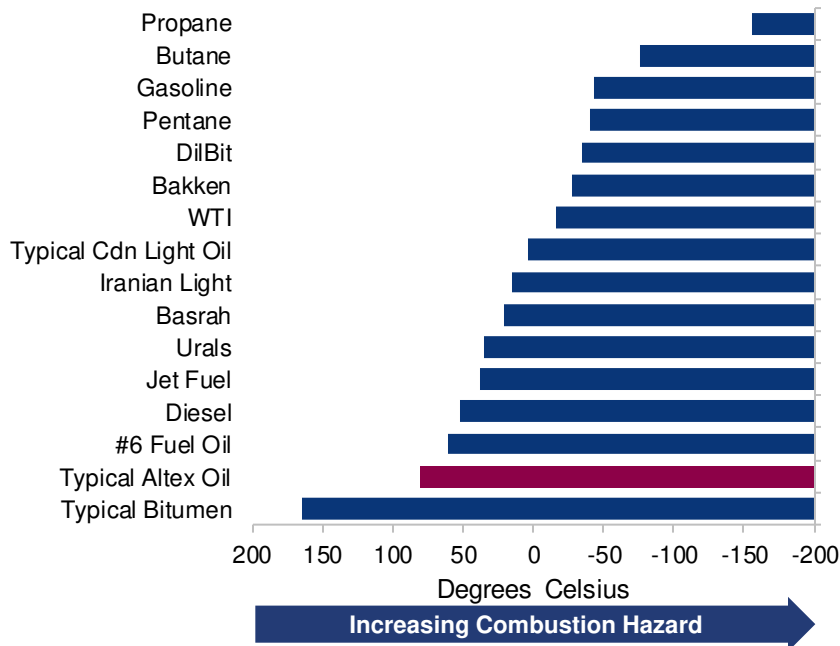
| Average release by transportation method | Per year | Per incident | Per billion ton-miles |
|--|-----------|--------------|-----------------------|
| Road | 477,558 | 687 | 13,707 |
| Railway | 83,745 | 1,688 | 3,504 |
| Hazardous liquid pipeline | 6,592,366 | 19,412 | 11,286 |

Fraser Institute

But if bitumen is not diluted and shipped by rail, it is safe as houses. It is warmed enough to fill a railcar, where it solidifies until its final destination, and is warmed again to be removed. Should a railcar of solid bitumen come crashing off a hilltop and land in a stream below, there it would lie in a lump.

~ Elizabeth May, Green Party

Petroleum Products by Flash Point



Supporting International Exports

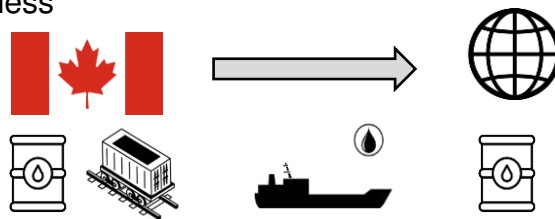
- Altex has used rail to support international exports of Canadian oil multiple times over the last decade

Historical Experience

- Altex has assisted in exporting western Canadian heavy oil to global markets thru terminals on Pacific Ocean, Atlantic Ocean and USGC using various methods:
 - Transloaded oil to tank cars, which were railed to the west coast of the US and loaded onto tanker ships (also did this for exports off US/Can marine terminals to Caribbean/European refineries)
 - Transloaded oil product directly into flexi-tanks in sea containers, which were railed to the west coast of Canada and loaded onto container ships
 - Transloaded oil product to tank cars, which were railed to the west coast of Canada where the oil was moved into flexi-tanks in sea containers and then loaded onto container ships
- Altex sees a high level of interest from third parties wishing to continue and grow these lines of business

New Opportunities

- Existing rail system can move oil from western Canada to marine terminals on west coast
- Terminals on the coast can be used to put oil on ships for movement to Asia
- Rail can be a functional long-term solution for certain movements
- **Rail can also be a bridge to building pipelines that can eventually replace onshore movements by rail over time**
- Easily accessible markets include China, Japan, and Korea (expandable over time to other Asian markets including India)



Exports by Rail and Sea Container

- Heavy oil is loaded into tank railcars at a western Canadian rail terminal
- The railcars are moved to a marine terminal where the oil is moved from the railcar to a bag (flexi-tank) inside a sea container
 - *Product can also be loaded directly into a sea container at a rail terminal in western Canada*
- Sea containers are loaded onto a container ship and shipped to port in Asia
- Requires product to be non-hazardous
- Heavy oil is sold as asphalt – consistent with Alberta’s Bitumen Beyond Combustion initiative



| Criteria ¹ | Min | Max |
|---|---------------------|-------|
| Density (kg/m ³ @ 15°C): | - | 1,020 |
| Flashpoint (°C): | 60.5 ^(a) | - |
| H ₂ S - Vapour Space (ppmv): | - | 10 |
| Viscosity (cP @ 50°C): | - | 2,500 |
| BS&W (%): | - | 1.0 |
| Reid Vapour Pressure (kPa): | - | 68.6 |
| Sulphur (%): | - | 4.75% |

¹ Specifications may change based on refiner and shipping company requirements

Exports by Rail and Crude Oil Tanker

- Rail to tanker business is achievable in a relatively short period compared to increasing pipeline capacity
- Product is loaded into a tank railcar at a western Canadian terminal
- Tank cars are moved to a marine terminal where product is moved from railcars to tanks – and eventually to an oil tanker ship
- Oil tanker is moved to overseas markets
- Very few marine terminals in Canada are capable of handling crude oil tankers
- Need dock with water depth sufficient to accommodate a large, cost-efficient ship
- Suitable ports are not currently available on the west coast of Canada, but Altex is in discussions with parties who have control of such docks
- Infrastructure to facilitate movements from rail to ship include oil storage tanks, which could also serve as terminalling for an eventual pipeline (if constructed)



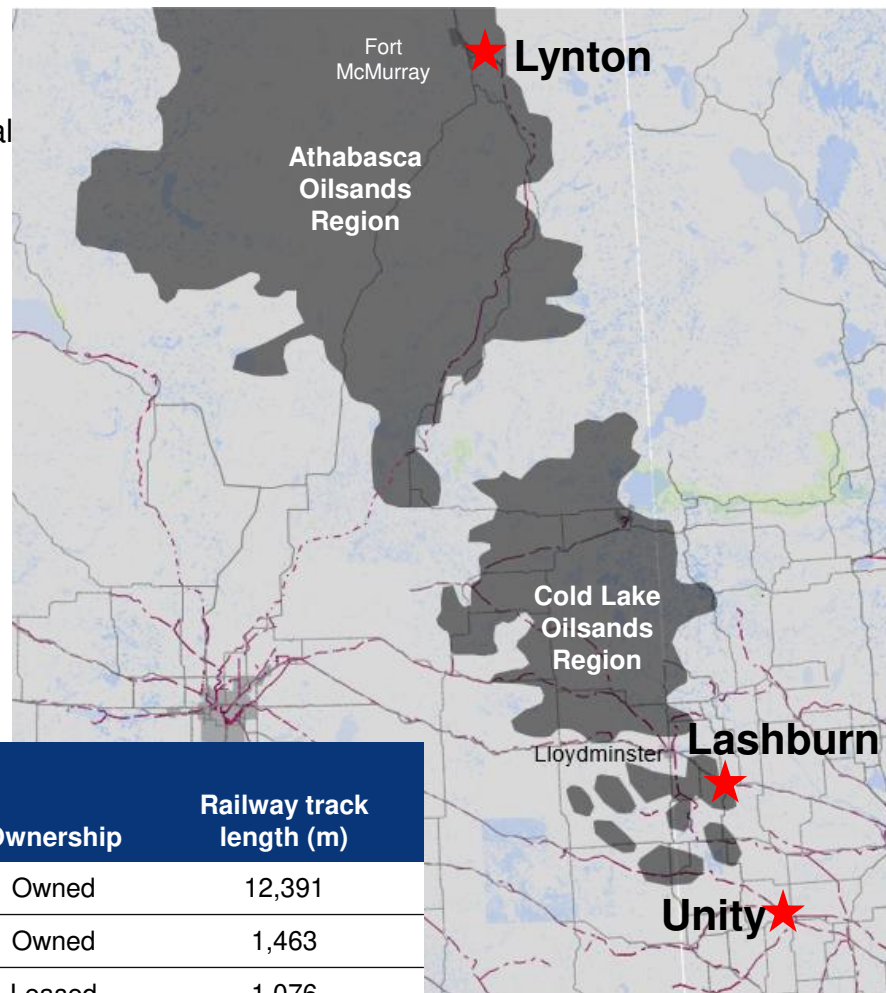
Thomas Zafiras

Western Canada Oil Market Diversification

- The geopolitical landscape of 2025 highlights Western Canadian provinces' immediate need to diversify export markets for its oil production
- The USA receives 87% of Western Canada production today, but this market is facing challenges from:
 - Regulatory and political hurdles in building infrastructure (such as new pipelines)
 - An increase in US production shifting the supply and demand balance such that the US has become a net exporter of oil
 - More recently, the US government is planning to impose tariffs on all imports of oil from Canada, significantly reducing profitability for producers and Canadian provincial and federal governments
- Challenges with the US market means growing Western Canada production requires access to new markets, and most market participants believe TMX will be at capacity in the near term
- An opportunity exists today for Western Canada to focus on growing an open and diversified market
- **Immediate and cost-effective expansion of overseas exports can be achieved through established supply chains, including transporting oil to the coast by rail**
- Altex Energy is a major western Canadian crude by rail provider and has a proven record of assisting in the diversification of oil markets for its customers – including moving Western Canada oil to China
- Altex, working with the Canadian and Provincial Governments, railways, and terminals on the West Coast of Canada, can play a critical role in expanding markets for Western Canada producers and reducing Canada's trade dependence on the US

Altex Energy Rail Terminals

- Altex controls and operates three state-of-the-art rail terminals in western Canada:
 1. Lashburn, our flagship unit train terminal located in a rural setting near Lashburn, SK
 2. Unity, a manifest terminal in Unity, SK
 3. Lynton, a manifest terminal located within CN's Fort McMurray, AB rail yard
- Sophisticated and flexible, capable of transloading diverse products (crude oil, condensate, chemicals, refined products, etc.)
- **Strategically located in heavy oil producing regions, with terminals within ready trucking distance of production**
- Terminals have transloaded oil for many international producers, marketers, and refiners



| Terminal | Full Capacity (mbbl/d) | No. Tanks | Tank Storage (mbbl) | No. Truck Stations | Ownership | Railway track length (m) |
|--------------------|------------------------|-----------|---------------------|--------------------|-----------|--------------------------|
| Lashburn | 90 | 36 | 148 | 26 | Owned | 12,391 |
| Unity | 30 | 10 | 24 | 12 | Owned | 1,463 |
| Lynton | 30 | 12 | 30 | 6 | Leased | 1,076 |
| Total Altex | 150 | 58 | 202 | 44 | | 14,930 |

Altex Advantage

- Altex was one of the first crude-by-rail transloaders in Canada and has secured patents for railcar designs and transloading processes
- Altex uses sophisticated, proprietary SCADA and logistics management systems to provide a premium service to customers and oil suppliers
- We are experts at providing connectivity for Western Canadian to both North American and global markets, and are in a position to help Western Canada reach its market diversification goals



Lashburn, SK



Unity, SK



Fort McMurray, AB

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