

Canadian Imports of U.S. Crude Oil, Natural Gas, and Refined Products

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Updates From Last Publication on Jul. 25, 2025

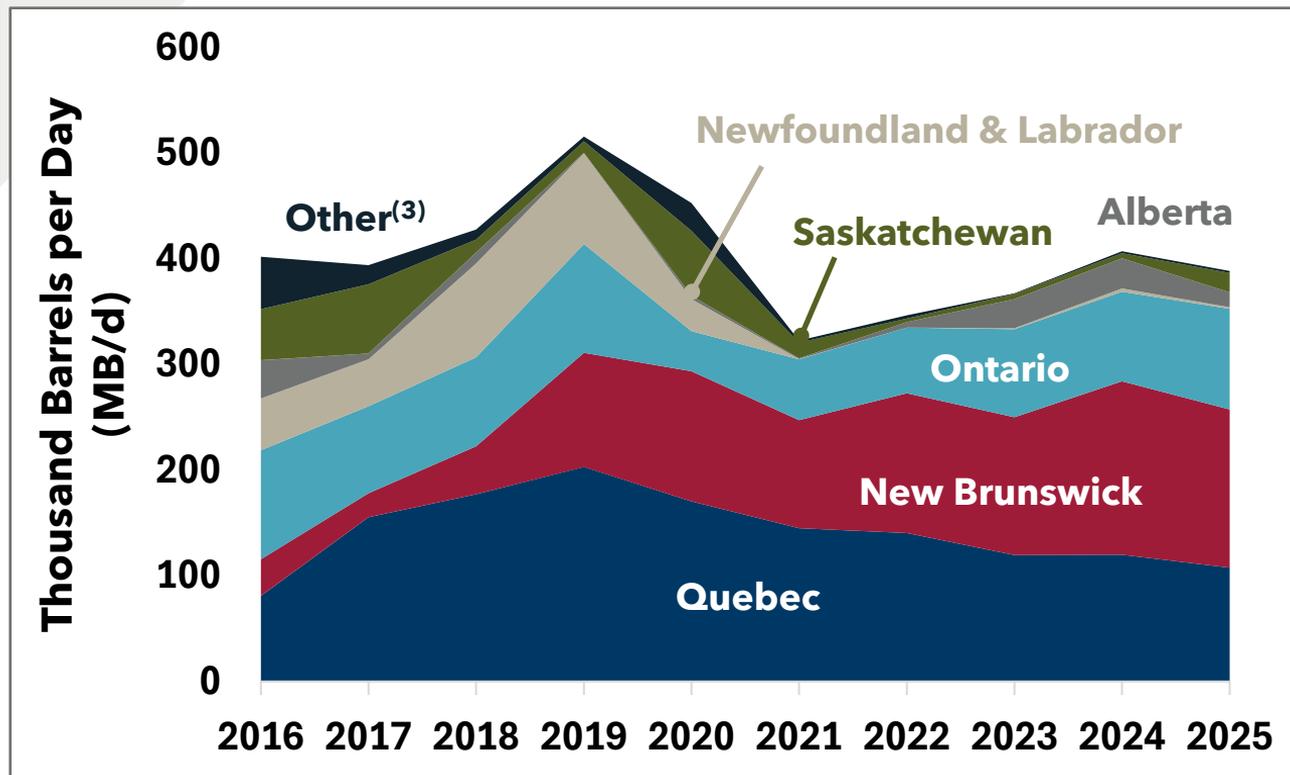
- 🇨🇦 **Slide 5:** Updated to reflect the latest monthly import data from Statistics Canada (Aug. 2025)
- 🇨🇦 **Slide 8:** Updated to reflect the latest monthly offshore production data from Statistics Canada (Jun. 2025)
- 🇨🇦 **Slide 10:** Updated to reflect the latest monthly Canadian refinery throughput data from Statistics Canada (Jul. 2025)
- 🇨🇦 **Slide 13:** Updated to reflect the latest monthly import data from Statistics Canada (Aug. 2025)

Summary of Canada's Reliance on the U.S. for Crude Oil and Natural Gas

- 🇨🇦 **Parts of Canada depend on the U.S. for crude oil, natural gas, and refined products.** This reliance includes U.S. imports and Canadian-produced oil and gas that transit through the U.S. on their way to Ontario and Quebec. This dependence poses an energy security risk for all regions of Canada. If the U.S. were to cut off the delivery of these crucial commodities, Canada would face energy shortages and high prices.
- 🇨🇦 **Ontario and Quebec are particularly vulnerable.** About half of the natural gas these provinces consume is imported from the U.S. Additionally, Ontario depends entirely on crude oil delivered via the U.S., with no immediate alternatives available. Quebec also relies on crude oil transiting the U.S. for about 60% of its refinery consumption. While there are options to deliver more Canadian natural gas via the TransCanada (TC) Canadian Mainline, the pipeline would likely require capital investment to increase its flow rate materially. To reduce Ontario's dependency on U.S.-transited oil, Line 9 could be reversed (once again) to deliver offshore crude oil into Ontario from Montreal, but this cannot be done in the short term.
- 🇨🇦 **Alberta imports over 200,000 barrels per day of light condensate from the U.S. to blend with heavy bitumen for transportation.** A curtailment of these imports could increase heavy oil producers' costs and cause operational issues that could constrain production.
- 🇨🇦 **B.C., Quebec, and Ontario also depend on refined product imports from the U.S.**

Canada Crude Oil⁽¹⁾ Imports from the U.S. by Province

Annual | 2016 to 2025⁽²⁾



- In 2024, total Canadian crude oil imports averaged 518 MB/d. The U.S. represented 407 MB/d (~78%) of these imports.
- New Brunswick, Quebec, and Ontario account for most of the U.S. crude oil imports:
 - New Brunswick: 164 MB/d (40%)
 - Quebec: 120 MB/d (29%)
 - Ontario: 85 MB/d (21%)
- The reversal of Line 9 in the 2010s has made Ontario and part of Quebec completely dependent on crude oil transited through the U.S. As such, Ontario is completely reliant on U.S. crude oil imports, while other provinces (Quebec and New Brunswick) are also heavily reliant.

Enbridge Mainline Pipeline

Critical Energy Infrastructure for Canada



Originating in Edmonton, Alberta, the Enbridge Mainline moves crude oil, refined products, and natural gas liquids through a connected pipeline system. At Superior, Wisconsin, the system splits into Line 5, going north of Lake Michigan, and Lines 6, 14, and 61, going around the southern tip of the lake. The two routes then coalesce and terminate in Sarnia, Ontario, where it is interconnected with Line 9, which is terminated in Montreal, Quebec.

The Enbridge Mainline is Canada's largest transporter of crude oil, accounting for roughly 70% of all Western Canadian Sedimentary Basin exports to Eastern Canada and the U.S. Midwest markets.

- The original pipeline was built in 1950, connecting Edmonton, Alberta to Superior, Wisconsin. The line was then extended in 1953 to connect to Sarnia, Ontario. There have since been many offshoots and other lines that go south or east, connecting to refineries across Eastern Canada and the U.S. Midwest.
- Prior to constructing the Enbridge Mainline, several politicians, including C.D. Howe, pushed for an all-Canadian route north of the Great Lakes to increase Canadian energy security by linking Western Canada's supply with refineries in Ontario and Montreal. However, the routes through the U.S. were chosen because of lower project costs and faster timelines.
- After the initial line connecting Edmonton to Superior was completed, C.D. Howe said of its energy security role, the pipeline was "an essential factor in our preparedness program for the defense of Canada."

Enbridge Line 9 Pipeline

A Lesson About Canadian Energy Security

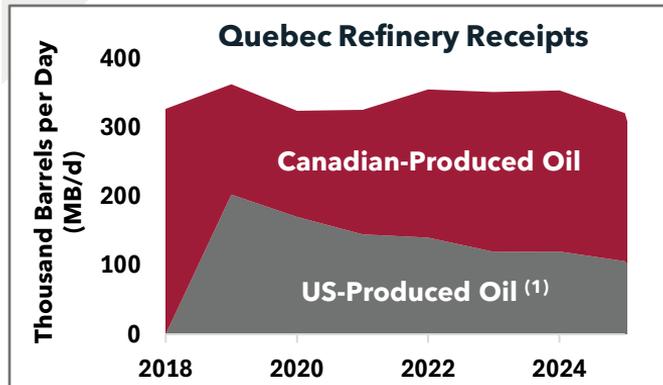
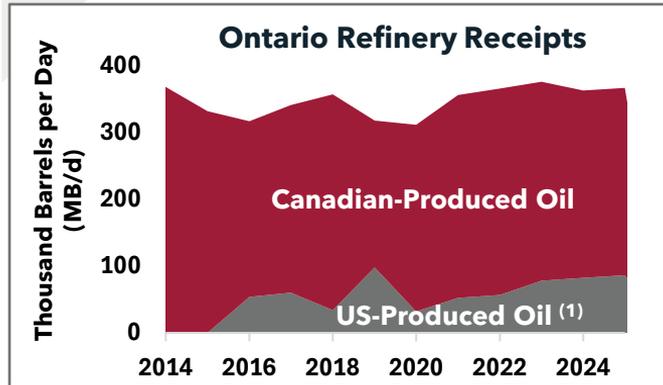


The Enbridge's Line 9 pipeline connects refineries in Sarnia to Montreal. The flow of crude oil through the pipeline has been reversed multiple times.

- 🚩 **1976:** Line 9 opens, built for energy security purposes and to carry Western Canadian and U.S. crude oil to refineries in Quebec.
- 🚩 **1999:** By the 1990s, there was a lack of crude oil from Western Canada (before the growth from the oil sands) and crude oil delivered by the pipeline could not compete with overseas supply, being economically more attractive. Therefore, the flow of Line 9 was reversed by Enbridge to transport crude oil from Montreal to refineries in Sarnia. This made Ontario more dependent on overseas crude oil but also provided optionality for the region versus Canada and the U.S. only.
- 🚩 **2012-2015:** When crude oil from Canada and the U.S. became abundant following the growth of the oil sands and shale plays, the flow was reversed again. The reversal happened in two phases, starting with Line 9A and then 9B. This allowed crude oil from Western Canada and the U.S. to once again supply refineries in Quebec and displace overseas crude oil.

The reversal of Line 9 has increased Canada's dependence on U.S. crude oil while also creating a vulnerability for Canadian crude oil, which must be transported on the Lakehead System in the U.S. before reentering Canada. Prior to the reversal, Eastern Canada could access overseas crude oil (however, that was a more expensive source, and therefore the pipeline was not used).

Annual Ontario & Quebec Refinery Consumption



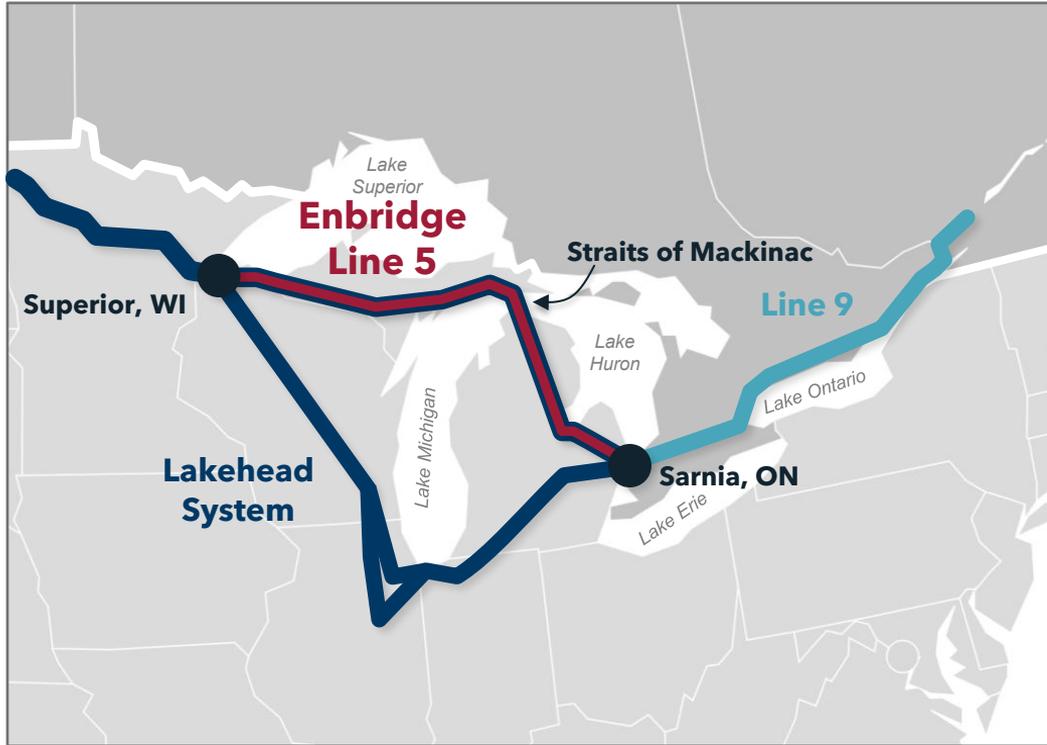
➤ **Ontario relies on oil transported through the Enbridge Mainline**, which passes through the U.S. This system delivers both Canadian and US-produced crude oil to Ontario's four refineries, with limited short-term alternatives for supply.

➤ **Quebec's two refineries also rely heavily on the Enbridge Mainline.** Crude oil reaches Montreal via the Enbridge Line 9 and is shipped via the St. Lawrence to Quebec City.

➤ Line 9 is the primary supply route for Quebec, delivering over 60% of the refinery receipts over the last several years. St. Lawrence tanker deliveries supply the remainder of the crude oil. There are also options to use rail from the west for crude oil delivery.

Enbridge Line 5 Pipeline

Illustrating Canada's Energy Security Risk



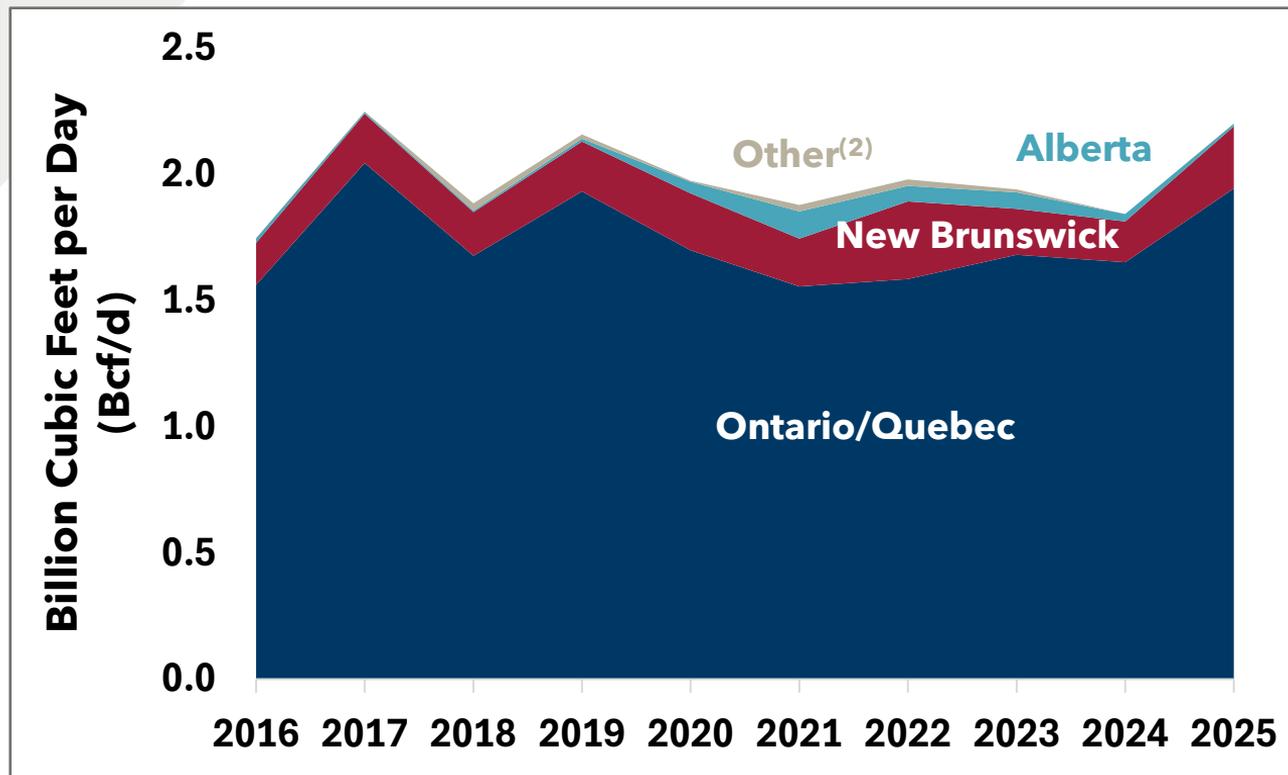
The Enbridge Line 5 pipeline is a strategic piece of Canadian infrastructure, delivering crude oil to key refineries in eastern provinces and states. The future operations of the pipeline were challenged by the State of Michigan in 2020.

The Enbridge Line 5 pipeline is a critical link for Ontario and Quebec to receive crude oil. In 2020, Michigan's governor ordered a shutdown of the pipeline, which would have caused energy shortages in Eastern Canada. This situation illustrates the risk of Canada's key infrastructure transiting the U.S.

- ▶ Line 5 is part of the Enbridge Mainline system and one of the offshoots of the Lakehead System. The pipeline transports up to 540,000 B/d of crude oil and natural gas liquids. It moves more than half of the crude oil used in Ontario and 66% of what gets consumed in Quebec. It's also critical for Ohio and Michigan to provide heating oil and propane.
- ▶ In 2020, Michigan Governor Whitmer ordered Enbridge to cease operations of Line 5 in the Straits of Mackinac by May 2021 due to concerns about a pipeline leak and potential oil spill under the Straits. On November 30, 2021, Governor Whitmer withdrew the 2020 complaint concluding this case.
- ▶ In December 2023, Michigan regulators approved a key permit that would protect the Great Lakes by encasing the pipeline in a concrete tunnel under the Straits of Mackinac. This would allow the pipeline to continue operating and delivering crude oil to Eastern Canada.

Canada Natural Gas Imports from the U.S. by Province

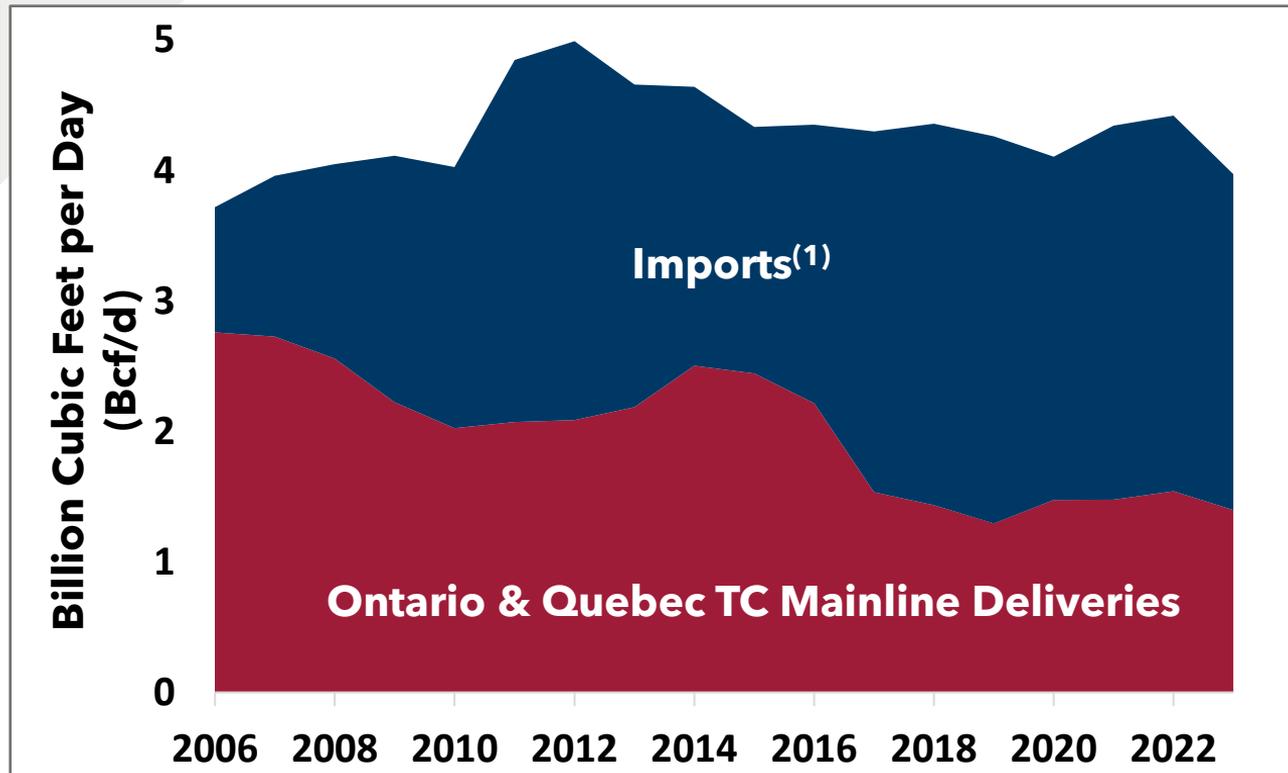
Annual | 2016 to 2025⁽¹⁾



- ▶ Ontario and Quebec are the most dependent on U.S. natural gas imports, with 1.7 Bcf/d or about half of Ontario and Quebec consumption in 2024.⁽³⁾ The natural gas is imported to Ontario and then flows into Quebec.
- ▶ The TC Energy Canadian Mainline connects Western Canada with Ontario, over Canadian territory. However, due to higher costs to transport natural gas on the Canadian Mainline, Ontario has been growing its reliance on U.S. natural gas imports (see next slide).

TC Canadian Mainline Pipeline Deliveries

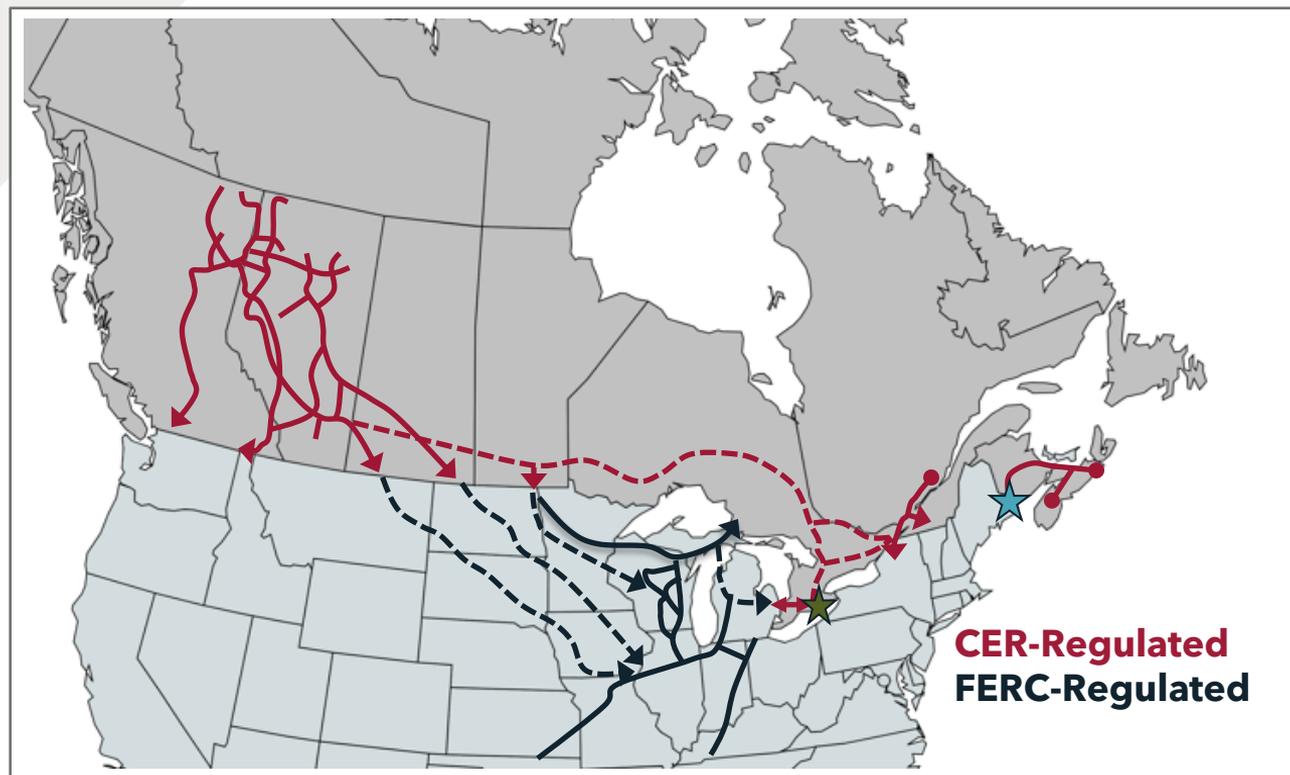
Ontario & Quebec | Annual | 2006 to 2023



▶ Pipeline deliveries to Ontario and Quebec via the TC Mainline have steadily decreased following the expansion of US natural gas production and associated infrastructure build-out to accommodate increased transportation of U.S. gas into Canada. In 2023, combined Mainline deliveries into Ontario and Quebec from the WCSB were ~1.4 Bcf/d, down from ~2.8 Bcf/d in 2006.

▶ **High transportation costs on the TC Mainline have hindered Canada's ability to re-capture market share.** However, due to long-term fixed contracts in 2017, followed by a reduction in base tolls from 2021 to 2026 and resulting rate rider reductions as part of a toll settlement, subsequently lower tolls have stopped further erosion of Canada's market share.

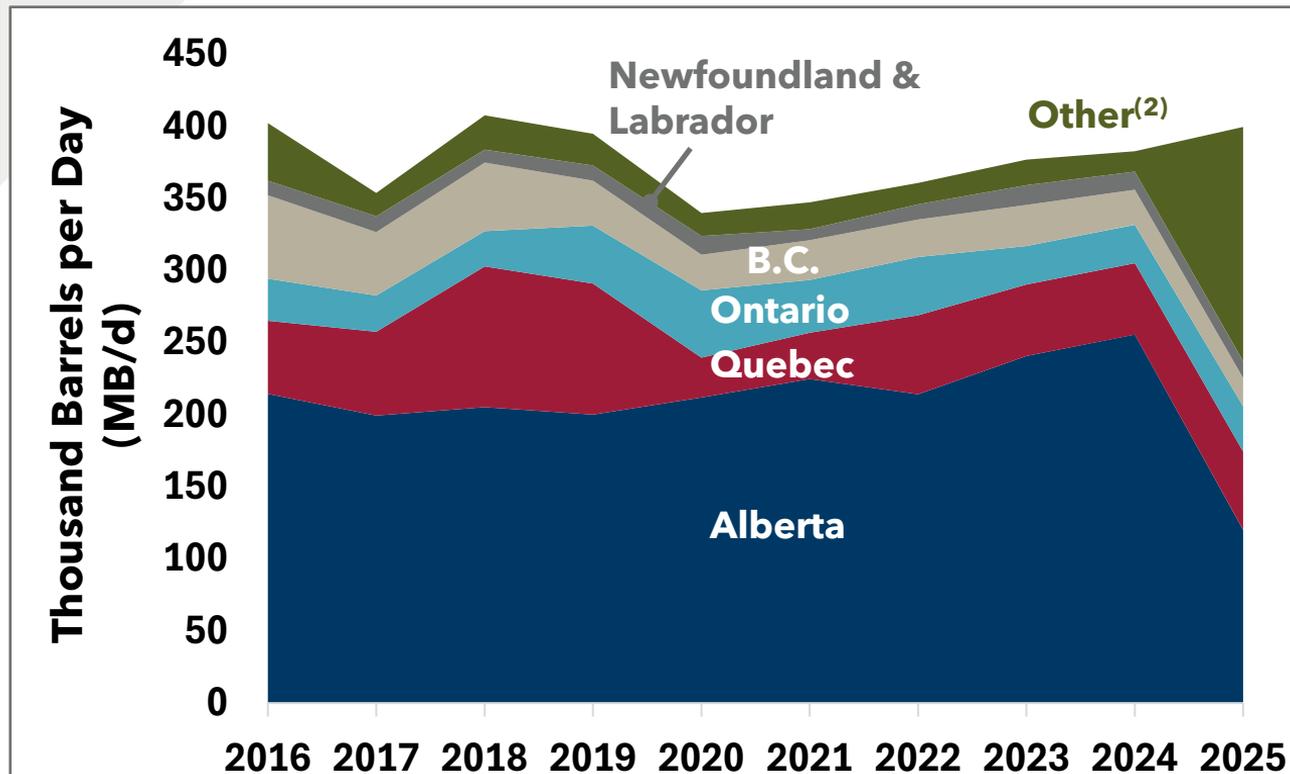
Canada and U.S. Natural Gas Pipeline Infrastructure⁽¹⁾



- The TC Canadian Mainline (red dashed line) transports natural gas produced in Western Canada to markets in Eastern Canada. The system flows about half of its potential capacity because the transportation costs have been higher than for flowing gas via the United States.
- The Alliance, Northern Border, Great Lakes Gas Transmission, and Viking Gas Transmission pipelines (black dashed lines) supply markets in the U.S. Midwest with Canadian gas, some of which is re-exported back into Ontario. These pipelines also supply U.S. gas to Canada via various interconnects (not shown).
- U.S. gas is also primarily imported into Ontario at Niagara and Chippawa (green star) and into New Brunswick (blue star) via U.S. pipelines (not shown).

Canada Refined Petroleum Product Imports from the U.S.

By Province | Annual | 2016 to 2025⁽¹⁾



- Alberta is the most reliant on imports of refined products, followed by Quebec, Ontario, and B.C.
- Alberta imports are mostly condensate, which is used to blend with heavy bitumen to transport the blended bitumen by pipeline.
- In 2024, annual U.S. imports averaged:
 - **Alberta:** 255 MB/d (67%), mostly condensate for bitumen blending
 - **Quebec:** 49 MB/d (13%)
 - **Ontario:** 27 MB/d (7%)
 - **B.C.:** 24 MB/d (6%)