COMMODITY SNAPSHOTS

SEPTEMBER 2019



[Revised September 2019]

PETROLEUM PRODUCTS

VOLUMES & SUPPLY CHAIN CONCERNS

Petroleum product exports through the Port of Vancouver were 6.2 Mt in 2018. Growth of 1.6 Mt through the Port of Vancouver by 2023. One-quarter of Canada's oil exports are light oil, but heavy oil is the fastest-growing sector. Despite recent curtailment in oil production, increases of 1+ million barrels per day (bpd) are forecasted by 2030, (most from the oil sands). Industry divestment from oil sands exploration remains a long-term threat to further growth.

Delays in pipeline projects hurt Canadian producers' ability to obtain higher prices and capitalize on production capacity improvements. The industry is increasing movement by rail, with about 7-10 trains per day heading to the US. Oil by rail volumes could crest in late 2020; rail will be necessary until at least 2022. The sharp reduction in Venezuelan production is another concern as infrastructure constraints impact Canada's ability to pick up the slack for US Gulf Coast refineries.

POTASH 2018 VOLUME 9.2 Mt CAPACITY 12 Mt Forecast 2023 VOLUME 10.4 Mt 2023 CAPACITY 12 Mt 2030 VOLUME 12.5 Mt

EXPANSION PLANS

 BHP Billiton has proposed an 8 Mt/yr terminal at Fraser Surrey Docks to export potash from its Jansen mine (both awaiting final investment decision)

Note

- No potash terminal in Prince Rupert
- Alternative capacity available at Portland, Saint John and Thunder Bay

PORT IMPLICATIONS

- Sufficient terminal capacity exists to 2023
- Additional capacity required by 2030

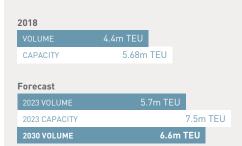
RAIL IMPLICATIONS (ONE WAY ONLY)*

• Less than one additional 205-car unit train per day

SUPPLY CHAIN CONCERNS

- Consistent rail service; rail car capacity
- Last-mile pinchpoints: two rail bridges in Metro Vancouver
- High monthly variability in volumes

CONTAINERS



EXPANSION PLANS

- 0.6 m TEU at GCT Deltaport (2019)
- 0.6 m TEU at DP World Centerm (2021)
- 0.215 m TEU at GCT Vanterm (2022)
- 0.45 m TEU Phase 2B at DP World Fairview Terminal (2023)

ADDITIONAL PROJECTS (NO FIRM TIMELINE)

- New 2.5 m TEU terminal on South Kaien Island¹
 in Prince Rupert
- New 2.4 m TEU terminal at Roberts Bank (RBT2)
- 2 m TEU expansion at GCT Deltaport (Berth 4)

PORT IMPLICATIONS

- Terminals often operating above 85% capacity (benchmark is service deteriorates above 80%)
- Expansions coming online will meet demand until 2023

RAIL IMPLICATIONS (ONE WAY ONLY)*

 Roughly one-two 12,000' trains per day in Prince Rupert plus two-three additional 12,000' trains per day in Vancouver (outbound)

SUPPLY CHAIN CONCERNS

- Poor on-time performance of container vessels (only 57.5% in 2018)
- Pressures of next-day e-commerce delivery models
- Industrial land availability in Metro Vancouver

COMMODITY CONCERNS

Non-tariff trade issues, uncertain timeline for future projects, congestion in Metro Vancouver, inaccurate forecasting, rebalancing of traffic between ports; balancing demands for freight and passenger rail service in urban areas.

¹South Kaien Island site south of existing Fairview Terminal and adjacent to Ridley Island coal and grain terminals, near AltaGas

Canada's bulk producers are continuing to find global markets. Forecasts indicate that demand for most commodities will grow over the next five years. While the anticipated capacity required to export products through to 2023 seems mostly to be in place (or in some cases under construction), some producers have expressed concern over supply chain capacity and inefficiencies that are affecting their access to markets.

FOREST PRODUCTS

VOLUMES & SUPPLY CHAIN CONCERNS

Bulk and containerized forest product traffic via Port of Vancouver was down in 2018 because of a 1.3 Mt decline in wood chip movement and a 0.45 Mt decline in lumber exports (since 2016). There is growth in wood pellet traffic, and breakbulk pulp traffic is expected to grow to 1.4 Mt by 2023.

Sufficient terminal capacity exists to handle this growth. As most mills are captive shippers (rail service from one provider), they are concerned about railway performance. Continued truck driver shortages are also worrisome. Other concerns of the industry include a declining fibre supply in BC, US tariffs, and more competition from Russia in low-grade lumber. Almost every mill in BC is losing money today, mill closures are expected.

AG PRODUCTS (BULK GRAINS, SPECIALTY CROPS AND FEED)



EXPANSION PLANS

- 2 Mt/yr at Fibreco (2019)
- 8 Mt/yr at G3 Terminal Vancouver (2020)2
- 3.5 Mt/yr at Fraser Grain Terminal (2021)3

Note

 No expansion planned at Prince Rupert Grain (current capacity 7 Mt)

PORT IMPLICATIONS

- Currently nearing capacity
- Excess capacity will exist by 2021 (as new and expanded terminals are completed)

RAIL IMPLICATIONS (ONE WAY ONLY)*

 Roughly one additional 170-car unit train per day

SUPPLY CHAIN CONCERNS

- High level of carry-forward stocks in the prairies
- Rail car capacity and surge capacity
- High monthly variability in volumes
- Terminals not running 24/7

EXPANSION PLANS

- 2 Mt/yr at Westshore Terminal (2019)
- 6 Mt/yr at Neptune Bulk Terminal (2020)

Note

- No expansion planned at Ridley Terminal in Prince Rupert (current coal capacity 24 Mt)
- 100 acres of dry bulk expansion potential on Ridley Island

PORT IMPLICATIONS

 Sufficient terminal capacity will exist to 2030 if expansion plans proceed

RAIL IMPLICATIONS (ONE WAY ONLY)*

 Roughly one additional 200-car unit train per day

SUPPLY CHAIN CONCERNS

- Increase in average number of days ships at anchor
- Rail capacity not sufficient

Source: CPCS and WESTAC analysis of VFPA and PRPA cargo statistics and forecast data, public documents (websites, annual reports, development permits, etc.); container capacity data provided by terminal operators.

* For illustrative purposes Actual number of cars varies by producer, railway, type of car, etc.
On May 8, 2019 it was announced that DP World has agreed to buy Fraser Surrey Docks.

RAIL IMPLICATIONS

VANCOUVER

5-6 ADDITIONAL TR

PRINCE RUPERT

1-2 ADDITIONAL TRAIN DAILY EACH WAY

² G3 at Lynnterm West Gate

³ Fraser Grain adjacent to Fraser Surrey Docks