



Written submission to the Pre-Budget Consultations in Advance of the 2020 Budget

*Climate Emergency: The Required
Transition to a Low Carbon Economy*

By: Vancouver Fraser Port Authority

August 2, 2019

Recommendations

- **Recommendation:** That the government establish a \$1 billion fund to decarbonize trade-related activities including trucks, cargo-handling equipment, vessels, and locomotives, and that this fund be marketed to Canada Port Authorities and their supply-chain stakeholders to accelerate investment in low or zero carbon technologies such as natural gas, renewable/biofuels, battery electric, hydrogen fuel cell and grid-connected technologies. This recommendation is supported by the following:
 - **Recommendation 1.1:** Allocate \$200 million to facilitate transition of container drayage trucks to low or zero carbon technologies such as natural gas vehicles, battery electric vehicles, hydrogen fuel cell vehicles, or grid-connected vehicles (overhead catenary).
 - **Recommendation 1.2:** Allocate \$100 million to support introduction or expansion of shore power facilities in Canadian ports for ocean-going vessels.
 - **Recommendation 1.3:** Allocate \$200 million to facilitate electrification (zero emission technologies) of cargo-handling equipment within Canadian ports, including container terminal trucks, container top and side picks, fork lifts, and rubber-tire gantries.
 - **Recommendation 1.4:** Allocate \$200 million to advance low and zero-emission fuelling infrastructure, such as charging infrastructure, electrical distribution and related smart grid technologies, to enable adoption of low and zero-emission vehicles and equipment.
 - **Recommendation 1.5:** Allocate \$100 million to support transition of ferries, tugs and other domestic vessels to low or zero-carbon technologies such as liquefied natural gas, hydrogen and electric hybrid technologies, and establish a Canadian-led international initiative to advance research and development of low or zero-carbon technologies for deep-sea, ocean-going vessels in support of the International Maritime Organization commitment to reduce greenhouse gas emissions from shipping by 50% by 2050, relative to 2008.
 - **Recommendation 1.6:** Allocate \$200 million to support transition of locomotives operating within ports and the surrounding metropolitan areas (port host communities), such as the Lower Mainland of British Columbia, to low or zero-emission technologies.
 - **Recommendation 1.7:** That the government consult with industry and port authorities to advance complementary policy and regulation promoting use of shore power facilities, increasingly stringent emissions limits for port equipment, and transition of existing equipment to low or zero-emission equipment.

Submission

The Vancouver Fraser Port Authority is responsible for the stewardship of federal port lands and waters in and around Vancouver, British Columbia. Like all Canada Port Authorities, the Vancouver Fraser Port Authority is established by the Government of Canada pursuant to the *Canada Marine Act*, and accountable to the federal minister of transport.

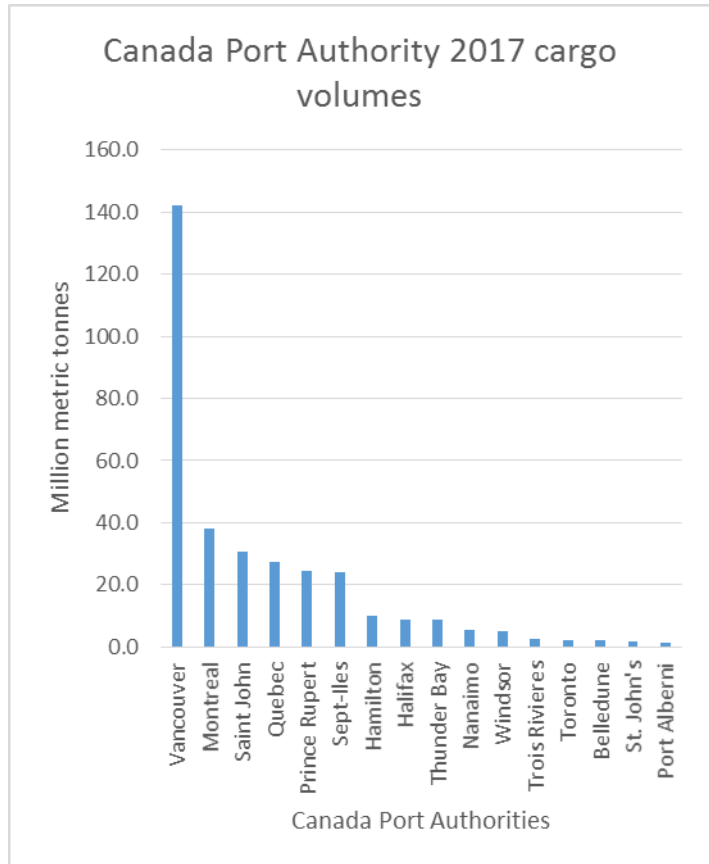
Located on the southwest coast of British Columbia, the Port of Vancouver is Canada’s largest port, supporting trade with more than 170 world economies and moving about \$1 in every \$3 of Canada’s trade in goods outside North America.

The port operates across five business sectors: automobiles, breakbulk, bulk, container and cruise. Operators include cargo and cruise terminals, industries requiring tidewater access, shipyards, tugboats, railways, trucks, shipping agents, freight forwarders, suppliers, builders, and administrative agencies.

The Port of Vancouver enables the trade of approximately \$200 billion in goods and sustains:

- \$24.2 billion in economic output
- \$11.9 billion in gross domestic product
- \$7 billion in wages
- 115,300 jobs in Canada
- \$1.4 billion per year in tax revenues

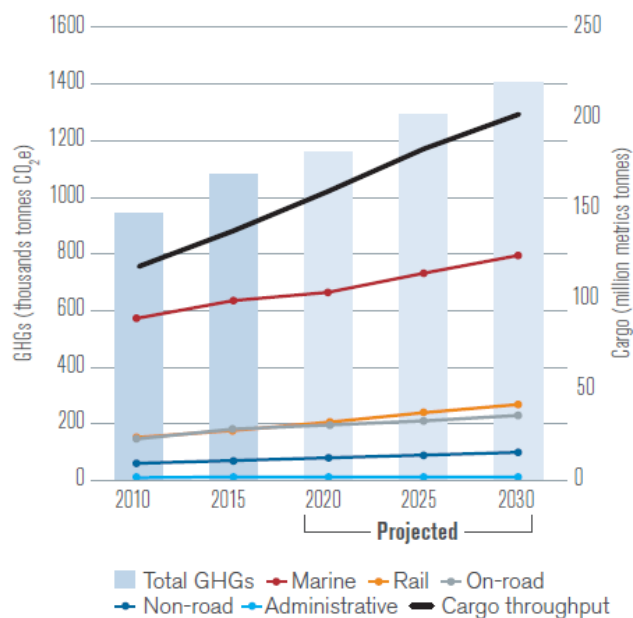
The port authority has the vision is to be the world’s most sustainable port, which delivers economic prosperity through trade, maintains a healthy environment, and enables thriving communities.



The port authority supports the Government of Canada’s commitment to reduce greenhouse gas (GHG) emissions by 30% below 2005 levels by 2030, and recognizes the significant contribution that that transportation sector needs to make to achieve this target.

Every five years the port authority prepares a detailed GHG emissions inventory that includes all trucks, cargo handling equipment, locomotives and vessels related to the Port of Vancouver. The 2015 Port Emissions Inventory results show that GHG emissions continue to increase with growth in trade and that a transition to low carbon technologies is needed to ensure that the future projected growth in trade will be able to align with Canada’s GHG targets. The following chart provides an overview of port-related GHG emissions as they relate to the projected increase in cargo throughput, forecasted out to 2030.

GHG emissions and cargo throughput, 2010-2030



Port industries are immensely competitive and cost optimized, where incremental costs associated with adoption of clean technology can become a competitive disadvantage for early adopters. A significant effort will be required to stimulate innovation in this sector and federal funding will have a catalyzing effect. California is currently leading the way in the application of clean growth technologies within port industries, with success resulting from a combination of targeted regulatory measures and significant innovation funding to support the industry's transition.

Therefore, in support of continued prosperity through trade that aligns with Canada's climate commitments, the port authority proposes that the Government of Canada establish a \$1 billion fund to help decarbonize trade-related activities including trucks, cargo-handling equipment, vessels, and locomotives, and that this fund be marketed to Canada Port Authorities and their supply-chain stakeholders to accelerate investment in low or zero carbon technologies such as natural gas, renewable/biofuels, battery electric, hydrogen fuel cell and grid-connected technologies. Operating Canada's largest port, the Port of Vancouver, the port authority would be excited to play a leadership role in working within the opportunities this fund would provide to facilitate the industry's transformation.

Conclusion

The Vancouver Fraser Port Authority is committed to becoming the world's most sustainable port delivering economic prosperity through trade, maintaining a healthy environment, and enabling thriving communities. The recommendations articulated in this submission will help drive Canadian ports and the heavy-duty transportation sector towards a thriving and prosperous low carbon economy.