

# Marine Shipping: Setting A Course for Canada's Economic Recovery

The Chamber of Marine Commerce and its members have played a vital role in Canada throughout the COVID-19 pandemic, ensuring that the marine supply chain is still moving goods within Canada, to the United States, and to international markets.

Our work as an essential industry has ensured that grains are being used to make bread, pastas, and other foods to feed Canadians, that municipal supplies have enough salt for next winter, and that aggregates and other construction materials are transported to build critical infrastructure during this time.

As we look to the longer term, and to how we can make sure that Canada can recover in a better position than it was before, we propose a series of measures that could be taken to improve the safety and efficiency of marine transportation and at the same time create jobs, boost our trade potential and protect the environment.

## 1 Investing in Innovations and Improvements that Reduce Pollutant Air Emissions and GHGs from Vessels, including Alternative Fuels and Propulsion in Marine Transport

The Government of Canada has announced its intention to support efforts that develop marine infrastructure and convert ships from burning heavy oil and diesel toward more environmentally-conscious fuels, like liquefied natural gas (LNG).

Some vessels among the CMC member fleet are already using alternate fuels, such as LNG, to power their ships, and others are exploring the potential use of biofuels to power their vessels. These efforts need more investigation to see if they are feasible to use long term. Ultimately, alternative propulsion systems that have zero carbon emissions are needed in order to meet long-term goals. With no such systems available for large commercial vessels, more research and development is needed.

In the interim, some vessels are already using new technologies to reduce pollutant emissions, including exhaust gas scrubbers. These systems have the potential to also reduce black carbon and other criteria air contaminant (CAC) emissions.

- We call on R&D investments and government support for alternative fuel and new propulsion technologies testing by shipowners and their partners to study the efficacy and environmental efficiency of alternative fuels in marine transport.

This will increase the adoption of these technologies on Canadian ships.

- We call on the government to provide funding to shipowners for projects that reduce or avoid GHG or CAC emissions. This could include introducing or upgrading to new technologies or equipment, implementing more energy efficient operating practices or procedures, or substituting fossil fuels with less carbon intensive alternative fuels.



CHAMBER OF  
MARINE COMMERCE  
[www.MarineDelivers.com](http://www.MarineDelivers.com)



@MarineDelivers

## **2 Expanding the National Shipbuilding Strategy**

In 2010, the Government of Canada made the decision to support Canada's marine industry and build vessels here in Canada. This approach, called the National Shipbuilding Strategy, is developing a sustainable, long-term shipbuilding plan that benefits Canadians and the Canadian marine industry. This strategy is focused on constructing vessels for the Navy and Coast Guard here in Canada. This program also includes the possibility of upgrading and retrofitting additional assets for the Coast Guard.

The National Shipbuilding Strategy officially supports two shipyards, with a third shipyard expected to be announced. There are more shipyards across Canada that can support the National Shipbuilding Strategy and help create more jobs across the country.

Canada has many shipyards, including in the Great Lakes, that have the capacity to build military and non-military ships, including the much-needed Canadian Coast Guard fleet renewal.

We also know that improvements can be made to the existing fleet, such as vessel life extension (VLE) projects. For example, the Canadian Coast Guard fleet has vessels that need to undergo VLE maintenance in the next few years.

- We call for the National Shipbuilding Strategy to be expanded beyond three shipyards.
- We call for rapid investment in Canadian Coast Guard fleet renewal, to kickstart the building of new ships this year, and to complete the remaining vessel life extension (VLE) projects before delivery of the new ships.
- We call for additional investment in Canadian Coast Guard dredging capability in the lower St. Lawrence River and the Detroit-St. Clair Rivers, including additional confined disposal facilities.

## **3 Reinvesting in the National Trade Corridors Fund**

Transport Canada announced the creation and disbursement of the \$2-billion National Trade Corridors Fund (NTCF). This fund was extremely popular, and was designed to help fund infrastructure projects in Canada, such as work to airports, ports, rail yards, transportation facilities and access roads.

Because of the popularity of the program, the fund was depleted quickly, and dozens of qualified projects were not able to receive funding. The NTCF has been instrumental in helping the marine sector expand its capacity to export Canadian goods abroad.

- We call on the government to double investment in the NTCF to allow for more infrastructure projects in the transportation sector to be built, supporting Canada's trade capacity.

## **4 Modernizing Navigational Technology and Services**

Over the years, navigational aids for marine transportation have become more sophisticated and have taken advantage of advances in technology for positioning, charting and other navigational requirements.

In addition, the Canadian Coast Guard's marine communications and traffic services (MTC) provide critical safety and traffic information.

- We call for additional investment in aids to navigation, such as advancing the use of automatic identification system (AIS) and messages, four-season buoys, and real-time, water currents information for the Seaway to provide up-to-the-minute information to mariners.
- We call for additional investments in the Coast Guard's marine communications and traffic services that will leverage technology to maximize routing information, navigation support and traffic optimization.



- We call for additional investment in Maritime Autonomous Surface Ships (MASS) technologies for domestic vessel operators, and for Transport Canada to collaborate with the Seaway and port operators to encourage further investment in shore side systems that promote and accommodate advanced technologies for transit conditions, including auto locking and auto docking.
- We also would like to see an expanded charting program by the Canadian Hydrographic Service to provide high resolution bathymetric charts for the upper rivers of the Great Lakes region.

## 5 Building Climate Resiliency

Climate change threatens infrastructure throughout Canada – including infrastructure needed for transportation as well as for the protection of Canadians. In the Great Lakes, we have seen rising water levels cause damage to shoreline infrastructure.

The Transportation Assets Risk Assessment (TARA) program provided funding to assess the impacts of the changing climate on federally-owned transportation assets such as bridges, ports and airports and provide information that can be integrated into asset management and infrastructure investment plans.

Numerous Canada Port Authority (CPA) ports identified assets at risk because of climate change, and the TARA program helped to incorporate these risks into their infrastructure management plans.

- We call for investments in critical safety infrastructure that would protect shorelines, residents, and transportation from the threats of climate change.
- We call for funding for ports and terminal operators to update and repair their facilities to handle larger ships with greater cargo tonnages.
- The TARA program should be renewed and repurposed to fund infrastructure projects designed to mitigate the climactic risks identified by the program.

## 6 Improving Transportation Data Collection and Statistics

In 2017, the Government of Canada announced an investment of \$50 million over 11 years to build the Canadian Centre on Transportation Data (CCTD). As part of this initiative, Transport Canada and Statistics Canada partner together to share new data, performance indicators, analysis and research on transportation in Canada.

This funding is not enough: collection of marine transportation data in Canada by government has been largely absent for the past decade, and it will take significant resources to build up the capacity to collect regular data again on the marine mode.

- We call for further investments to the CCTD so that accurate marine transportation data can be gathered, analysed, and disseminated.



## 7 North Atlantic Right Whale Protection

Over the past several years, the Government of Canada has put into place several measures to protect the North Atlantic Right Whale from interactions with fishing gear and vessels. This has also included investments in technology to identify whale migration patterns, as well as the presence of right whales in a given area.

As major users of North Atlantic waters, Canadian shipowners have long been engaged in research and other measures to protect marine wildlife and habitat. The shipping industry reduces speed and alters routes in critical whale habitats, regularly collects important data for scientists and helps test new technology such as the early-warning whale alert system under development by a scientific group being hosted at Dalhousie University.

- We call for investment in additional sonar and glider equipment to allow for more accurate, updated data collection on right whale migration patterns, such as the MARS acoustic listening station. This would allow for quicker changes to dynamic shipping lanes to protect whales while allowing shipping to continue.
- We also call for funding to study noise reduction technologies and retrofits for ships to determine their efficacy in reducing whale strikes.
- We also call for investment in all-weather monitoring systems to supplement existing gliders or sonar equipment.

## 8 R&D for Ballast Water Management Measures, including Treatment Systems

Canada's government seeks to make Canadian and U.S. ships fit ballast water treatment systems, while U.S. rules exempt ships trading in the Great Lakes, but apply to most Canadian ships.

To date, no known type-approved ballast water management systems have been proven to reliably operate in Great Lakes conditions and trading patterns. Systems have been approved under type-approval processes that meet U.S. Regulations and the IMO Ballast Water Management System Code.

However, a system must be evaluated under the actual operating conditions of domestic waters. It must consistently meet discharge standards, whether the ship is in the Great Lakes, the St. Lawrence or the Canadian Arctic, and work within the voyage lengths and cargo operations required of the domestic trades market.

- We call on government research investments to align with U.S. efforts on management practices for lake vessels and to determine which ballast water treatment systems could work in the Great Lakes operating environment.
- Once suitable systems are identified for use by domestic vessels, we call for government to support the fitting of ballast water treatment systems on vessels as an infrastructure investment.

## 9 Accelerating the Marine Safety and Security Service Delivery Modernization Initiative (MSSSDMI)

Many programs administered by Transport Canada (TC) in the marine sector, such as marine medical certificates and large vessel registrations, rely on paper-based reporting and record keeping that are not digitized. TC has recognized the need to move towards digitization of these programs and services through the MSSSDMI, with an initial project planning completion date of 2022.

- We call for an acceleration of the MSSSDMI with more resources that will allow for the full digitization of TC's marine safety and security programs by the end of fiscal year 2022-23.



### Questions?

Please contact

CMC's Senior Director  
of Government and  
Stakeholder Relations

Sarah Douglas at:  
613-899-6417 or  
sdouglas@cmc-ccm.com