



Salish Sea Symposium
January 24, 2023

MARITIME SHIPPING

**Economic, Environmental and
Social Dimensions**

**Vida Ramin, VP Policy and Partnerships
Chamber of Shipping**



Shipping is the backbone of international trade and the global economy.

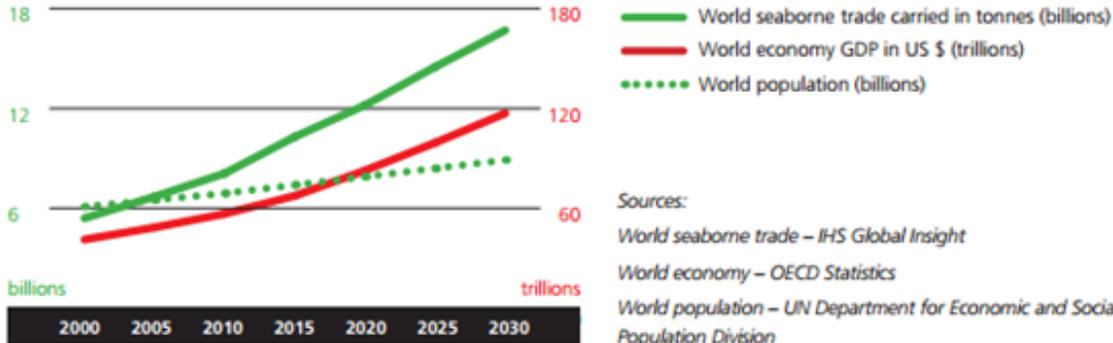


90%
of global trade is conducted by sea

THAT MEANS...

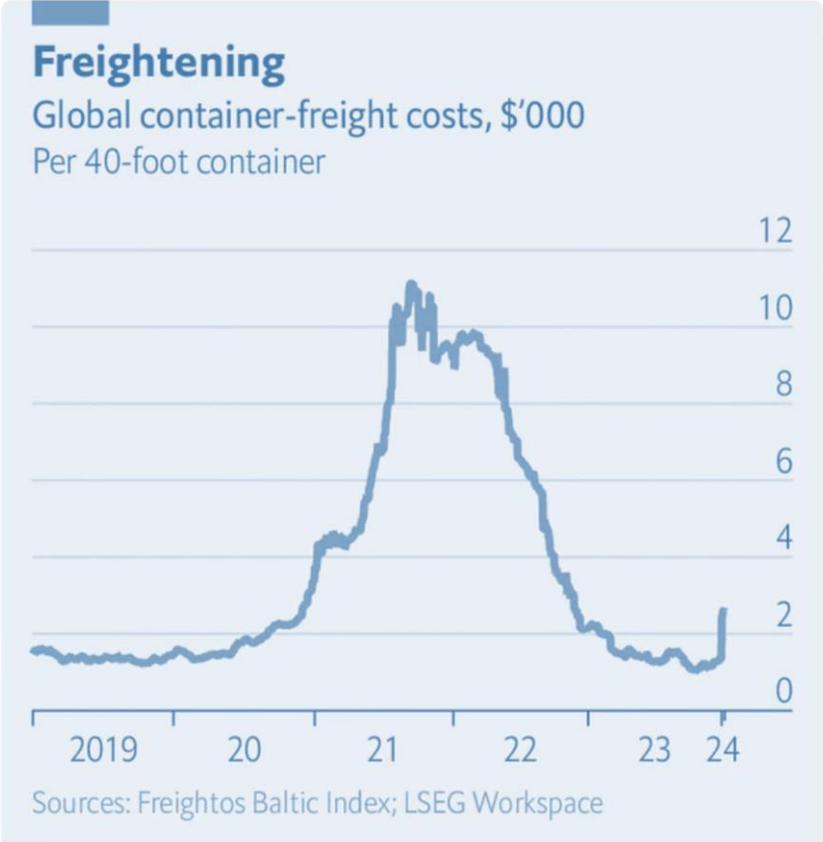
90% of all of the world's food, products and energy are transported by sea.

PREDICTED INCREASES IN WORLD SEABORNE TRADE, GDP AND POPULATION

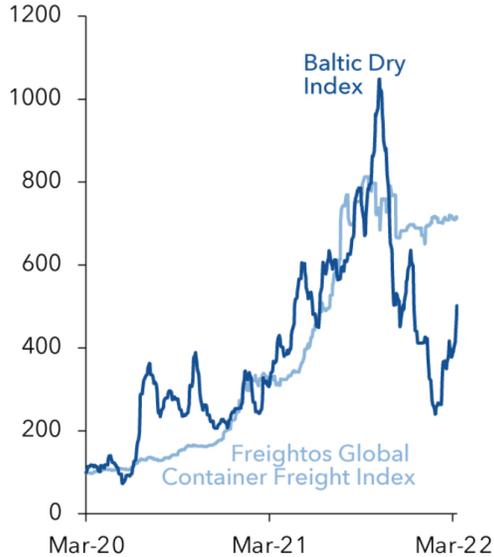


Sources: Marine Insights and the International Chamber of Shipping

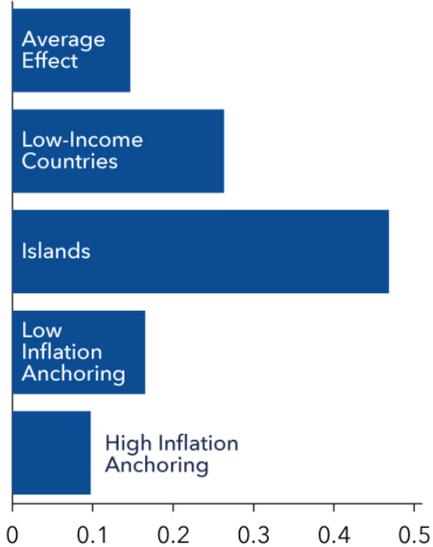
Maritime transportation is a critical component of global supply chains. This inextricable link was demonstrated during the COVID pandemic.



Shipping costs
(indexes; March 1, 2020=100)



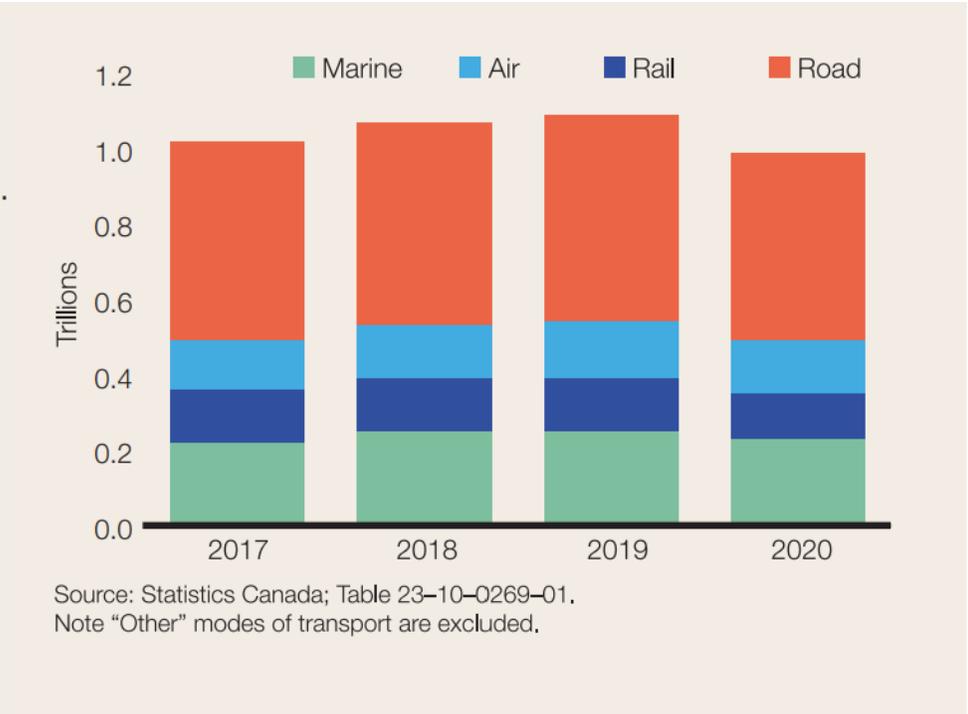
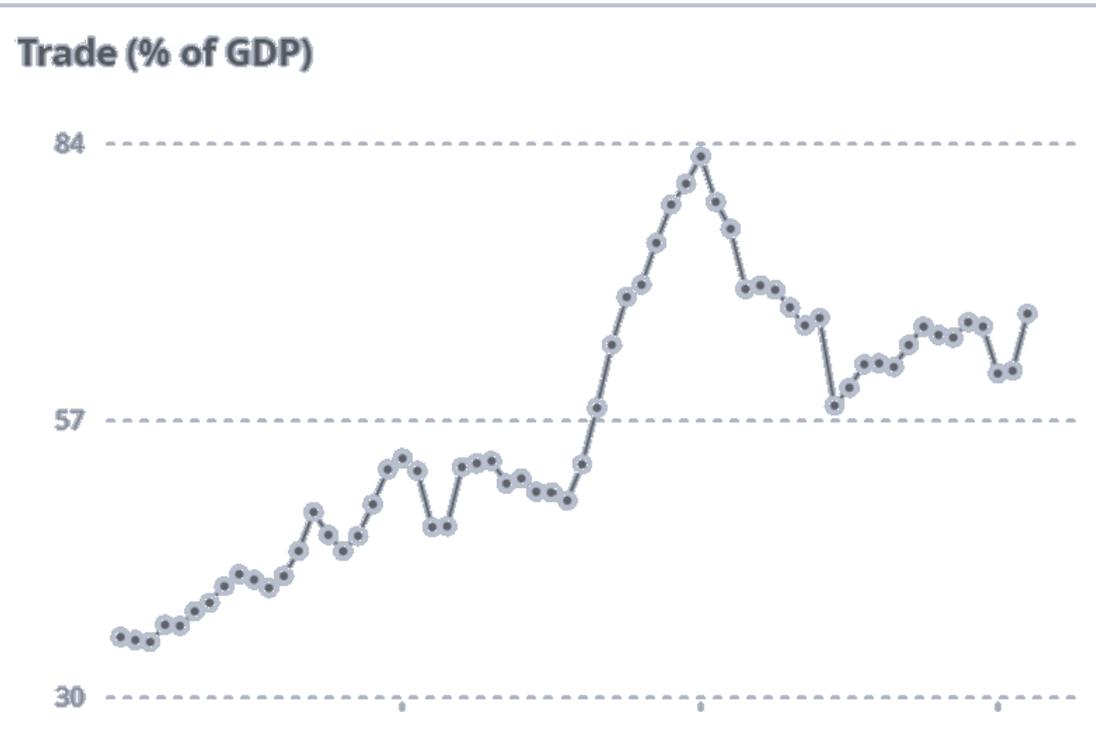
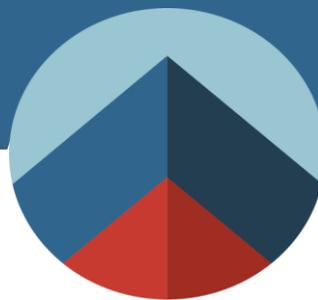
Inflation effects 12 months after shipping costs increase
(percentage point)



Sources: Haver Analytics and IMF staff calculations.
Note: The right panel is based on estimates in Carrière-Swallow and others (2022), and presents the impact of a one standard deviation increase in world shipping costs (+21.8 percentage points) on domestic headline inflation after 12 months.

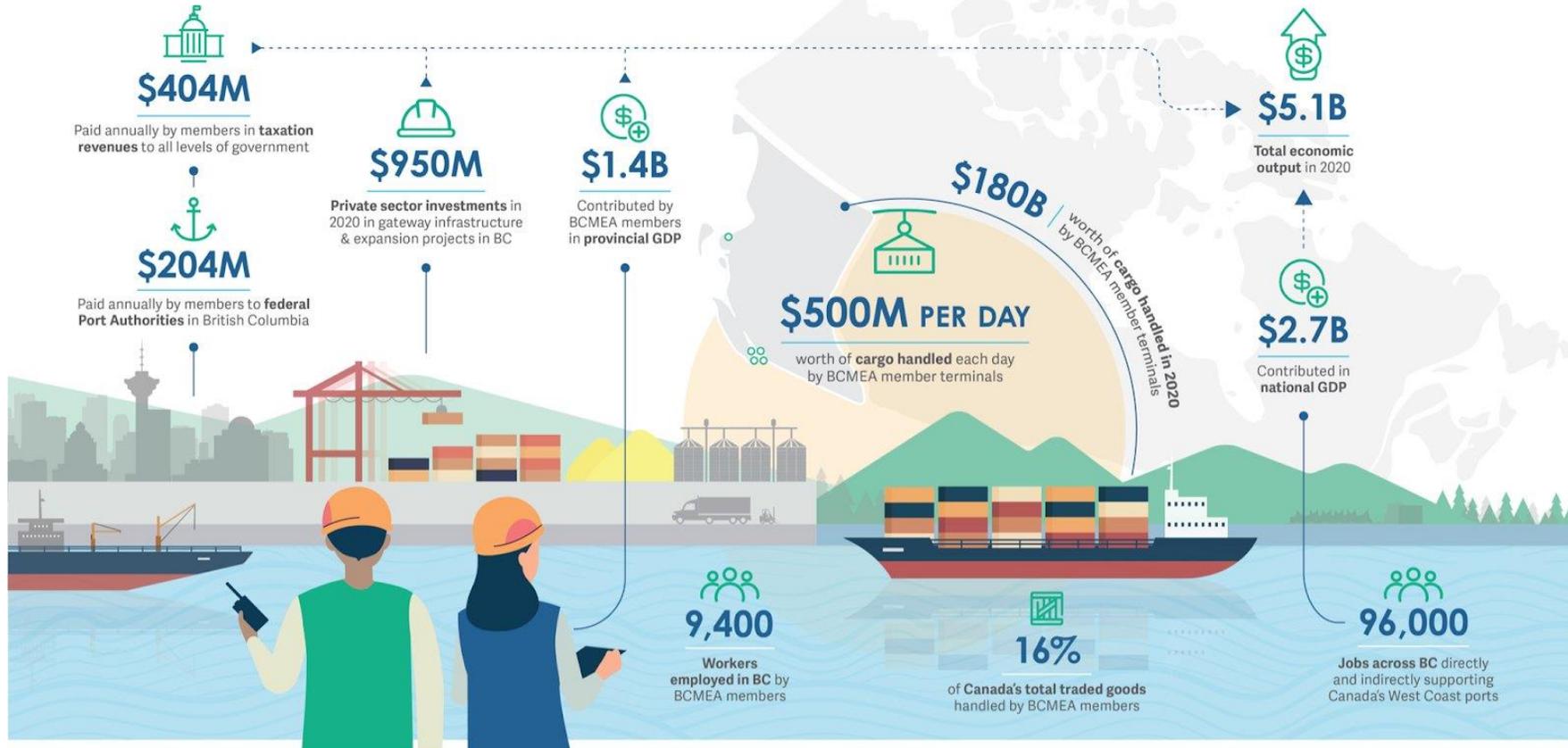


International trade is integral to the Canadian economy, with marine shipping being the second most common mode of transport.



Sources: World Bank and Final Report of the Supply Chain Task Force, 2022

The shipping industry plays an important role in British Columbia's economy, providing a range of benefits.



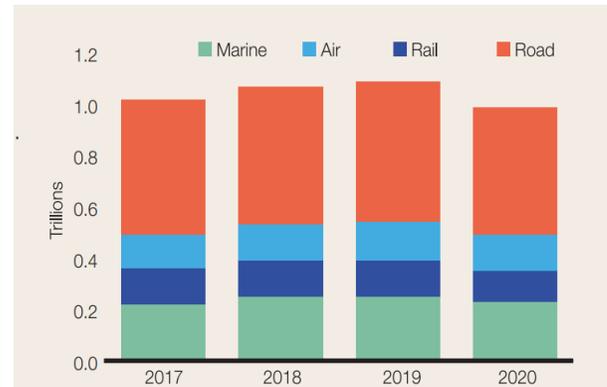
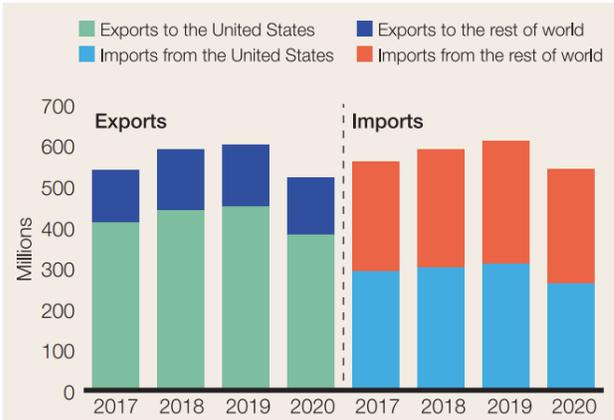
ECONOMIC IMPACT STUDY



**BC Maritime
Employers Association**

Dependence on maritime transport will increase due trade diversification.

Currently, the US is our top trading partner and roads account for 50% of merchandise trade.



Source: Statistics Canada; Table 23-10-0269-01. Note "Other" modes of transport are excluded.

Canada's Trade Diversification Strategy



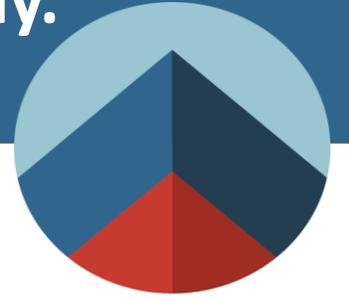
BUT...



B.C.'s Trade Diversification Strategy

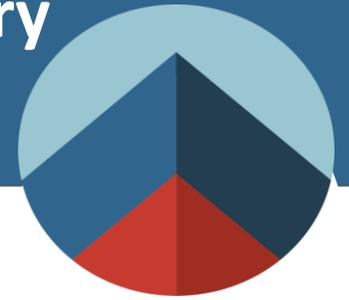
Increased trade with overseas markets and greater reliance on maritime shipping.

Maritime shipping is highly regulated – internationally and nationally.



- MARPOL: Pollution prevention (operational and accidental causes)
- SOLAS: Safety standards: construction, equipment and ops
- BWMC: Ballast water management
- COLREGS: Collision prevention
- ISPS: Safety and security of ships and port facilities
- Polar Code: Risk reduction in Arctic and Antarctic waters
- FUND: Compensation for oil pollution damage
- CLC: Civil liability for oil pollution damage
- BUNKER: Civil liability for bunker oil pollution damage
- OPRC: Oil pollution preparedness, response & cooperation
- STWC: Seafarer training and certification
- Maritime Labour Convention: Seafarer welfare
- International Safety Management Code: Safe management and operation of ships and for pollution prevention
- Hong Kong Convention: Safe and sustainable ship recycling
- Salvage Convention: Salvage of vessels in distress at sea
- Canada Marine Act
- Canada Shipping Act
- Pilotage Act
- Ocean Act
- Species at Risk Act
- Wildlife Act
- Fisheries Act
- National Marine Conservation Areas Act
- Marine Liability Act
- Marine Insurance Act
- Double Hull Standards
- Oil Tanker Moratorium Act
- Marine Spills Contingency Plan
- Emergency Management Act
- Marine Transportation Security Act
- Transportation of Dangerous Goods Act
- Canadian Environmental Protection Act

The shipping industry participates in several collaborative voluntary initiatives, including (1) the ECHO Program;



2022 Program Highlights



93% participation rate - Haro & Boundary
82% participation rate - Swiftsure Bank



Underwater noise reduction - up to 48%



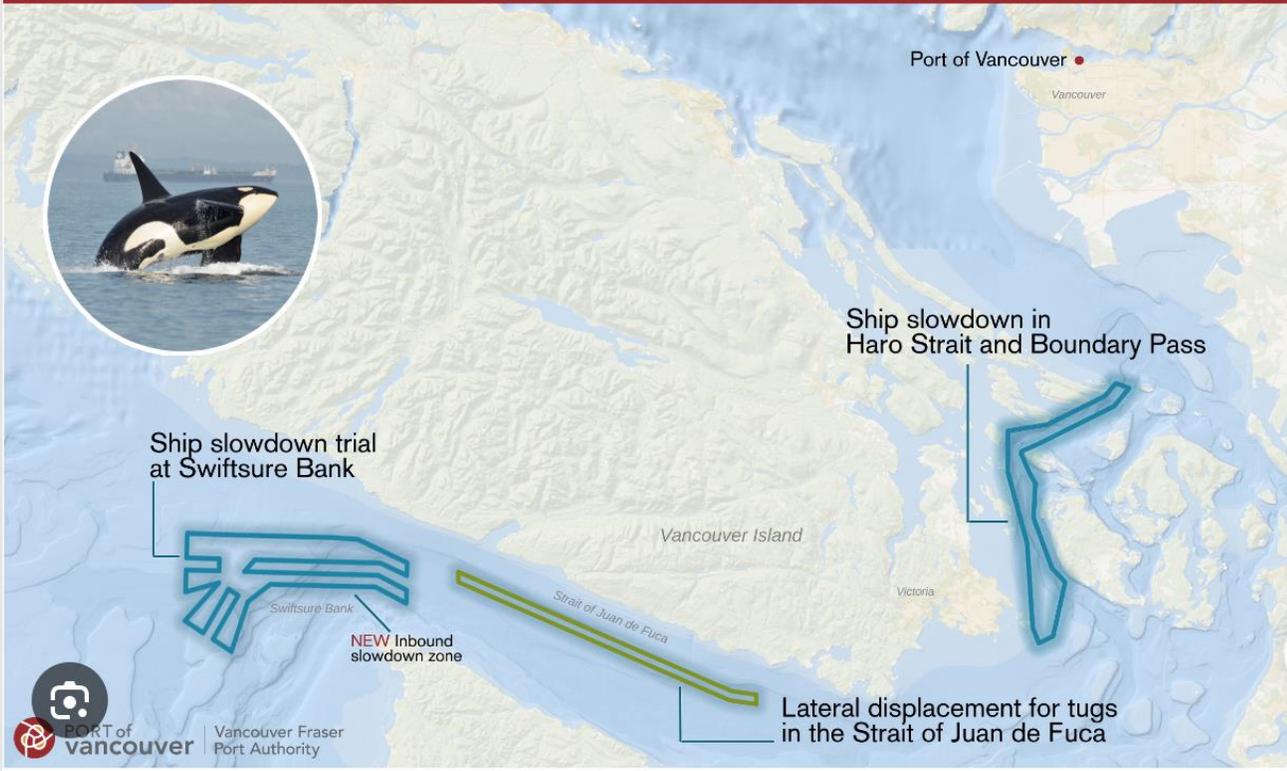
Localized air pollution reduction: up to 25%



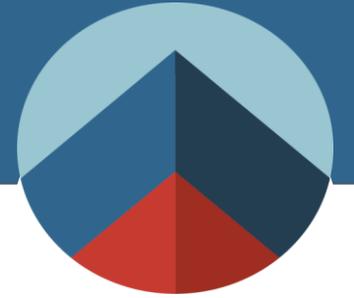
Vessel strike risks reduced by up to 27%

Enhancing Cetacean Habitat and Observation (ECHO) Program

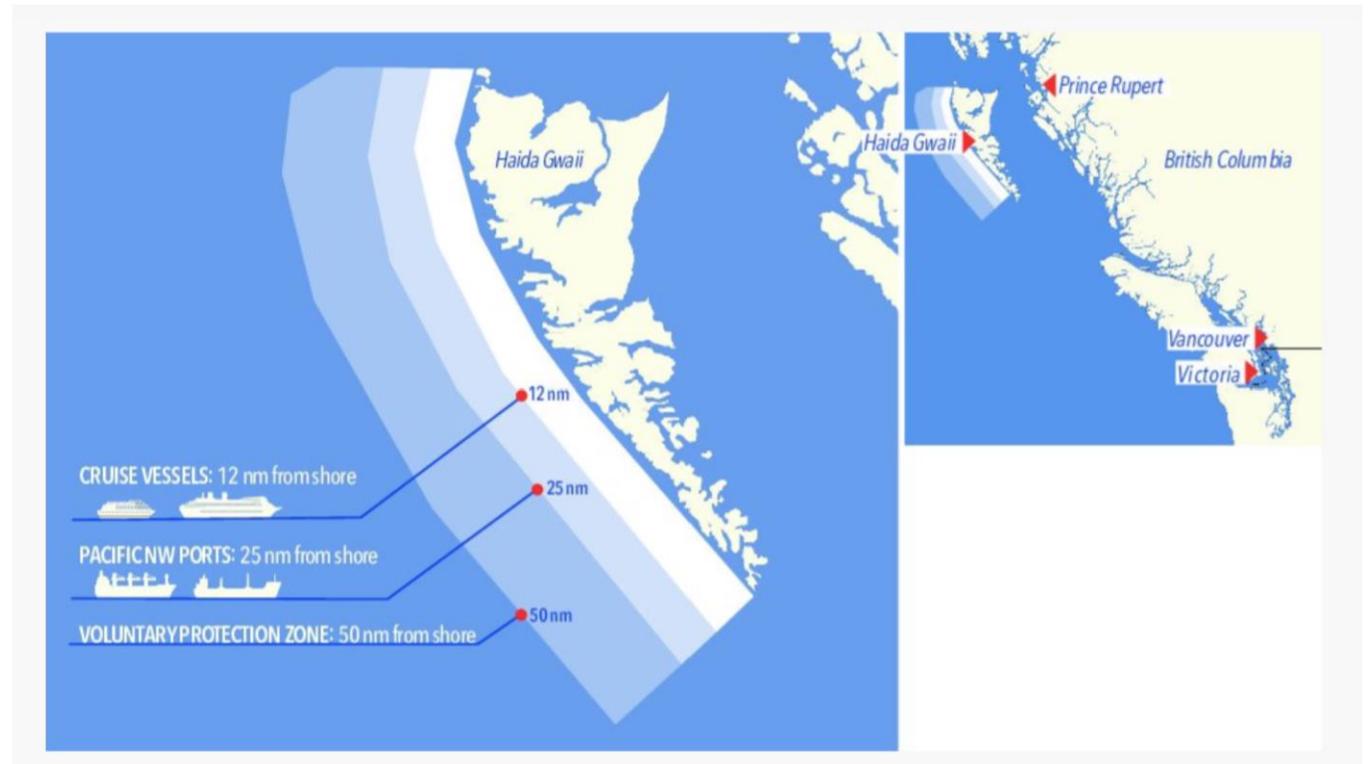
Voluntary underwater noise reduction measures in southern resident killer whale critical habitat



(2) The Haida Gwaii Voluntary Protection Zone (VPZ); and

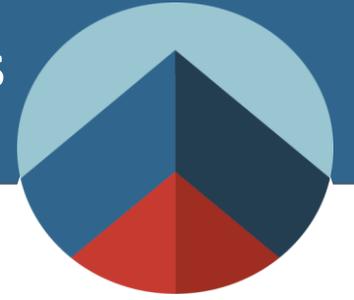


- Partnership between Council of Haida Nation, Canada and the marine shipping industry
- Impact mitigation through reduction of vessel transits within a sensitive ecological area
- Vessels asked to observe a minimum distance from shore
- Participating cargo vessels observe a minimum distance of 50 nm
- Total participation rate in 2022: 94% (5% improvement over 2021)

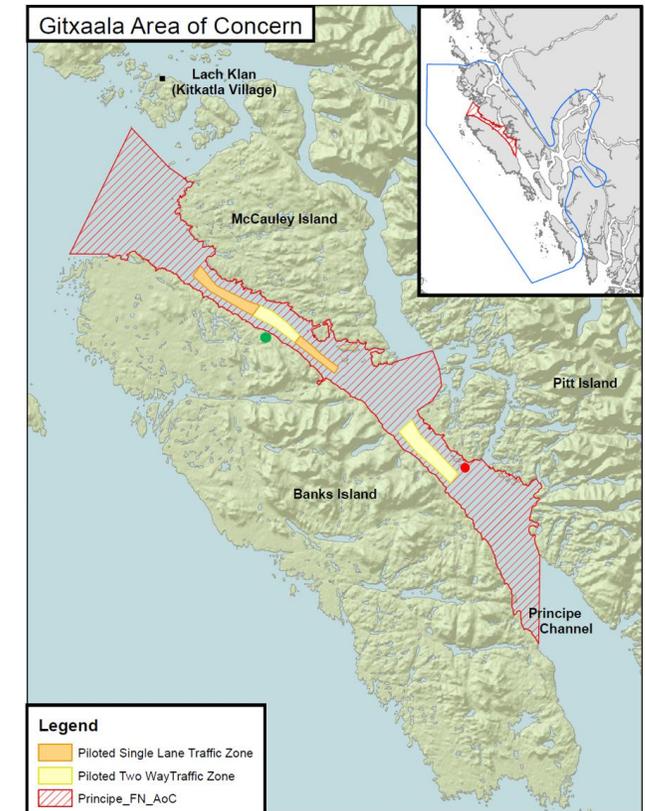
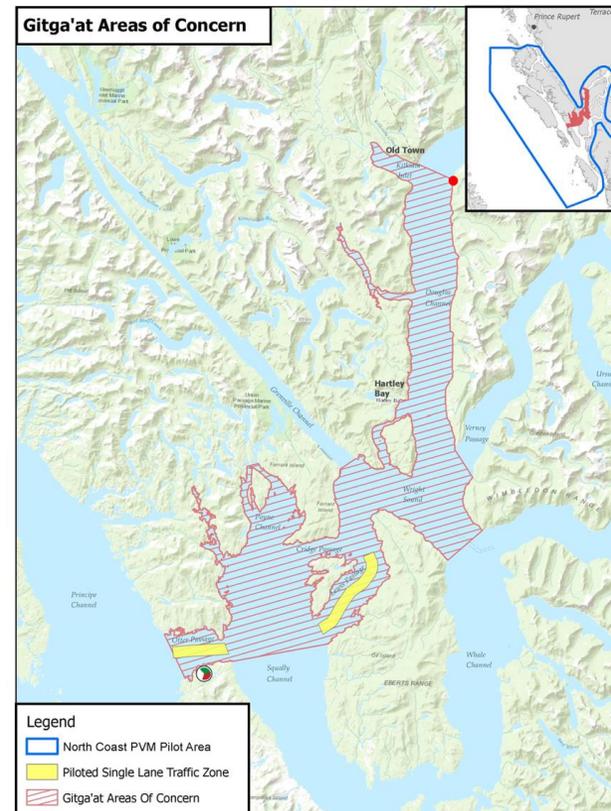
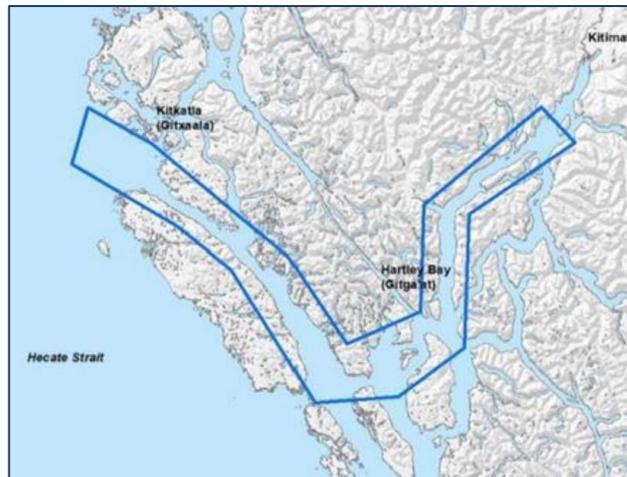


Map Showing VPZ and Requested Minimum Transiting Distances

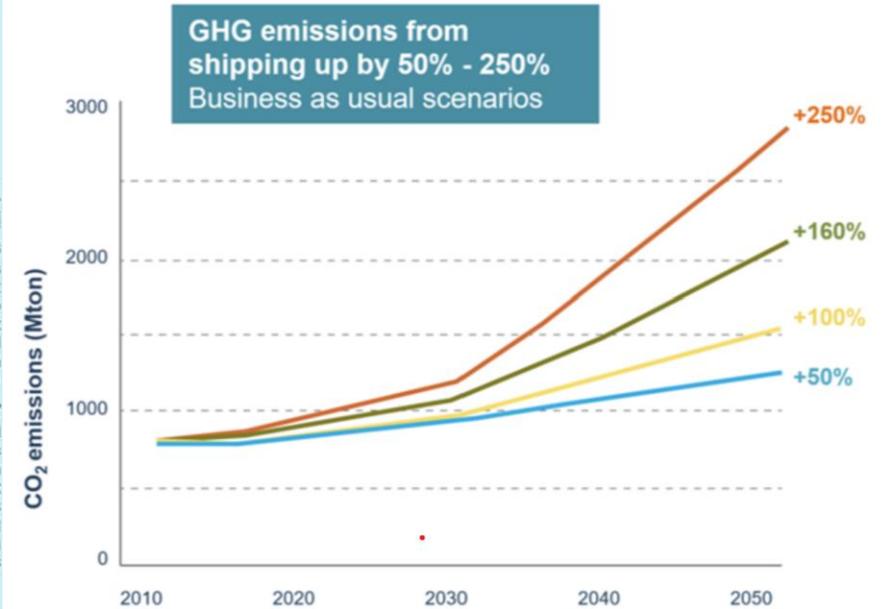
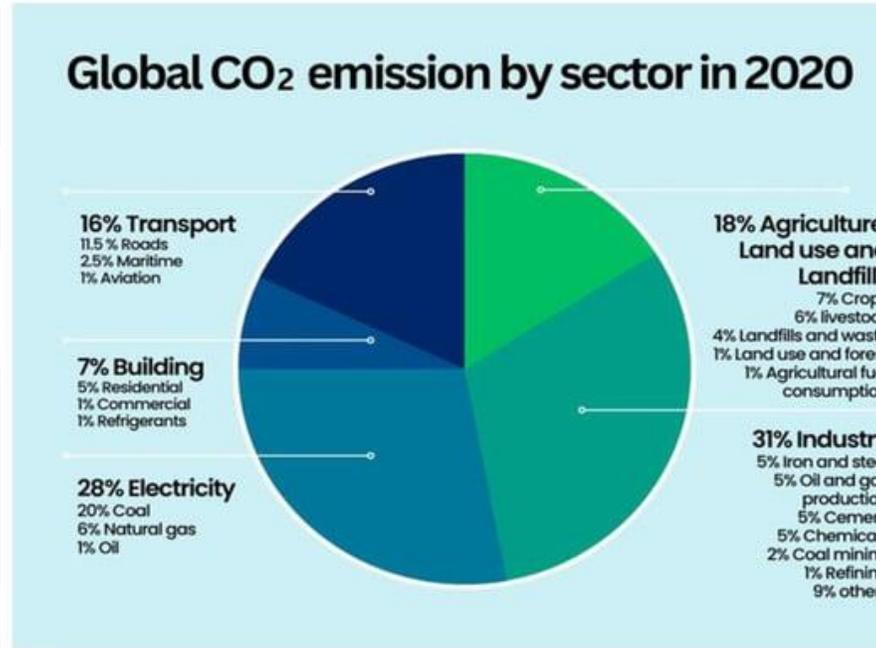
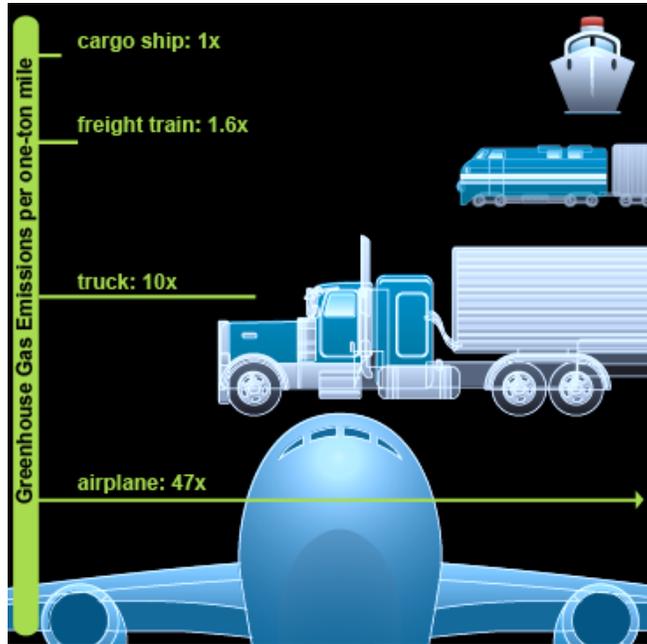
(3) The Implementation North Coast Waterway Management Guidelines



- Partnership between Gitga'at and Gitxaala Nations, Canada and shipping industry.
- Voluntary actions to safety by reducing conflicts between First Nations' marine use activities and commercial vessels.
- Actions include traffic separation, vessel speed reductions and single lane traffic for piloted gas carriers.



A ship is the most energy efficient mode of cargo transport. Despite this, shipping is responsible for 3% of global emissions and business as usual is not an option.

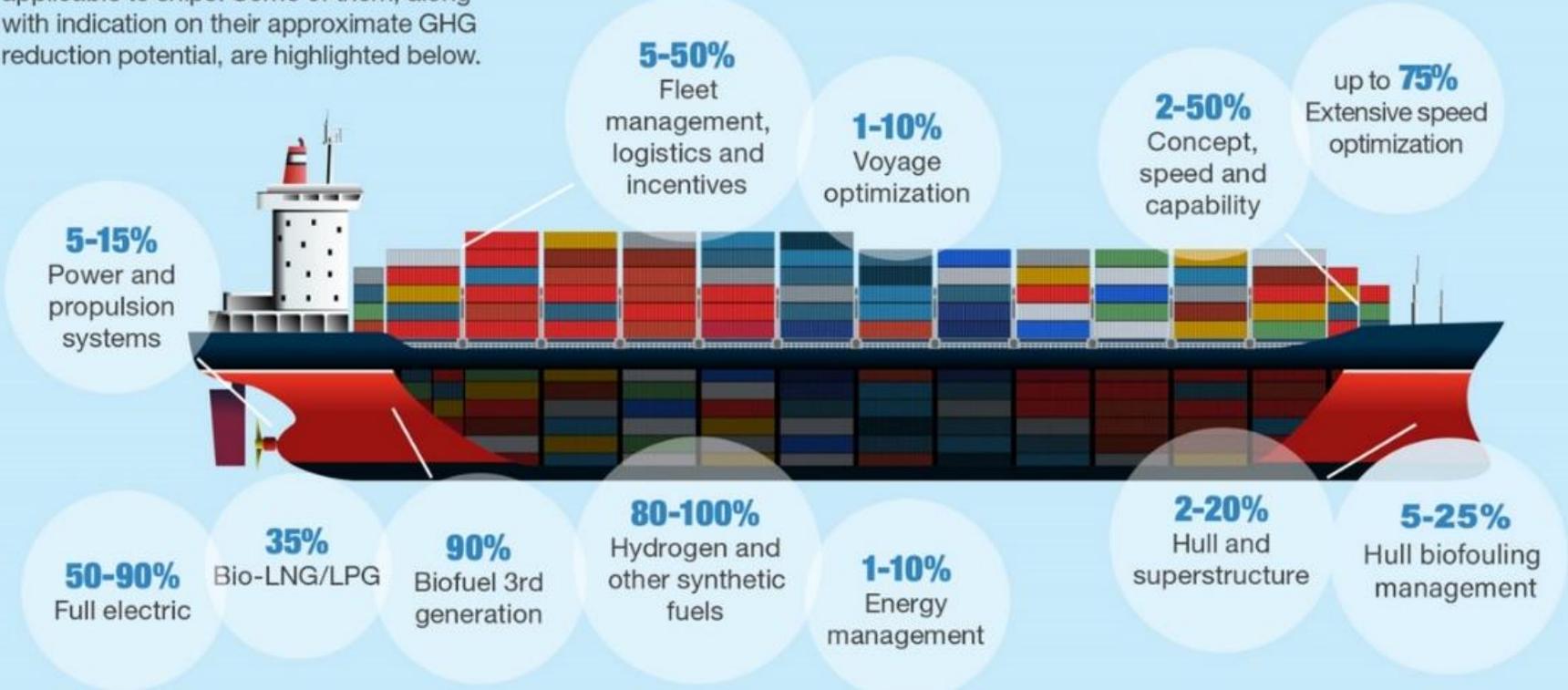


Sources: (1) Simchi-Levi, 2010; (2) Zadeh et al, 2023; and (3) Third IMO GHG Study, 2015.

Maritime shipping companies are evaluating and pursuing a range of pathways to reduce GHG emissions from their operations.

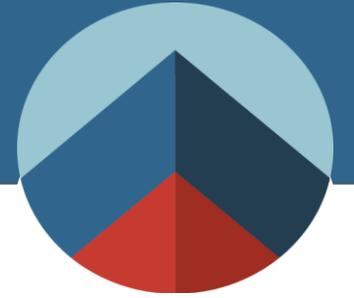


Achieving the goals of the Initial IMO GHG Strategy will require a mix of technical, operational and innovative solutions applicable to ships. Some of them, along with indication on their approximate GHG reduction potential, are highlighted below.

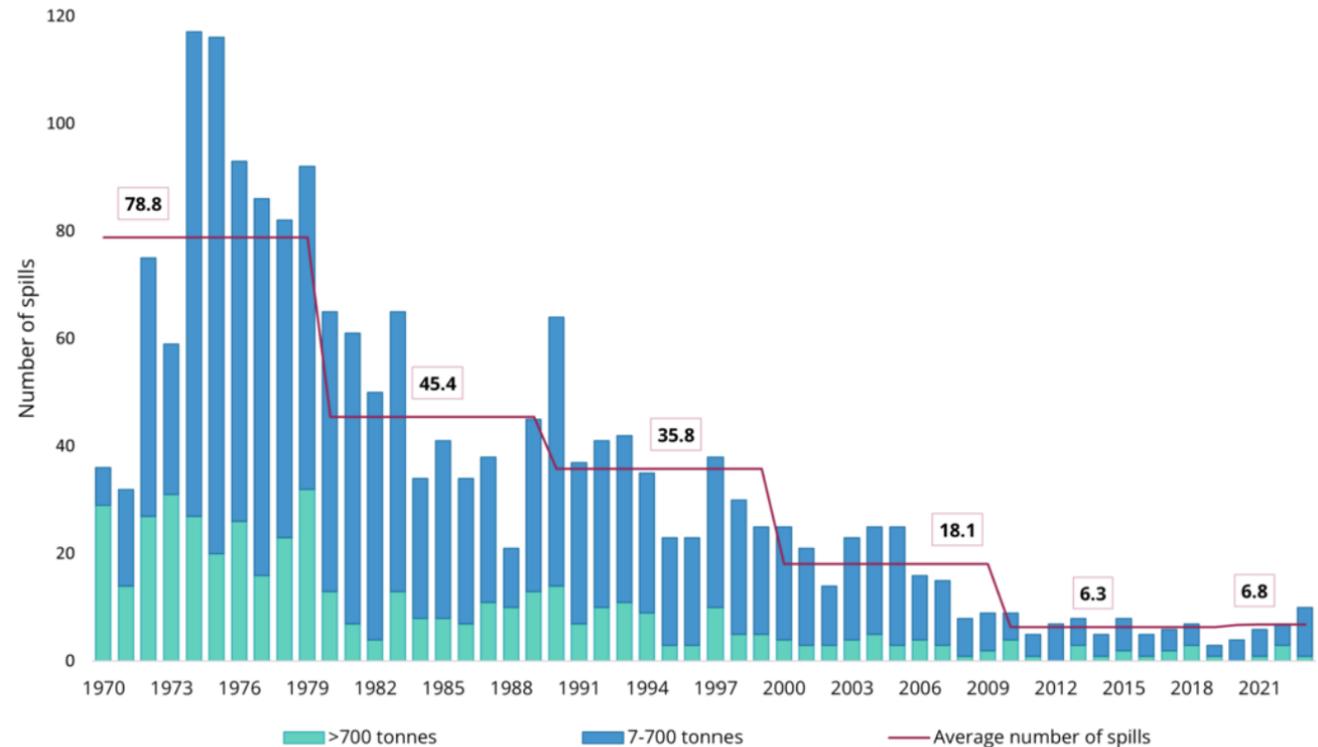


Source: IMO

The majority (67%) of Canadians are concerned about the potential for oil spills in Canadian waters. That concern is understandable. If you are, here are some things you should know...



- The industry is continuously improving.
- Globally, the frequency of marine oil spills have declined by 90% since the 1970s.
- Locally, we need to do a better job of collecting and transparently disseminating oil spill data.



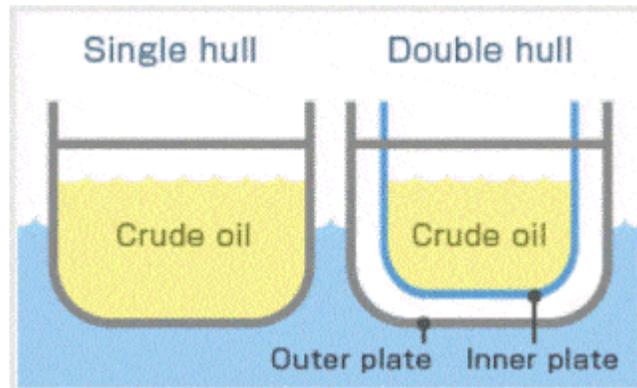
Source: International Tanker Owners Pollution Federation, 2023

Shipping companies calling on west coast ports are equally concerned about marine oil spills and play a role in all pillars of defence against them.



Oil Spill Prevention and Preparedness

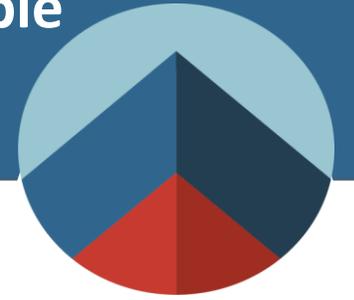
- Mandatory double hulls for tankers
- Shipboard Oil Pollution Emergency Plan
- Oil Record Book
- Vessels must carry oil spill response equipment
- Crew training and regular drills to ensure readiness
- Tug escorts
- Two pilots



Oil Spill Response

- Vessels must report oil spills to the relevant authorities
- Vessels must cooperate with oil spill response efforts
- Every vessel ≥ 300 GT is required to have an arrangement with a response organization
- Western Canada Marine Response Corporation (WCMRC) is the response organization on the west coast
- WCMRC and its activities are 100% industry funded by shipping companies and oil handling facilities

Consistent with the polluter-pays principle, shipping companies are responsible for cleanup and compensation.



Civil Liability Convention (CLC)

The CLC places liability on the owner of the ship from which the oil escaped or was discharged.

International Fund for Compensation for Oil Pollution Damage

It establishes an international fund to provide compensation for oil pollution damage not covered by the CLC.

It is financed by contributions from oil tanker owners and operators.

Ship Source Oil Pollution Fund (SOPF)

This Canadian fund applies to any type of oil spill from any ship. The fund was established through levies collected from oil cargo companies.

Changes SOPF in December 2018 removed the per-incident limit of liability.

Thank You



Vida Ramin

Vice President, Policy and Partnerships

Chamber of Shipping

vida@cosbc.ca