

MarineA history of innovation





A World-Class Marine Hub

British Columbia (B.C.), Canada is pioneering ocean technology, from establishing one of the world's first and largest undersea digital observatories to developing deep-water submersibles and remotely operated vehicles. With the world's largest hybrid and fully electric tugboat fleet, B.C. is constantly pushing the boundaries of innovation. With ongoing shipyard expansion, the Province continues to move forward on new commercial applications for both established and groundbreaking technologies. B.C. has cultivated a strong foundation in ocean science research and technology to position itself as a leader in various domains including:

- Defence and security
- Marine transportation, shipbuilding and ship repair
- Environmental monitoring and ocean stewardship



A Maritime Economy

As a pacific gateway with over 26,000 kilometers of coastline, B.C. has a rich history in the maritime sector with 130 years of shipbuilding, refit, repair, maintenance and supply-chain activities. Today, B.C.'s blue economy is the largest in Canada, with the industrial maritime sector generating approximately \$7.2 billion in total output, and sustaining jobs for over 34,000 people.



British Columbia companies are at the leading edge of research and commercial development of advanced marine technologies.





Diverse Marine Sector

The diverse marine sector in B.C. includes shipbuilding and design, ship repair, marine transportation, aquaculture and fishing, tourism and recreation, government services and defence

Established Expertise

B.C. companies are at the forefront of research and commercial development of advanced ocean technologies. Companies such as Barnacle Systems and International Submarine Engineering have developed, manufactured and exported products and systems to government and commercial customers worldwide.

World-leading Research Network

Universities, research organizations and private companies in B.C. work closely to share knowledge from the marine technology and science community and to commercialize data and components of its advanced research.

The Bamfield Marine Sciences Centre (BMSC) is a shared campus with the University of Victoria, University of British Columbia, University of Alberta, University of Calgary and Simon Fraser University. Located on the outer west coast of Vancouver Island, BMSC provides access to a diversity of marine, terrestrial, freshwater and cultural sites of the North East Pacific basin.

Highly Educated Workforce

B.C.'s advanced education system offers world-renowned programs in ocean sciences and technology. With highly respected programs in oceanography, environmental sciences and marine technology, post-secondary education system is training the future generation of ocean technology innovators. The educated workforce at B.C.'s ocean technology companies can provide advanced solutions to the challenges of working in the marine environment.

Industry Profile

British Columbia's marine industry features a range of capabilities and sub-sectors. Industrial marine clusters in B.C., primarily situated in Vancouver and Victoria, host over 1,000 companies, including Seaspan and its participation in the multi-billion-dollar National Shipbuilding Strategy for the Government of Canada. These clusters include associations, universities, research institutes and a large naval presence.



B.C. companies use advanced software, engineering, logistics and techniques to fabricate, repair and refurbish coastal and ocean-going ships. B.C.'s experienced companies have global reputations in naval architecture and ship design, computer-aided design, data analytics and digital twinning, and energy efficient technologies. For example, Seaspan Shipyards, supported by over 500 B.C. companies in its supply chain, is a strategic partner designing and building ships for the National Shipbuilding Strategy (NSS), including a polar icebreaker for the Canadian Coast Guard and two joint support ships for the Royal Canadian Navy.



Small Craft Marine Vessels

B.C. is at the forefront of ocean vehicle technology, producing remotely operated vehicles (ROVs), autonomous underwater vehicles (AUVs), submersibles and the world's largest fully electric tugboat fleet. Electric tugboats, pioneered by local operators, represent a significant advancement in alternative fuel technology, enabling quiet and clean daily operations, improving the lives of marine life

Ocean Science Research and Technology

B.C. ocean technology companies such as Open Ocean Robotics is a global leader in sustainable ocean monitoring with its solar-powered uncrewed surface vehicles and MarineLabs coastal intelligence and insights support ports, engineers and fleet operators across the maritime sector with high quality real time coastal intelligence data. Other leading B.C. companies, like AML Oceanographic, offer instrumentation sensors and information systems to measure and process marine parameters, as well as their components.



Marine Professional Services

B.C. specializes in marine engineering, including the education and training around industrial marine activities. B.C. companies include internationally recognized naval architects, like Robert Allan Ltd., whose tug and workboat designs are deployed worldwide, and full-service naval architecture and marine engineering design firms, like Capilano Maritime Design, a trusted name in passenger ferry and workboat innovation.

Renewable Energy Production and Infrastructure

Harnessing significant wind, wave, tidal and current resources, B.C. companies are developing new sources of power to help meet the growing demand for clean and renewable energy in Canadian and international markets. Industry and not-for-profit organizations such as Clean Energy BC and Alacrity Canada work to accelerate and promote B.C.'s marine energy sector.

World-Class Research Institutions and Centres

Strong connections between British Columbia's research and academic institutions and our commercial sector build a strong and forward-looking culture.

Leading research institutions and centres include:

- Bamfield Marine Sciences Centre
- British Columbia Institute of Technology,
 Marine Studies
- Camosun College, Nautical Training Transport
- Fisheries and Oceans Canada
- Ocean Wise Research Institute
- University of British Columbia, Department of Earth, Ocean and Atmospheric Sciences
- University of Victoria, School of Earth and Ocean Sciences





Supportive Government

The Government of British Columbia actively supports buyers and investors through competitive taxes, an open economy and international trade missions, particularly benefitting marine technology companies. With our business-friendly environment and abundant trade opportunities, B.C. attracts investment from all over the world.

Encouraging Investment and Growth

- Coast Conservation Endowment Fund Foundation (Coast Funds) — in collaboration with the Government of B.C. and backed by a \$60 million grant and a strategy aiming for over \$200 million in investments.
 The initiative supports sectors like fishing, tourism and renewable energy.
- B.C. is a key player in Canada's National Shipbuilding Strategy (NSS), allocating over \$2 billion in contracts to Canadian firms, with Seaspan ULC receiving a multi-billion-dollar non-combat fleet renewal program. Seaspan's \$185 million investment transformed Vancouver Shipyards into a state-of-the-art facility, making it a leading shipbuilding center in North America.

B.C. Maritimes Industries Strategy

- Launched in 2023 to build marine sector capacity, capability and competitiveness.
- Invested up to \$25 million in new and upgraded maritime infrastructure and assets, through the B.C. Maritime Industries Infrastructure Modernization (MIIME) and Expansion Grant Program, to meet growing market demand for maritime services and attract more investment to BC. The last application intake for the MIIME Grant Program ran in late 2024 and the program is oversubscribed with all projects expected to complete by late 2025.





- B.C.'s geographic location and historic investment in maritime industries have created a competitive advantage.
- B.C. has over 1,000 industrial marine companies and boasts critical infrastructure including the Port of Vancouver (Canada's largest) and Port of Prince Rupert serving Canada's busiest trade route for deep sea vessels and cruise ships.
- The Province is also home to the Esquimalt Graving Dock, the largest hard bottom, non-military drydock on the west coast of the Americas that provides world-class vessel repair, refit and maintenance services.









- Prime location on Canada's west coast
- Well established federal and provincial funding programs
- Skilled, experienced and deep talent pool
- Two of Canada's largest ports and busiest trade routes
- World-class research institutions, post-secondary and technical training institutions
- Globally recognized maritime capabilities
- Environmental and ethical leadership through investments and funding supports for clean energy and industry decarbonization

Join these world-class companies making waves in B.C., including:

- 3GA Marine
 Barnacle Systems
 Cellula Robotics
 Kingfisher Boats
- Open Ocean Robotics
 OSI Maritime
 Point Hope Maritime/Ralmax
- Robert Allen Ltd.
 Seaspan
 Zodiac Technologies

British Columbia, Naturally.

