



Ocean
Alliance
Canada



Supply Chain Manager

BNOS PROFILE



Funded by the
Government of Canada's
Future Skills Program



ROLE OVERVIEW

Supply Chain Managers in the blue economy are responsible for overseeing and optimizing the end-to-end supply chain operations. This includes procurement, transportation, storage, and distribution within marine-based industries such as fisheries, aquaculture, ocean energy, shipping, and marine manufacturing.

This role ensures sustainability, regulatory compliance, and resilience of supply chains that operate in environmentally sensitive coastal and ocean-based contexts.

NATIONAL OCCUPATIONAL CLASSIFICATION

10012 - Purchasing Manager

11201 - Professional occupations in business management consulting

12102 - Procurement and purchasing agents and officers

STRATA LEVEL

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EDUCATION AND EXPERIENCE

A bachelor's degree or college diploma in business administration, commerce or economics is usually required.

- Designation Supply Chain Management Professional (SCMP) or registration in the educational program of the Supply Chain Management Association may be required. Public Relations



TECHNICAL COMPETENCIES

SUPPLY CHAIN PLANNING

Develops integrated supply chain plans for marine-based operations and coastal logistics networks to ensure responsive, efficient, and resilient delivery of goods and services in ocean environments.

- Analyzes marine logistics data and forecasts to develop adaptive strategies that align supply and demand under variable environmental and economic conditions.
- Develops sourcing and replenishment schedules for offshore and coastal operations to maintain optimal inventory flow throughout seasonal and regulatory cycles.
- Coordinates marine transportation and procurement schedules to ensure synchronized product movement and production readiness.
- Establishes contingency plans for disruptions caused by weather, port delays, or regulatory changes to preserve supply continuity.
- Defines and tracks key supply chain metrics such as cost, quality, and turnaround time to evaluate system performance and guide continuous improvement.
- Forecasts material costs and documents planning workflows and responsibilities to support budgeting, efficiency, and operational transparency.

PROCUREMENT STRATEGY & SOURCING

Designs procurement frameworks and sourcing plans for marine-based goods and services to ensure cost-effectiveness, reliability, and sustainability in ocean economy supply chains.

- Implements supplier evaluation frameworks including traceability, sustainability, and risk mitigation criteria.
- Conducts supplier audits and site visits to assess manufacturing capability and compliance with marine standards.
- Monitors vendor performance using service levels and KPIs to ensure delivery and quality benchmarks are met.
- Analyzes supplier performance data to identify issues, enforce accountability, and drive continuous improvement.
- Integrates supplier compliance logs, certifications, and due diligence processes into operational planning.

RISK MANAGEMENT & RESILIENCE PLANNING

Identifies, evaluates, and mitigates supply chain risks across ocean-based operations to build resilience against environmental, regulatory, and geopolitical disruptions.

- Assesses exposure to risks such as extreme weather, marine transport delays, and international trade shifts in blue economy supply chains.
- Implements mitigation strategies including supplier diversification, emergency sourcing, and backup inventory protocols.
- Develops risk assessment frameworks to guide scenario planning and continuity strategy development.
- Coordinates resilience planning across stakeholders to maintain critical operations during disruptions.
- Evaluates post-incident supply chain data to refine recovery protocols and prevent future failures.



TECHNICAL COMPETENCIES

DATA ANALYTICS FOR SUPPLY CHAIN OPTIMIZATION

Applies data analytics and digital tools to monitor, predict, and optimize supply chain performance in marine and coastal logistics environments.

- Implements analytical tools to monitor inventory turnover, distribution timelines, and sourcing efficiency.
- Evaluates dashboard outputs and forecasting models to guide real-time operational decisions in marine logistics.
- Conducts root cause analysis of supply chain inefficiencies and recommends process improvements.
- Develops predictive models to anticipate demand and optimize sourcing and transportation schedules.
- Supports cross-functional teams with visualized data insights to align planning with operational outcomes.

SUPPLIER EVALUATION & COMPLIANCE

Assesses, monitors, and validates supplier performance and regulatory adherence to ensure ethical, legal, and consistent supply chain operations in the oceans economy.

- Implements supplier evaluation frameworks including traceability, sustainability, and risk mitigation criteria.
- Conducts supplier audits and site visits to assess manufacturing capability and compliance with marine standards.
- Monitors vendor performance using service levels and KPIs to ensure delivery and quality benchmarks are met.
- Analyzes supplier performance data to identify issues, enforce accountability, and drive continuous improvement.
- Integrates supplier compliance logs, certifications, and due diligence processes into operational planning.

LOGISTICS AND TRANSPORTATION

Coordinates transportation systems and multimodal logistics for ocean-based distribution channels to ensure timely, cost-effective, and compliant movement of goods through marine and coastal infrastructure.

- Oversees port logistics, vessel schedules, and inland transfer coordination to minimize downtime and ensure efficient material flow.
- Ensures cold chain integrity for perishable marine products using tracking systems and temperature controls to preserve product quality.
- Applies international maritime shipping laws and Incoterms to establish compliant and reliable shipping agreements.
- Collaborates with customs brokers and marine authorities to expedite cross-border movement and reduce delays.
- Implements fuel-efficient and low-emission transportation methods to reduce environmental impact in marine operations.
- Selects transportation routes and consolidates shipments to optimize cost, reduce transit times, and streamline distribution.



INVENTORY AND WAREHOUSE MANAGEMENT

Monitors inventory systems and port-based storage facilities for ocean-derived products and equipment to optimize resource use, minimize waste, and maintain operational readiness in marine contexts.

- Maintains digital inventory systems to track stock levels, shelf life, and turnover rates for ocean-based goods.
- Forecasts inventory needs using marine harvest, aquaculture, or seasonal demand cycles to prevent shortages and overstocking.
- Implements climate-resilient and hazard-resistant storage strategies in port and coastal warehouses to protect goods.
- Analyzes inventory data to improve turnover rates, reduce spoilage, and enhance customer service responsiveness.
- Designs warehousing strategies for marine equipment and finished products to optimize handling time and space utilization.
- Determines appropriate staffing and equipment levels for warehouse operations to maintain safe and efficient material handling.



STRATEGIC THINKING

Applies long-term planning and critical analysis to marine-based supply chain systems and economic scenarios to drive innovation, mitigate risk, and support sustainable growth in the blue economy.

- Evaluates global market trends and marine policy changes to anticipate their impacts on logistics and procurement strategies.
- Leads scenario planning and risk modeling to prepare for regulatory, environmental, or supply disruptions.
- Advises leadership on sourcing and logistics strategies that align with long-range environmental and financial objectives.
- Aligns supply chain models with emerging blue economy opportunities such as offshore energy or sustainable aquaculture.
- Implements supply chain transformation initiatives to improve competitiveness, scalability, and ecological alignment.

COMMUNICATION

Positively directs outcomes by delivering communications that results in a better understanding of goals and objectives that capture interest and gain support for immediate action.

- Confers with supply chain planners to forecast demand and align supply strategies for coastal and offshore operations.
- Meets with suppliers to review performance metrics, provide feedback, and discuss upcoming changes in production or demand.
- Diagrams supply chain models and workflows to support discussions with customers and internal teams.
- Communicates procurement and logistics updates in a timely and concise manner to support stakeholder coordination.
- Prepares briefings and presentations to inform executive leadership on marine logistics strategy, risk, and performance.

COLLABORATION

Engages in professional collaborative efforts with other members of the team, including sharing information and expertise, utilizing inputs from others, and recognizing others contributions to work towards a common goal.

- Develops procedures to coordinate supply chain operations with sales, marketing, finance, production, and quality assurance teams.
- Participates in cross-departmental planning for product launches, engineering changes, or new marine initiatives.
- Collaborates with procurement, engineering, and sustainability teams to identify and onboard new suppliers aligned with marine compliance standards.
- Engages with port authorities, local communities, and Indigenous stakeholders to align marine logistics activities with shared development objectives.
- Leads multi-stakeholder task forces to coordinate marine infrastructure usage and joint distribution strategies.



LEGAL, POLICY, & REGULATORY COMPETENCIES

MARINE REGULATORY COMPLIANCE

Implements legal and regulatory frameworks across maritime logistics and ocean resource procurement activities to ensure full compliance with international law, national standards, and local governance requirements.

- Interprets and applies applicable marine transport, fisheries, and trade regulations to procurement and distribution activities.
- Monitors supplier compliance with labor, environmental, and marine safety laws to uphold legal and ethical standards.
- Coordinates customs documentation and regulatory filings for marine imports and exports to meet jurisdictional requirements.
- Maintains marine certifications, audit trails, and compliance documentation to support transparency and regulatory readiness.
- Reviews supply chain procedures regularly to ensure alignment with evolving marine conservation laws and environmental policies.



ENVIRONMENTAL COMPETENCIES

SUSTAINABLE MARINE SUPPLY CHAIN PRACTICES

Integrates sustainability principles and environmental safeguards into procurement, transportation, and inventory practices in marine industries to minimize ecological impact, support marine biodiversity, and promote responsible resource use.

- Sources marine-based products from certified sustainable operations to support ecosystem protection.
- Implements eco-friendly packaging, transport, and storage practices to minimize marine pollution and waste.
- Designs reverse logistics systems to facilitate the reuse, recycling, or safe disposal of marine-sector materials.
- Conducts life cycle assessments to evaluate the environmental impact of products and operational processes.
- Aligns procurement and logistics systems with evolving environmental policies and stakeholder sustainability goals.
- Identifies opportunities to convert waste streams into by-products to promote marine circular economy outcomes.



ENVIRONMENTAL EDUCATION FOR OCEANS LITERACY

Designs and implements ocean literacy education programs to build understanding of the ocean's influence on human systems and the impact of human activity on marine ecosystems to promote sustainable behaviors and ecosystem stewardship.

- Leads the development of strategic education initiatives to engage stakeholders and clients in ocean literacy and marine sustainability efforts
- Collaborates with cultural, environmental, and Indigenous groups to integrate local and traditional knowledge into ocean literacy programming
- Identifies curriculum needs and partnership opportunities to design innovative programs that advance ocean literacy education and outreach
- Creates instructional strategies and educational content that align with ocean literacy principles to engage and educate diverse audiences
- Develops educational materials focused on marine science and local context to explain human-ocean interactions and encourage ecosystem stewardship
- Prepares and delivers illustrated lectures and interpretive presentations to communicate scientific and cultural aspects of ocean literacy to public and stakeholder audiences .

OCEAN SYSTEMS AND HUMAN INTERACTION

Analyzes oceanographic processes, marine ecosystems, and biodiversity to assess the effects of human activities on ocean health to inform sustainable decision-making, education, and stewardship initiatives.

- Explains key oceanographic processes (e.g., currents, tides, acidification, temperature change) and how they shape marine ecosystems in accessible language to increase program impact.
- Assesses how human behaviors (e.g., pollution, overfishing, coastal development) impact ocean health, biodiversity, and ecosystem services to place audiences in relation to the ocean.
- Describes the interconnectedness of ocean systems with global climate regulation, food security, and human livelihoods to provide comprehensive relational overviews.
- Integrates knowledge of marine species, habitats, and ecological relationships into program content to enhance public understanding.
- Interprets data and research on ocean health trends to inform education, outreach, or conservation priorities.
- Explores and presents Indigenous and local knowledge related to ocean stewardship, place-based practices, and marine management to represent balanced and nuanced content.