

Category	Description	Primary Operation effect	Value chain stage where the risk occurs	Time horizon	Likelihood	Description of Countermeasure and Actions
Physical Risks Chronic	Risks to Marine Habitats Ship activity in Particularly Sensitive Sea Areas (PSSAs) may disrupt marine species habitat. Ship strikes are a major threat to many endangered whale species. Environmental hazards from underwater noise, which masks the communication signals of marine species and disrupts behavior of marine life. Risk of container loss overboard, resulting in marine pollution and long-term ecological harm	<ul style="list-style-type: none"> • Increase operation cost • Increase compliance cost 	Direct Operation Downstream	Medium-term	Low	<ul style="list-style-type: none"> • Continuously monitor our vessels' trading routes and any trespassing into sensitive or Particularly Sensitive Sea Areas (PSSAs) as defined in MEPC.1/Circ.778/Rev.3 Annex 2. In these zones, operations are limited strictly to transshipment activities only, no cargo loading/unloading or bunkering is conducted. This precaution mitigates environmental risks and reflects our proactive commitment to safeguarding vulnerable marine ecosystems while ensuring responsible global operations. • Monitoring through our Waves system the vessels' routes to ensure compliance and to encourage voluntary speed reductions for whale protection in areas designated as "Whales Initiatives", such as Blue Whales Blue Skies Zones, Vancouver Killer Whales Zone, NOAA Right Whale Ship Strike Reduction Rule Zones and SaVE WHALES Zones (Blue Whales Blue Skies" and "SaVE Whales" initiatives). • Implement robust vessel safety measures designed to minimise the risk of container loss during transit. • Apply advanced routing software to improve route efficiency while preventing transit through vulnerable marine areas.
	Dependence on Biodiversity Marine ecological degradation and sea-level rise may restrict access to key shipping channels and ports, leading to longer detours, higher fuel costs, schedule disruptions and reduced operational reliability.	<ul style="list-style-type: none"> • Increase operation cost • Increase compliance cost 	Upstream Direct Operation	Long-term	Low	<ul style="list-style-type: none"> • Ensure compliance with all port regulations and adjust deployment schedules to minimise additional operational costs. • Engage proactively in marine ecological protection initiatives to strengthen ecosystem resilience. • Prioritize fleet modernization by adopting commercially viable green technologies to reduce environmental impact and enhance operational sustainability.
Policy and Transition Risks	Ballast Water Management Risk of invasive species through uncontrolled ballast water discharge and the transfer of non-native aquatic organisms to new marine environments, disrupting local ecosystems, harming biodiversity and affecting fisheries and coastal industries.	<ul style="list-style-type: none"> • Regulatory compliance • Reputational damage • Increase operation cost 	Direct Operation	Medium-term	Medium	<ul style="list-style-type: none"> • Ensure full compliance with the IMO Ballast Water Management Convention to prevent the spread of invasive aquatic species. • Install IMO- and USCG-certified ballast water treatment systems on all vessels. • Follow manufacturer-recommended maintenance procedures/intervals. • Train crew members in the proper operation of ballast water management systems to guarantee effective and consistent performance.
	Ship Recycling Improper ship recycling can result in severe environmental damage and legal liabilities. Ensuring compliance with international regulations, such as the Hong Kong International Convention and adhering to environmental protection standards is essential to mitigate this risk.	<ul style="list-style-type: none"> • Increase compliance cost • Market restrictions • Legal liabilities 	Direct Operation Downstream	Medium-term	Low	<ul style="list-style-type: none"> • Ensure accurate recording and documentation of hazardous materials through comprehensive Inventories of Hazardous Materials (IHM) for all vessels. • Collaborate closely with suppliers to guarantee safe and environmentally responsible recycling practices. • Select ship recycling facilities that adhere to high safety and environmental standards. • Maintain a dedicated team of trained Quality Control Engineers/Experts responsible for on-site sampling, preparing IHMs and certifying compliance.
	Biofouling Management Extended anchorage during extreme weather may disrupt port operations and increase hull biofouling, reducing efficiency, raising fuel use and harming marine ecosystems	<ul style="list-style-type: none"> • Environmental pollution • Increased maintenance costs • Increased emissions • Reduced efficiency 	Direct Operation	Short-term	Low	<ul style="list-style-type: none"> • Implement proper biofouling management that minimizes environmental harm, while ensuring compliance with IMO and applicable environmental regulations. • Apply Low Friction paints on all vessels, leading to significant power savings and subsequent reductions in carbon emissions, while reducing negative environmental impacts.
	Waste Management Improper handling of waste and plastics may lead to pollution into the marine environment, posing ecological harm and regulatory non-compliance. Implementing IMO-aligned systems and crew training helps prevent plastic discharge and maintain environmental standards.	<ul style="list-style-type: none"> • Environmental pollution • Violations, fines • Navigational safety risks • Reputational risks 	Direct Operation	Medium-term	Medium	<ul style="list-style-type: none"> • Install garbage compactors on all vessels to reduce the waste volume onboard. • Onboard garbage is segregated under DSMS procedures, with separate waste streams and practices to prevent, reduce, recycle and safely discharge waste ashore, in compliance with international regulations. • Training crew on proper garbage segregation and handling of waste to reduce impacts on the marine environment.
Biodiversity Protection Opportunity	Leverage advanced route optimization and environmental data analytics to minimize whale strikes, reduce underwater noise and lower fuel consumption simultaneously.	<ul style="list-style-type: none"> • Reduced impact on marine species • Reduced emissions 	Direct Operation	Long-term	Low	Enhanced biodiversity protection and operational efficiency while lowering costs and supporting compliance with marine protection regulations.