
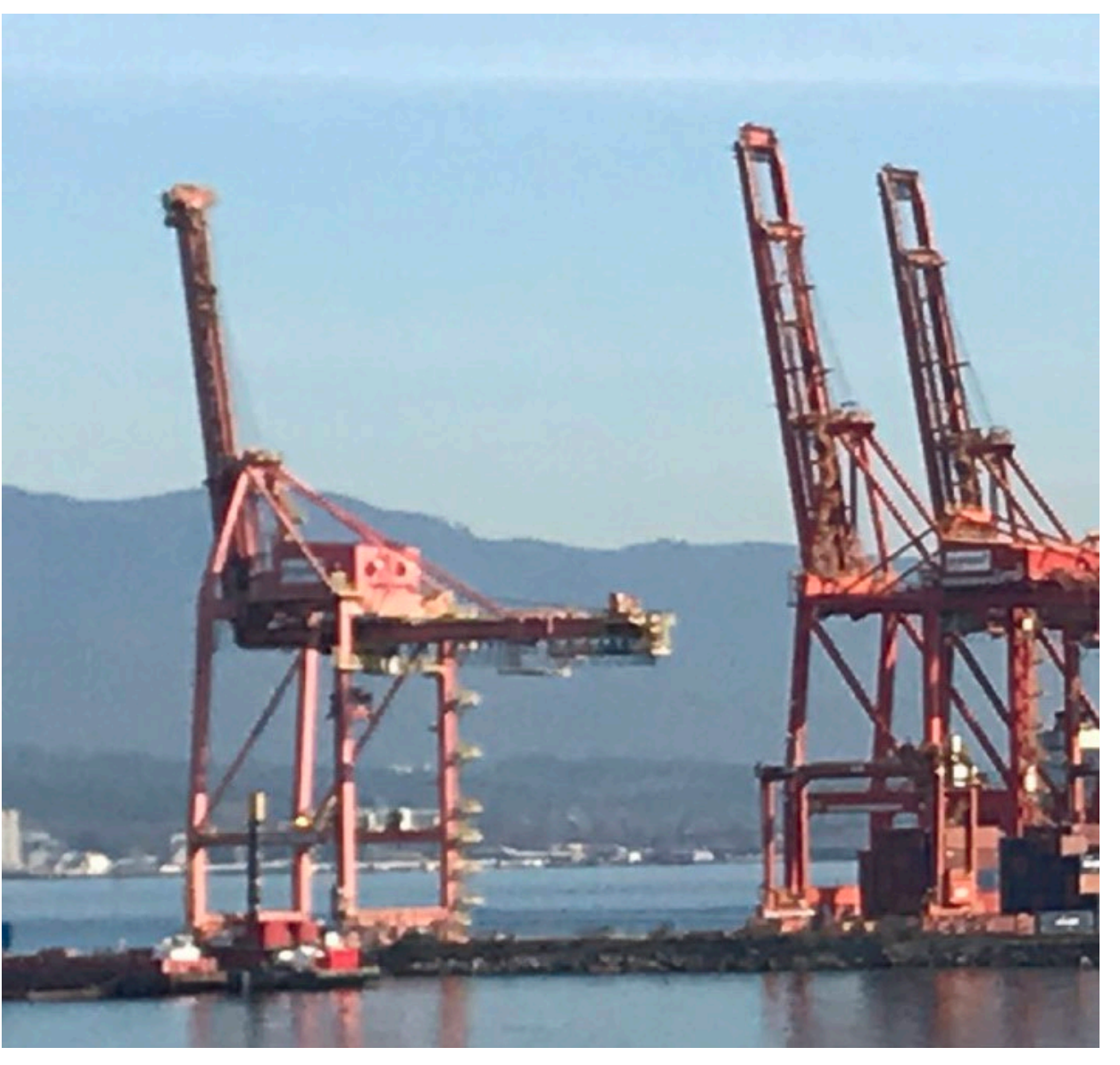
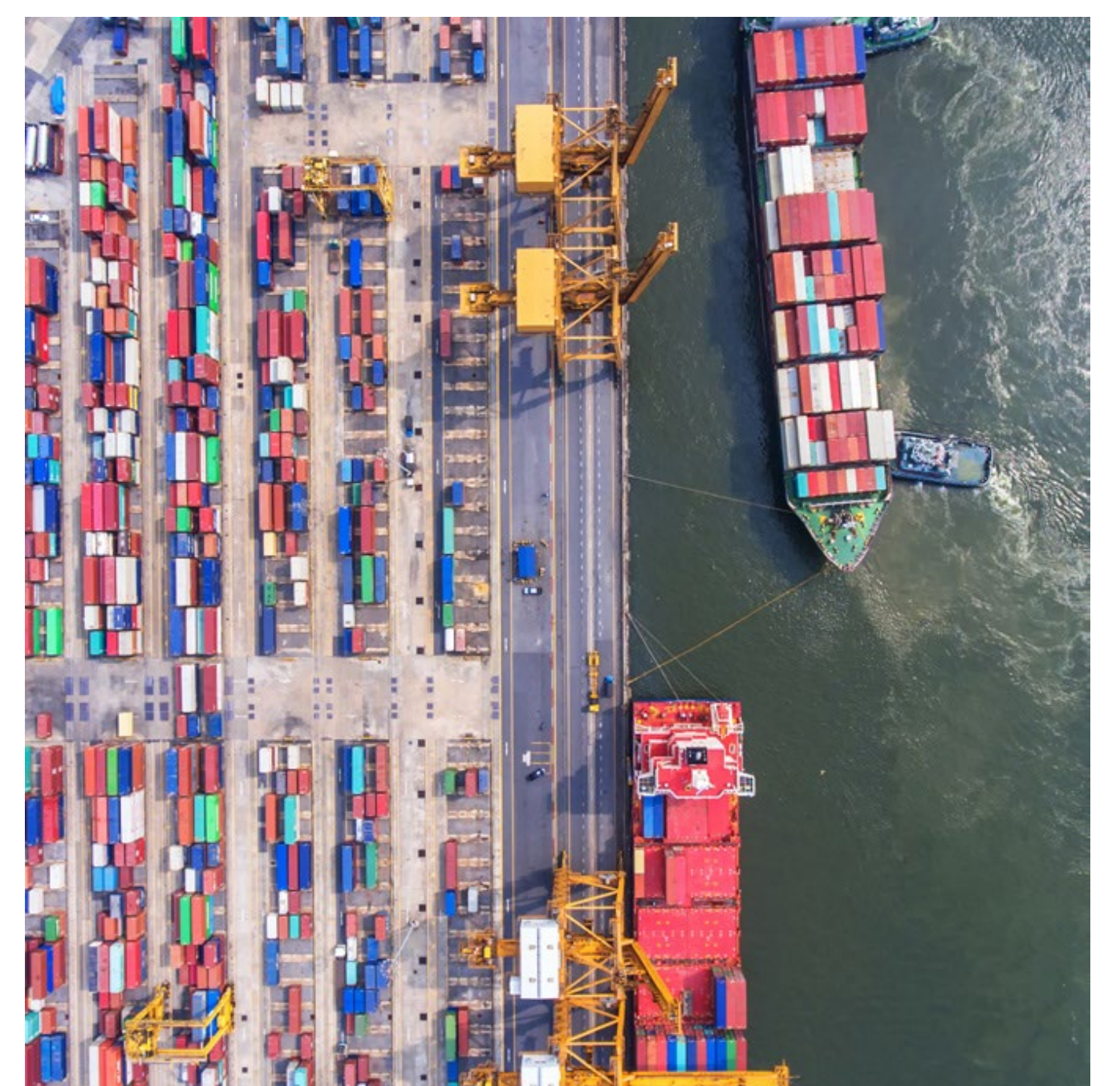
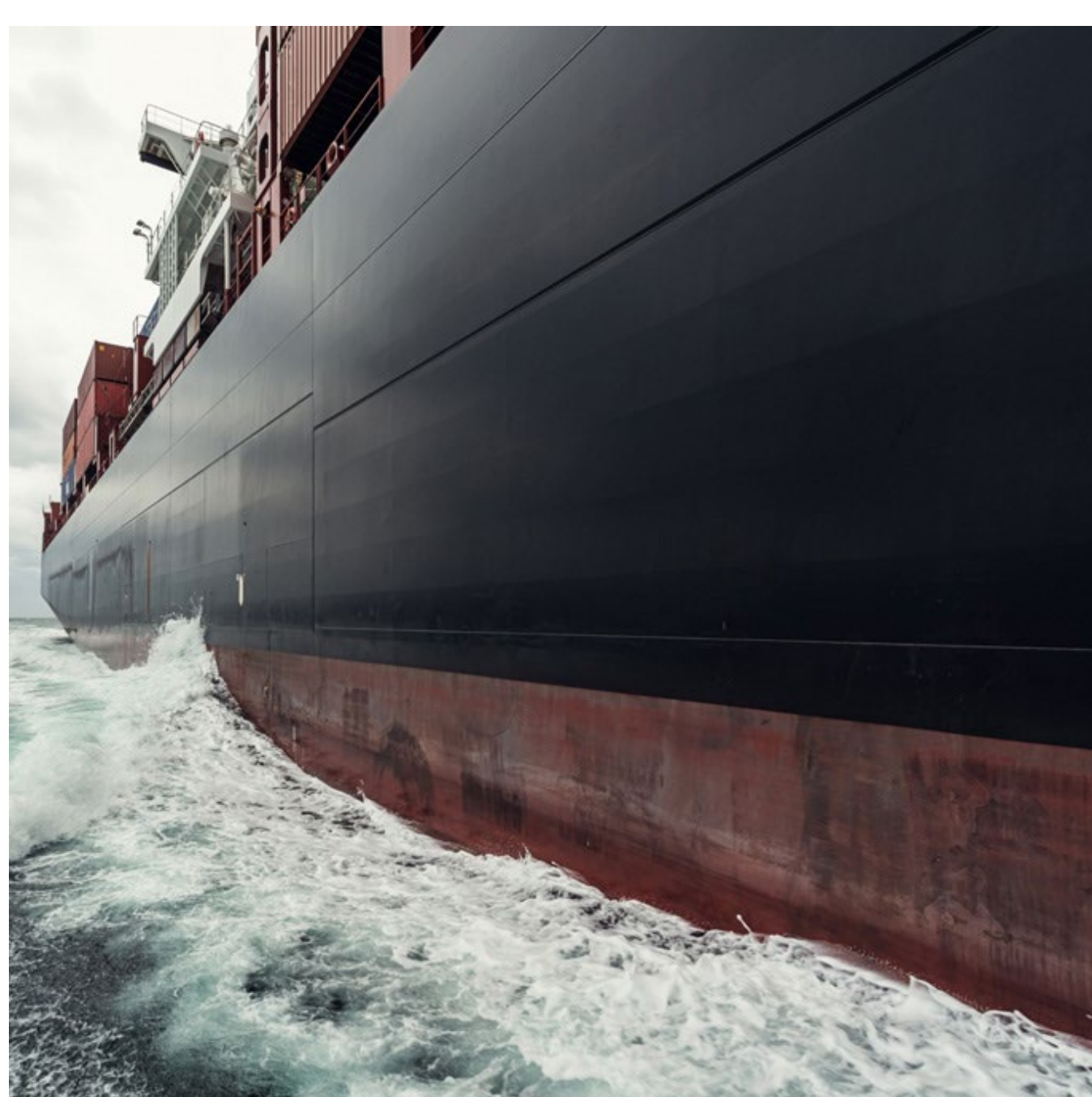


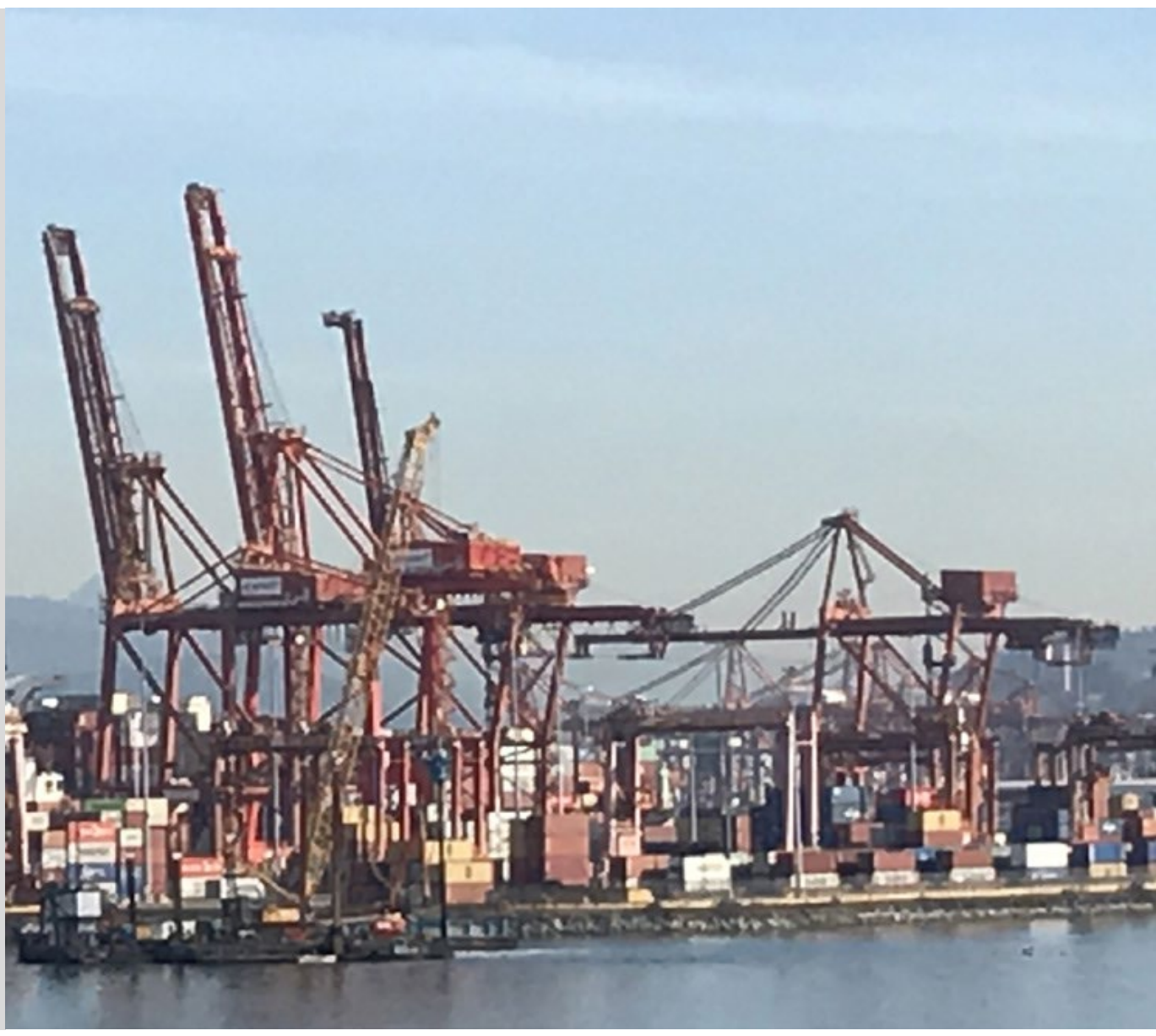
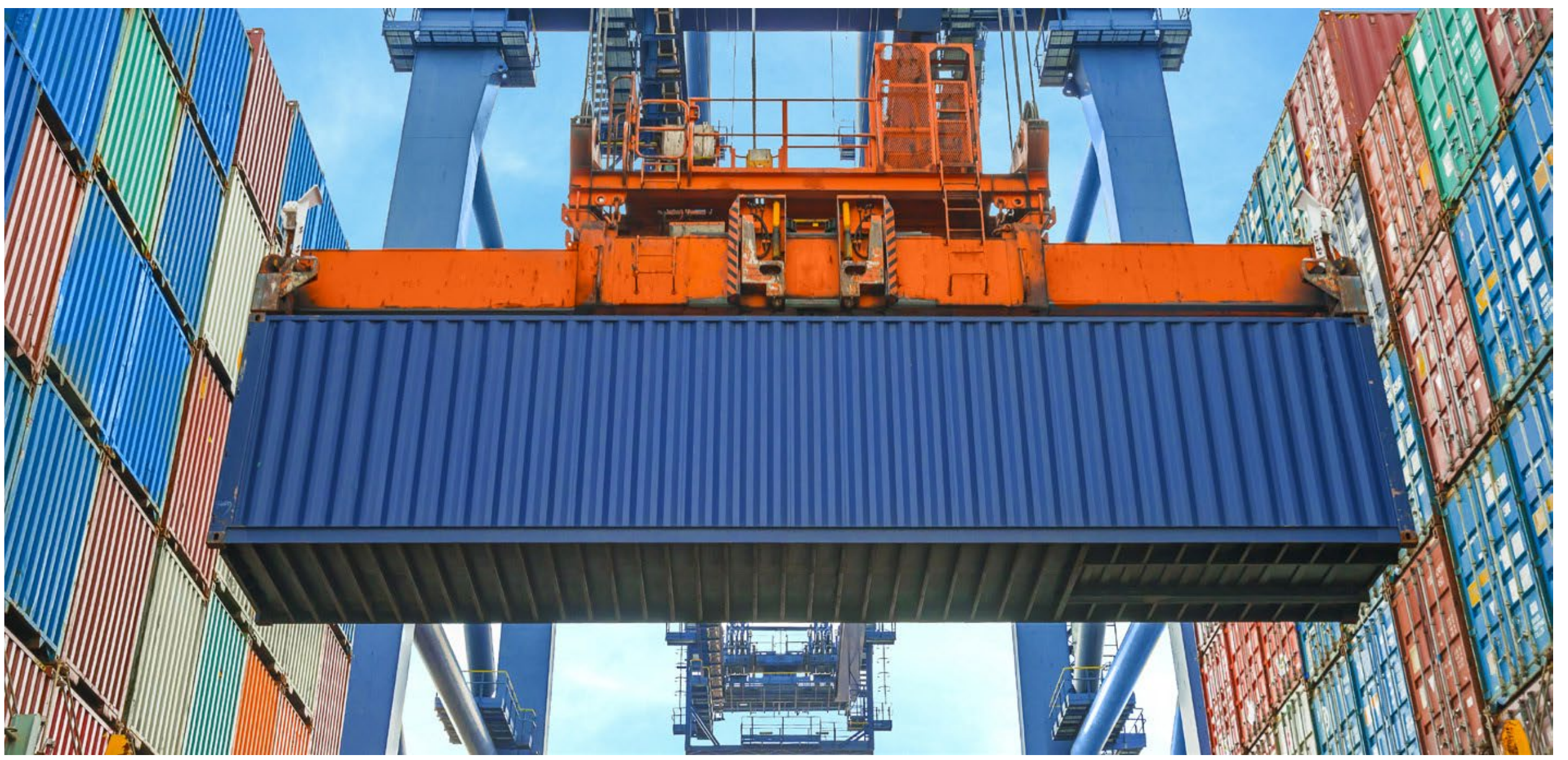
Enabling digital transformation in the maritime industry using advanced AI technologies

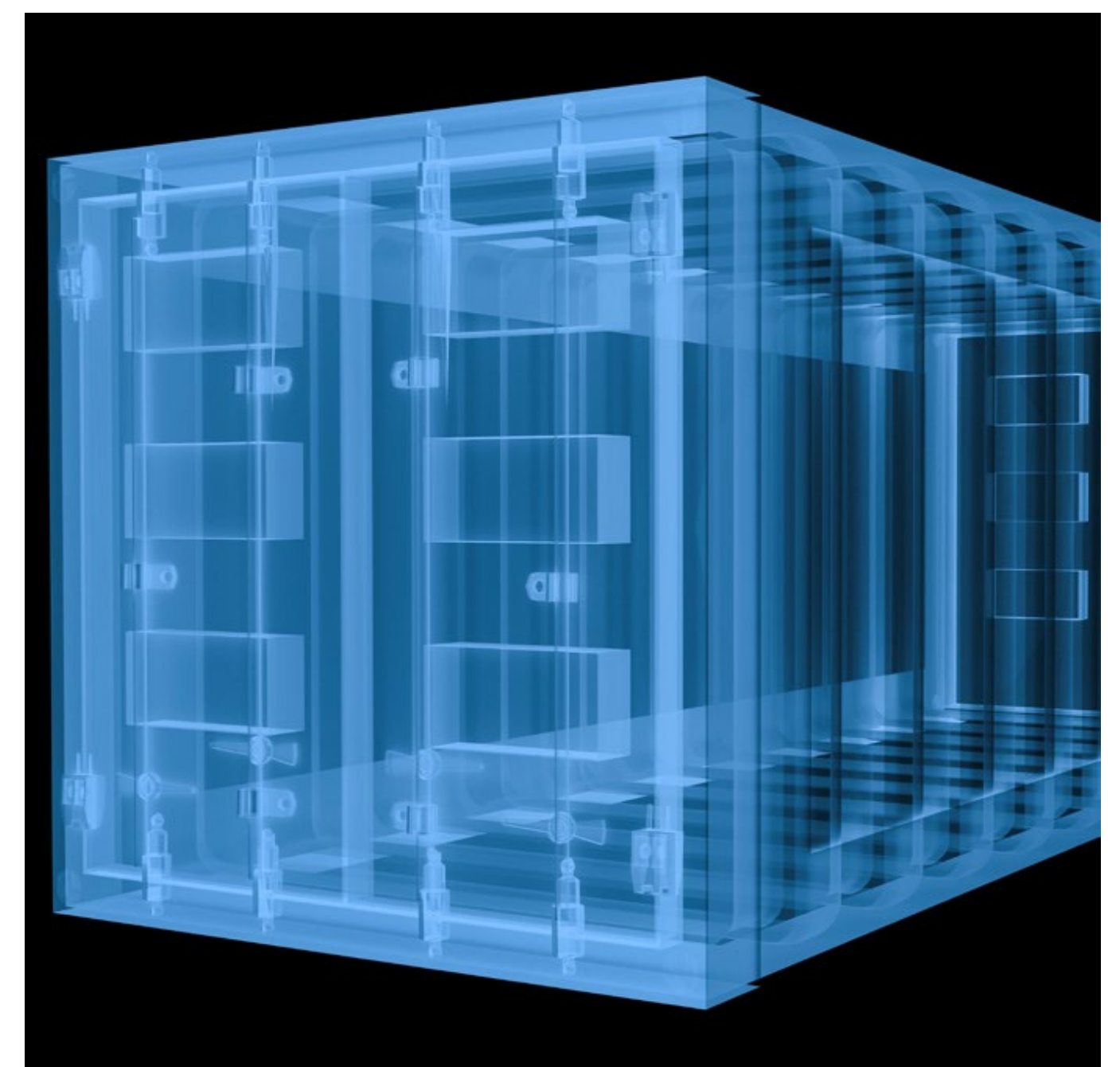
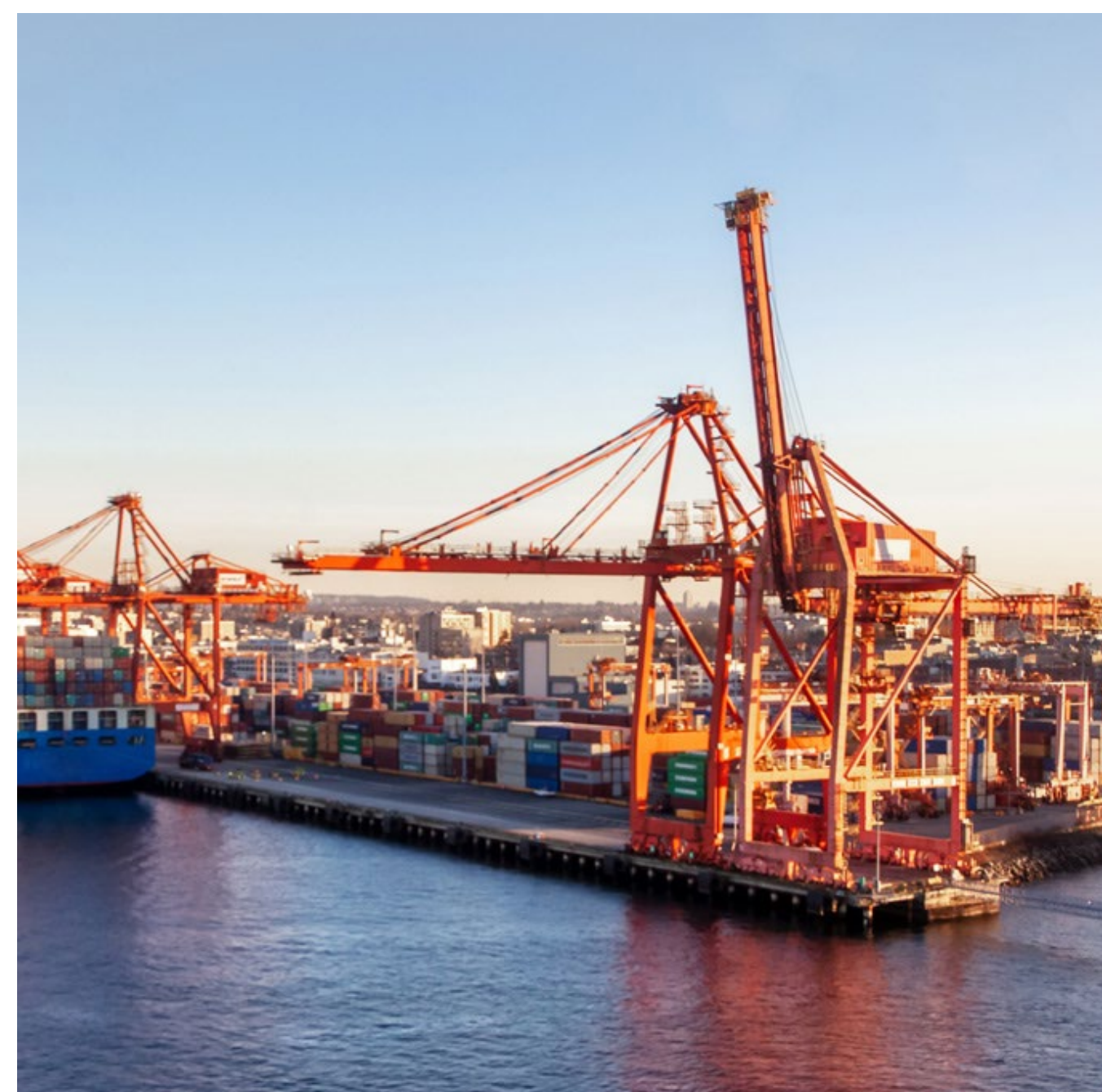
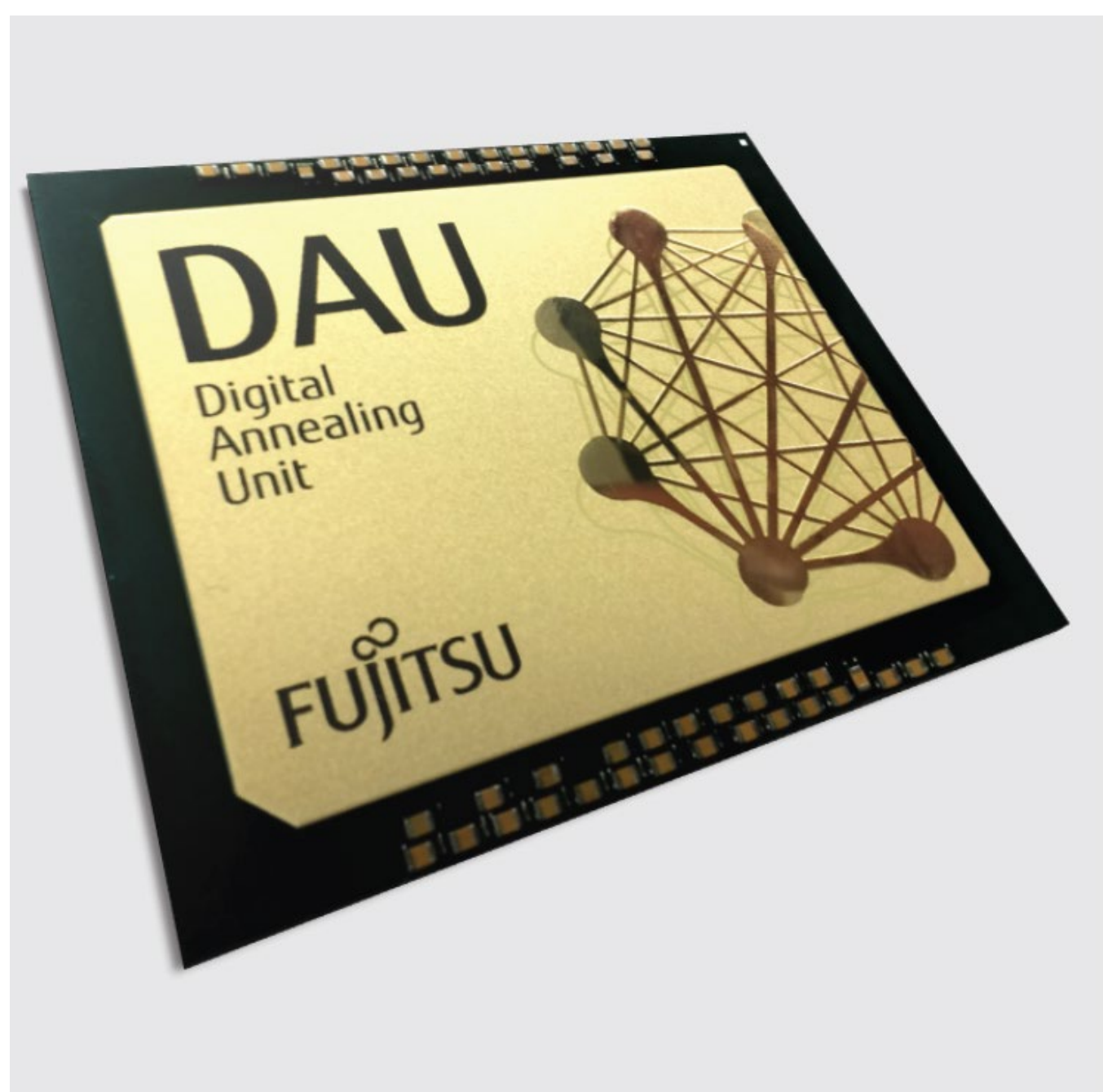
- Supply chain optimization
- Logistics
- Fuel efficiency
- Environmental compliance
- Vessel safety



	Carriers	Port or terminal operators	
Stakeholder			
Business problem	<p>Increasing fuel costs</p> <p>Fuel costs for ships increase January 2020 when ship operators must use cleaner, low sulfur and more expensive fuel as per new *IMO 2020 regulations.</p>	<p>Collisions</p> <p>Ship collisions are disastrous for ship operators, causing loss of cargo and crew death and potentially financial loss and increased insurance rates.</p>	<p>Inefficient berthing</p> <p>Long wait times cause ships to be in harbor longer, reducing vessel utilization, making ports less competitive and creating risk to the local environment.</p>
Fujitsu solution	<p>Vessel fuel optimization</p> <p>An artificial intelligence solution that computes energy efficient vessel routes to reduce fuel costs, voyage travel times, and greenhouse gas emissions, while preserving crew and ship safety.</p>	<p>Collision avoidance</p> <p>An AI based collision avoidance system to mitigate accidents and provide captains time to course correct. Saves lives, reduces the risk of sinking, lost cargo, and environmental damage.</p>	<p>Intelligent berth planning</p> <p>Advanced booking systems optimize berthing and vessel schedules. Port and terminal operators can visualize and optimize KPIs like:</p> <ul style="list-style-type: none"> • Berth Utilization Rate • Vessel Duration at Berths • Berth Arrival



Port or terminal operators	Inspection agencies	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Stakeholder</p> 		
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Business problem</p> <p>Inefficient unloading Slow loading or unloading means that ships are in dock longer and terminal utilization is sub-optimal.</p>	<p>Inefficient crane & gate operation Port operations are slowed by inefficient and suboptimal coordination of cranes, gates and trucks.</p>	<p>Slow inspection times Slow Inspection times scanning cargo for contraband requires days due to manual screening.</p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Fujitsu solution</p> <p>Ship unloading optimization Calculates a near-optimal schedule to unload ships' containers using Fujitsu's patented Digital Annealer providing:</p> <ul style="list-style-type: none"> • 25% increase in the number of containers delivered • 35% reduction in total delivery truck distance travelled 	<p>Port operation optimization Improves overall port efficiency by optimizing joint operation of gantry cranes, gates, and vehicles.</p> <ul style="list-style-type: none"> • Increase overall port throughput • Maximize use of available resources 	<p>Fujitsu Computer Vision image recognition Fujitsu Computer Vision image recognition offering allows automated analysis of 3D images to:</p> <ul style="list-style-type: none"> • Rapidly reduce inspection times from days to minutes • Remove risk of human error when analyzing images



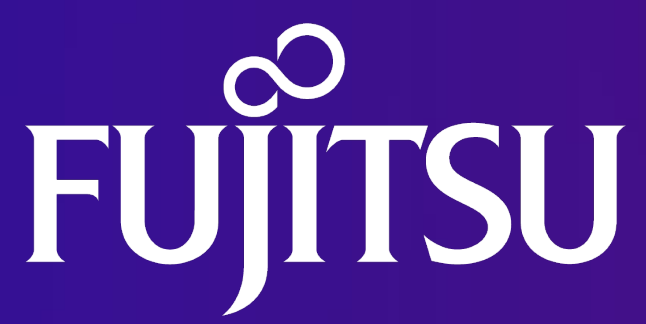


Digital transformation solutions for the maritime industry

People remain central to Fujitsu's vision, with AI solutions centered firmly on empowering workers, businesses and society, creating value and supporting their business outcomes.

Fujitsu has over 30 years of experience developing innovative and ethical AI offerings. Our AI portfolio provides a human-centric approach to the co-creation of services and solutions and builds trust in this era of digital transformation. It utilizes 'best of breed' global technologies supporting by consulting services to meet ever-growing customer challenges. By combining the strength of our AI development, services and solutions to address specific business requirements, Fujitsu is able to deliver optimal AI supported solutions to address the challenges maritime companies face today and in the future:

- Consulting Services
- Data Analytics Solutions
- Artificial Intelligence
- Machine Learning
- Quantum Inspired Solutions and Services



About Fujitsu

Fujitsu's purpose is to make the world more sustainable by building trust in society through innovation. As the digital transformation partner of choice for customers in over 100 countries, our 124,000 employees work to resolve some of the greatest challenges facing humanity. Our range of services and solutions draw on five key technologies: Computing, Networks, AI, Data & Security, and Converging Technologies, which we bring together to deliver sustainability transformation. Fujitsu Limited (TSE:6702) reported consolidated revenues of 3.7 trillion yen (US\$28 billion) for the fiscal year ended March 31, 2023 and remains the top digital services company in Japan by market share. Find out more: www.fujitsu.com.

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