

**Attachment G:**

**Bulk vessel informal survey response**

Submitted for consideration for the At Berth Regulation Interim Evaluation

**From:** [John Dunlap](#)  
**To:** [Melgoza, Elizabeth@ARB](#)  
**Cc:** [Garth Mitcham](#); [Csondes, Angela@ARB](#); [Soriano, Bonnie@ARB](#); [Storelli, Nicholas@ARB](#); [john@dunlapgrp.com](#)  
**Subject:** Request for information on bulk operations for CARB's Interim Evaluation: CSL Responses  
**Date:** Thursday, July 21, 2022 12:39:19 PM  
**Attachments:** [image001.png](#)  
[2022 July California Ports 2020 2021.xlsx](#)

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Elizabeth:

My client has consulted the various parts of their operation to gather the information you have requested.

What follows below is their answers to the questions applicable to vessel operations (4 of them). Furthermore, if we have fallen short---please do not hesitate to ask for additional insight or clarification.

CSL has developed the attached data table providing all calls and tons delivered at each terminal in addition to one spot cargo loaded in 2021, providing a two-year comparison. Please note the declining trend in some areas is because of COVID and the structural effects it has had on residential and commercial construction (our primary markets) during the initial months of the pandemic in terms of stalled or cancelled projects, followed by a general slowdown in demand. This is seen as at least partially attributable to the lack of permit processing which persisted for many months in most counties due to outright permit office closures or staffing issues once operations resumed, combined with the delay in infrastructure funding and coordination. We believe the situation should improve in 2023 in spite of the fact the experts are predicting recession.

Due to single point discharge operation into receiving hoppers at all California receiving facilities we do not line haul during unloading. Line-hauling is the norm however during loading and is standard practice at LB 212/214.

CSL Americas' does operate a dedicated vessel into the Bay area, currently M/V "Algoma Victory" which is relieving M/V "Honourable Henry Jackman", the usual performer in the trade. This vessel operates on approximately an 11 day rotation in terms of her roundtrip timing between voyages. The balance of our fleet are scheduled on the basis of mine run production at the load Ports and minimum inventory requirements at the receiving terminals.

In so far as reducing emissions, technological developments are being installed on our newbuild design vessels for which we will be placing an order shortly, likely before year end. The initial order will be for 4 ships with an initial option for two more of the same series. These ships will be dual fuel, conventional and methanol capable. All newbuilds will be powered by Tier III main engines or higher category. We strive to incorporate environmental and other efficiencies into all newbuilds. These ships will likely cost over \$500 million and represent the latest technology available. If you care to—I can arrange a confidential call with CSL to share a bit about their order.

As to the vessel age question---we cannot answer on behalf of the bulk sector. However, we can say that CSL operates one of the newest fleets in the bulk sector. See our sustainability report @ [www.cslships.com](http://www.cslships.com) under the our commitments section for more insight.

One of the things we desire to stress (again) is that CSL operates in a highly competitive and cost-sensitive business environment. That said, rail and trucking continually compete with CSL. This is not going to go away anytime soon, because the material CSL transports is being utilized in infrastructure, commercial and residential construction. We remain concerned that an unforeseen impact of CARB's regulatory construct for the At Berth regulation could tip the scales away from a clearly more efficient and less polluting transportation solution.

Let us know if any additional questions.

Kind regards,

John D. Dunlap, III  
President, Dunlap Group

690 Market Street, Unit 202 San Francisco, CA 94104  
Phone: (916) 290-3842  
Email: [john@dunlapgrp.com](mailto:john@dunlapgrp.com)  
[www.dunlapgrp.com](http://www.dunlapgrp.com)

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**From:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>

**Sent:** Friday, July 8, 2022, 9:53 AM

**To:** [alan.sabam@pabcogypsum.com](mailto:alan.sabam@pabcogypsum.com); [martin.jeppeson@calamco.com](mailto:martin.jeppeson@calamco.com); [mark.darling@yara.com](mailto:mark.darling@yara.com); [brian.crets@yara.com](mailto:brian.crets@yara.com); [jay.prosch@yara.com](mailto:jay.prosch@yara.com); [Oystein@frontiership.com](mailto:Oystein@frontiership.com); [rmcintosh@eagleaggregates.com](mailto:rmcintosh@eagleaggregates.com); [andrew.lennox@cslships.com](mailto:andrew.lennox@cslships.com); [garth.mitcham@cslships.com](mailto:garth.mitcham@cslships.com); John Dunlap <[john@dunlapgrp.com](mailto:john@dunlapgrp.com)>; [jeffrobbins@gensteam.com](mailto:jeffrobbins@gensteam.com); [ron.garcia@yara.com](mailto:ron.garcia@yara.com); [Greg.Knapp@lehighhansen.com](mailto:Greg.Knapp@lehighhansen.com); [brian.hobdy@pabcoproducts.com](mailto:brian.hobdy@pabcoproducts.com); [sbrown@pacificbasin.com](mailto:sbrown@pacificbasin.com); [joe.carillo@ssamarine.com](mailto:joe.carillo@ssamarine.com); [carlos.dejesus5@ssamarine.com](mailto:carlos.dejesus5@ssamarine.com); [Raymond.Arciniega@SSAMarine.com](mailto:Raymond.Arciniega@SSAMarine.com); [wray.bartling@psterminals.com](mailto:wray.bartling@psterminals.com)

**Cc:** Soriano, Bonnie@ARB <[Bonnie.Soriano@arb.ca.gov](mailto:Bonnie.Soriano@arb.ca.gov)>; Csondes, Angela@ARB <[acsondes@arb.ca.gov](mailto:acsondes@arb.ca.gov)>; Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>

**Subject:** Request for information on bulk operations for CARB's Interim Evaluation

Hello everyone,

The 2020 At Berth Regulation was adopted in 2020 with emission control requirements for certain vessel types starting on January 1, 2023. The new regulation aims to increase emissions reductions from ocean-going vessels while at berth in California ports. The rule expands the requirements to roll-on-roll off and tanker vessels and includes additional ports and terminals in California. CARB staff is developing an Interim Evaluation as outlined in section 93130.14(d) of the 2020 regulation. As part of the Interim Evaluation, CARB staff will assess the progress made in adopting control technologies for use with tanker and ro-ro vessels, as well as review control technologies for ocean-going vessels at anchor. In addition, as part of this effort, CARB staff was directed by our Board to include an assessment of control technologies for use on bulk and general cargo vessels.

We are seeking your assistance and requesting information to assist with this evaluation. CARB staff evaluated the bulk and general cargo sector several years ago but there are data gaps we would like to better understand. CARB solicited input from stakeholders in support of the development of the Interim Evaluation, but to date, has not received any data or information from the bulk sector. CARB wants to sufficiently reflect any updates and/or changes that have occurred in this sector since the At Berth rulemaking, to ensure that up-to-date industry sector data is considered.

Specifically, for bulk and general cargo vessels, we are interested in information on:

- The percentage of bulk/general cargo vessels using line-hauling operations (where a vessel shifts up and down a berth using the vessel's mooring lines and an onboard winch to help facilitate unloading operations).
- What has been the trend in bulk/general cargo visits over the past five years? Specifically, have throughput/vessel visits increased or decreased?
- Is there any commodity that shifted from containerized cargo to bulk vessel transport? If so, what commodity/commodities were impacted and how did this change impact your operation?
- Over the past five years, have there been any bulk activity expansions at your port, or are there current plans to expand?
- What is the age distribution of the bulk/general cargo vessels that visit your port or terminal?
- What percentage of vessels operate on liner vs. tramp schedules at your port/terminal?
- Information about new technologies designed to control emissions from bulk/general cargo vessels.

The information requested above will assist CARB staff by providing an up-to-date evaluation of the bulk sector operations in our Interim Evaluation. As part of developing the Interim Evaluation Report, CARB staff will consider all information submitted, including terminal specific engineering evaluations, logistical considerations, public engagement, and independent studies. Additionally, we would welcome any other relevant information that you deem important to be considered for inclusion in the Interim Evaluation pertaining to the bulk and general cargo vessel sector. By December 1, 2022, staff will publish an analysis and findings in a report and make it available for public review. We request that you provide us feedback to the questions listed above and any additional information you would be

interested in sharing with staff.

Please submit responses via e-mail by July 22, 2022, to Elizabeth Melgoza ([elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)) and Nicholas Storelli ([nicholas.storelli@arb.ca.gov](mailto:nicholas.storelli@arb.ca.gov)).

Please let us know if you have any questions.

Have a great weekend.



**Lizzy Melgoza**  
California Air Resources Board  
Transportation and Toxics Division  
Marine Strategies Section  
1-279-208-7467  
[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)

# CORPORATE SUSTAINABILITY REPORT

2021





PHOTO: STEVE FARMER

CSL's MV *Nukumi* is a new purpose-designed 26,000 DWT self-unloading ship built to service Windsor Salt. The cutting-edge vessel is the first diesel-electric Laker and the first single-point loader to operate in Canada. For more information, visit [mvNukumi.com](http://mvNukumi.com).

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# About this Report

At CSL, we are committed to conducting our operations in accordance with the highest standards of corporate social responsibility. Not only do we believe it is the right thing to do, it is also vital for the long-term success and profitability of our business.

Our goal is to put into practice strategies and tactics that align our principles and values regarding safety, environmental protection, ethical behaviour, customer service, and employee and community engagement with our global business objectives.

Since the publication of our inaugural Corporate Sustainability Report in 2013, we have made significant advancements in a performance-based sustainability culture and embraced internationally recognized best practices in measurement and reporting, such as the Sustainability Accounting Standards Board Marine Transportation Standard, the Global Reporting Initiative standards, the Green Marine program and the United Nations Sustainable Development Goals.

By understanding the impacts of our business from both a social and environmental perspective, and by encouraging continuous improvement in all aspects of our operations, we believe we can build a better future for our people, our environment and our industry.

For more information on CSL's sustainability and corporate social responsibility programs, visit our website at [www.cslships.com](http://www.cslships.com).

# 2021

# HIGHLIGHTS

## Sustainability Governance

- › Identified five additional ESG priorities that define our business fundamentals.
- › Aligned ESG data disclosures with the Sustainability Accounting Standards Board (SASB)'s Marine Transportation Industry standard.

## Health and Safety First

- › Supported crews in maintaining safe vessel operations throughout the pandemic and rolled out crew vaccination programs across regions.
- › Reduced the Total Recordable Case Frequency Rate (TRCFR) by 12.5 percent, continuing a year-over-year downward trend since 2012.

## Decarbonization

- › Utilized B100 biodiesel on eight vessels, resulting in lifecycle CO<sub>2</sub>eq emissions reductions of 80 percent, compared with using marine gas oil.
- › Eliminated ozone depleting refrigerant gases R22 and R409A from the fleet.
- › Achieved a 26 percent reduction of CO<sub>2</sub>eq per tonne of cargo moved compared to 2005.

## Protecting Life Below Water

- › Completed the installation of six ballast water treatment systems in the global fleet.
- › Supported the development and testing of a real-time cavitation monitoring system.

## Resource Conservation and Supply Chains

- › Produced 61 percent less shipboard waste per crew per operational day than in 2010.
- › Eliminated incinerator use in the Canadian fleet.
- › Recycled three vessels in the most responsible way possible.

## Ethics and Integrity

- › Investigated and treated 21 alleged breaches to CSL policies, which were also reported to the Audit and Risk and Human Resources Committees of the Board of Directors.

## Investing in Our People

- › Ensured a safe return to the office and initiated a transition toward a hybrid work environment.
- › Was named one of Montreal's Top Employers for the third consecutive year.
- › Enhanced diversity and inclusion with the creation of a new position.

## Employee and Community Engagement

- › Donated approximately one percent of total net profit to charitable causes and disaster relief.
- › Established a new corporate donations pillar to support Indigenous organizations and initiatives.

## Creating Value for Our Customers

- › Delivered four vessels to meet customer requirements including the state-of-the-art 26,000 DWT self-unloading ship, *Nukumi*, built to service Windsor Salt.
- › Achieved a Net Promoter Score of 9.04 in the annual CSL customer survey.
- › Acquired a minority stake in Canadian engineering firm EMS-Tech Inc.



DE P. RICHMOND  
F=9.20  
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# Message from the CEO



2021 was a productive and transformative year for CSL.

Despite the ongoing disruptions caused by the COVID-19 pandemic, we continued to make important strides to drive our business forward and progress on our environmental, social and governance (ESG) objectives.

The many challenges and additional strains of the pandemic didn't slow down our talented and resilient ship and shore teams, who continued to provide the safe and sustainable marine transportation solutions our customers rely on.

Working together as a strong and cohesive team, our seafarers and shore side staff demonstrated every day that CSL is a company fueled by ingenuity and a sense of responsibility toward people and our planet.

I am extremely proud of the way our employees not only adapted to a volatile and complex operating environment but learned to grow within it. The lessons learned over the past two years have helped us refine our priorities when it comes to corporate responsibility and double down on initiatives to support our goal of Zero Harm.

In November 2021, we successfully completed the world's longest-running trials of B100 biodiesel on marine engines, accumulating nearly 30,000 running hours. Reducing the carbon

footprint of our fleet is a strategic imperative at CSL. While biofuel is one of many decarbonization strategies we are exploring, our test results confirmed its potential as a realistic alternative to fossil fuel that offers immediate and significant carbon reductions.

Upgrading our fleet with safer and more environmentally friendly ships is equally important and we were delighted to welcome four new vessels, including our cutting-edge MV *Nukumi* – the first diesel-electric Laker and first single point loader to operate in Canada.

It was also an honour for CSL to join forces with long-time collaborator, Canadian engineering firm EMS-Tech Inc., as a minority stakeholder. This new partnership will leverage our shared capabilities to produce a full range of safe, sustainable and high-performing cargo handling systems.

In 2022 and beyond, we look forward to exploring new opportunities to grow our business, and where our ESG priorities will continue to play center stage. As a socially responsible marine shipping company, we recognize our responsibility to protect the people who work on our ships, the communities in which we operate, and the waterways that are the lifeline of our industry.

## **Louis Martel**

President and Chief Executive Officer

# CSL at a Glance

Founded in 1845, The CSL Group Inc. is a privately-owned Canadian shipping company headquartered in Montreal, Quebec, with commercial operations around the world. Our regional offices are located in Halifax, St. Catharines, Winnipeg and Vancouver (Canada), Boston (USA), London (UK), Bergen (Norway), and Sydney, Whyalla, Perth and Karratha (Australia).

Through our four major operating regions, we own and operate a highly diversified fleet of specialized self-unloading vessels, transhippers and bulk carriers. We are a leading provider of marine dry bulk cargo handling and delivery services, and the world's largest owner and operator of self-unloading vessels. CSL is also a leader in high efficiency transhipment solutions.

In 2021, our fleet consisted of 47 vessels, including 29 self-unloaders, five transhippers, six bulkers, five pneumatic cement carriers and two self-unloading barges. CSL is also responsible for the commercial management of eight other self-unloading ships as part of the CSL International Pool, and one cement carrier as part of the Eureka Shipping joint venture.

In 2021, CSL transported 66.5 million tonnes of dry bulk commodities for customers throughout the world. Commodities moved include iron ore, aggregates, grain, cement, gypsum, salt and wheat.

Approximately 90 percent of our revenue is generated from long-term contracts with customers, with contracts ranging in duration between one and 20 years.



**1,500 people\***  
employed globally



**66.5 million\***  
tonnes of dry bulk  
cargo delivered



**Vessels**  
47 owned  
16 co-owned



**CSL** GROUP

\* Does not include joint ventures

We employ approximately 1,500 people globally in a wide range of positions, both on board our ships and in shore-based functions. We are committed to the wellbeing and development of our employees, and to promoting a corporate culture that values high ethical standards, a safe and healthy workplace, and respect for the environment.

## NEWBUILDS, CONVERSIONS AND ACQUISITIONS

In January 2021, CSL purchased MV *OC Agnes*, a 30,000 DWT self-unloading bulk carrier previously operated by CSL under a bareboat agreement. The vessel was renamed *CSL Thames* and is trading as part of the CSL Europe fleet.

CSL Americas completed the conversion of two Kamsarmax bulk carriers into gravity self-unloaders in 2021. At over 77,000 DWT, sister ships MV *CSL Kajika* and MV *CSL Koasek* are the largest in CSL's global fleet.

Throughout 2021, construction continued on MV *Nukumi*, the state-of-the-art diesel-electric self-unloader built under a partnership between CSL and K+S Windsor Salt Ltd. The new vessel was delivered to CSL in January 2022.

## JOINT VENTURES

In December 2021, CSL acquired a strategic minority stake in Canadian engineering firm EMS-Tech Inc., an industry leader in the design and supply of bulk material handling systems. This investment builds on the synergies between the two companies and expands CSL's commitment to provide customers with a full range of safe, sustainable and high-performance services.

In 2021, CSL's cement fleet joint venture with SMT Shipping, Eureka, entered into a shipbuilding contract with Royal Bodewes Shipyard to build three new, highly efficient 4,250 DWT eco-cement carriers. The vessel deliveries are scheduled for 2022 and 2023.

As part of CSL's 50/50 joint venture with Hartmann Family, MV *Fjordnes*, a 40,700 DWT self-unloader, was delivered in June 2021. This brings Hartmann's self-unloading fleet to seven ships, two of which are co-owned by CSL.

CSL also co-owns MV *Ventura* and MV *Weser Stahl* through a partnership with Marbulk Shipping.



# Corporate Governance

The CSL Group Inc. is headquartered in Montreal, Canada, and has offices in each of the regions in which it operates.

Company management is overseen by a nine-member Board of Directors, which includes CSL's three owners and six independent directors. In addition to overseeing the company's business activities, the Board of Directors advises the management team on CSL's strategic and operational direction.

Many of the Board's responsibilities are carried out through three working committees: the Audit and Risk Committee, the Human Resources Committee and the Corporate Environmental Sustainability Committee, all of which meet and report back to the Board of Directors throughout the year.

CSL and its owners believe that strong governance practices are essential to ensuring the company is managed responsibly and in accordance with CSL's core values.

## CSL BOARD OF DIRECTORS

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**Jacques Bougie**, formerly President and Chief Executive Officer of Alcan, is currently a Director of McCain Foods Limited and KDC-One Inc. He is also Chair of the advisory board of The Montreal Neurological Hospital and Institute. Mr. Bougie has served on the boards of SNC-Lavalin, Atrium Innovations, Alcan Inc., BCE Mobile Communications Inc., Bell Canada, Royal Bank of Canada, Nova Chemicals Corp., Novelis Inc., RONA Inc., Abitibi-Consolidated Inc. and AbitibiBowater Inc.



**Ian L. Edwards** is President and Chief Executive Officer of SNC-Lavalin, where he held successively senior roles until his current appointment in October 2019. He joined SNC-Lavalin in 2014 after six years in senior management roles with the Leighton Group, including that of Managing Director, Leighton Asia, India and Offshore. Mr. Edwards is an incorporated Member of the Chartered Institute of Building, a Fellow of the Institution of Civil Engineers, and Fellow of the Hong Kong Institution of Engineers.



**Rod Jones** was President and Chief Executive Officer of The CSL Group Inc. from 2008 to 2017. Over his 30-year career with CSL, Mr. Jones led the team that launched CSL Americas and CSL's international expansion to Australia, Asia, Europe and Africa. He was also a Director on the Board of The Standard Club, a P&I insurance club, from 2000 to 2017, where he served as Chair from 2014 to 2017. Prior to CSL, Mr. Jones held management positions at Van Ommeren and Navios Corp.



**William (Bill) Linton** is a Corporate Director currently serving on the Boards of TMX Group, Inc., Empire Company Ltd. and Deveron Corp. He served as Executive Vice-President, Finance and Chief Financial Officer at Rogers Communications Inc. from 2005- 2012 and was Chief Executive Officer of Call-Net Enterprises from 2000 to 2005. Mr. Linton is a Fellow of the Ontario Institute of Chartered Accountants. He is also an active investor and serves as a director of several private companies in the technology and finance industries.



**David P. A. Martin** is President of Bromart Holdings and an owner of The CSL Group Inc. and Horizon Capital Holdings, of which he is Co-President and Chief Executive Officer. Mr. Martin is a former Chair of the Board of Directors of the World Wildlife Fund (Canada) and a co-founder and General Partner of Capital for Aboriginal Prosperity and Entrepreneurship Fund (CAPE Fund).



**R. James E. Martin** is a film and television producer and an owner of The CSL Group Inc. and Horizon Capital Holdings. Mr. Martin began his career marketing films at The Movie Network before working in theatrical distribution with TVA International, a subsidiary of Montreal's Astral Network. Since 2006, he has been producing features through his own production company, High Treason Productions, and is currently developing a television co-production in partnership with Ciné Télé Action.



**Paul W. J. Martin** is the Chair of the Board of Directors of The CSL Group Inc. as well as an owner of The CSL Group Inc. and Horizon Capital Holdings. He started his career at CSL as a Management Trainee in the Administration Department before being promoted to Manager Business Development of CSL's Singapore office, where he also served as Director, Projects and Planning.



**Brian McManus** is the Executive Chair and CEO of Uni-Select Inc. Mr. McManus is also a member of the Board of Directors, the Audit Committee and the Human Resources Committee of Metro Inc. From 2001 to 2019, Mr. McManus was the President and CEO of Stella-Jones Inc.



**Lone Fønss Schrøder** is Chief Executive Officer of Concordium AG, a global provider of blockchain technologies. She is Vice-chair of Volvo Cars AB and Chair of the Audit Committee and is a director of Geely Sweden Holdings AB, Ingka Holding B.V. (Ikea Group), Akastor ASA; Aker Solutions ASA and Aker Horizons. She has held several senior management and CEO positions in the A.P. Møller-Maersk group and became CEO and president of Wallenius Lines AB in 2005.



# SUSTAINABILITY **GOVERNANCE**

CSL believes in creating shared value for our business, customers, and communities by providing a safer, sustainable, and more inclusive approach to marine transportation. As we evolve and seek continuous improvement for our environmental, social and governance goals, we remain committed to transparency and to reporting on our progress and ambitions for a sustainable and responsible shipping sector.





# ESG Strategy

Our Environmental, Social and Governance (ESG) strategy relies on a shared-value approach across five key areas where we believe CSL can create the most value for stakeholders: decarbonizing our operations, protecting life below water, continuing the journey to zero harm, promoting diversity and inclusion, and being a trusted partner. We are committed to focusing our time, efforts and resources on making a positive impact in these areas.

We have also identified five additional parallel priorities that will define our business fundamentals: ship recycling, ethics and anti-corruption, environmental management, a code of conduct for suppliers, and regulatory compliance. We consider these priorities as essential to our ongoing operations.





	Our Priorities	Shared Value Creation
<b>Environment</b>	Decarbonize our operations	Reducing carbon emissions and avoiding the worst consequences of climate change is a global imperative.
	Protect life below water	Healthy oceans are crucial for a habitable Earth and the shipping industry has a responsibility to protect and restore those oceans.
<b>Social</b>	Continue the journey to zero harm	A safe and healthy working environment is a fundamental human right.
	Promote diversity and inclusion	Fostering an inclusive culture will proactively contribute to our long-standing success.
<b>Governance</b>	Be a trusted partner	Cementing the credibility of CSL will lead to stronger relationships with all stakeholders.

# Long-Term Targets

The next step in the evolution of our ESG strategy is to define the long-term targets for each commitment. We will define these targets as we collect more baseline data and outline our plan for progress in each of our priorities. We remain committed to our 2030 Environmental Vision, which sets targets for nine environmental metrics. Over the next two years, we plan to conduct a full Scope 3 indirect emissions assessment to align CSL's decarbonization trajectory with the Science Based Targets initiative and a 1.5-degree warming scenario.

## 2030 ENVIRONMENTAL VISION

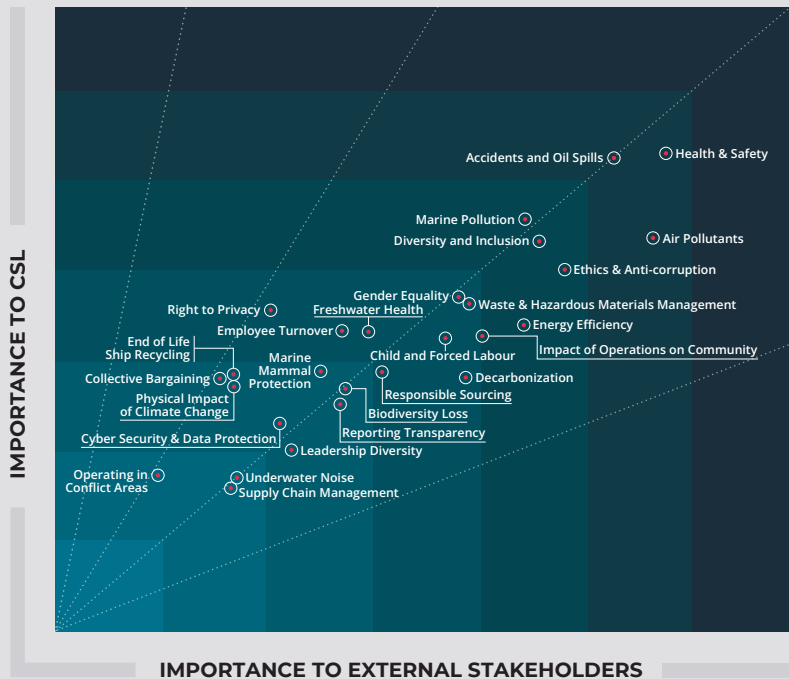
	GOALS	2021 ACHIEVEMENTS
<p><b>AIR</b></p>  	<ul style="list-style-type: none"> <li>&gt; Reduce greenhouse gases (GHG) per tonne-nautical mile by 35 percent compared to 2005</li> <li>&gt; Reduce sulphur oxides (SO<sub>x</sub>) by 95%</li> <li>&gt; Eliminate ozone-depleting substances</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Achieved 26 percent reduction in 2021, compared to 2005</li> <li>&gt; Achieved 92 percent reduction</li> <li>&gt; <b>Completed.</b> The fleet is now 100 percent free of ozone-depleting substances.</li> </ul>
<p><b>WATER</b></p>  	<ul style="list-style-type: none"> <li>&gt; Sustain zero oil spills</li> <li>&gt; Adopt ballast water and biofouling technologies and solutions</li> <li>&gt; Increase understanding of vessel noise footprints and impacts</li> </ul>	<ul style="list-style-type: none"> <li>&gt; 36 litres spilled in nine oil-to-water incidents</li> <li>&gt; Installed seven ballast water treatment systems across the fleet</li> <li>&gt; Measured underwater noise footprints for three ships, for a total of 17 ships with noise footprints</li> </ul>
<p><b>RESOURCE USE</b></p>  	<ul style="list-style-type: none"> <li>&gt; Reduce shipboard waste to landfill by 75 percent in m<sup>3</sup>/crew/operational day compared to 2010</li> <li>&gt; Recycle 50 percent as percentage of total shipboard waste</li> <li>&gt; Complete 10 supplier environmental impact assessments</li> </ul>	<ul style="list-style-type: none"> <li>&gt; Reduced shipboard waste by 59 percent compared to 2010</li> <li>&gt; Achieved 25 percent recycling</li> <li>&gt; No assessments completed in 2021 due to COVID-19. The program will resume in 2022.</li> </ul>

# ESG DATA REPORTING

For the second year, CSL's ESG Scorecard is included in our report's Annex. We chose to align disclosures with the Sustainability Accounting Standards Board (SASB)'s Marine Transportation Industry Standard. In addition to the SASB disclosures, subject matter experts across our business have helped us create disclosure metrics for material topics not covered by the SASB standard. Our goal is to report on all disclosures within the SASB standard by 2023.

## MATERIALITY

CSL's materiality matrix identifies and prioritizes the issues we believe are material to our business. We last reviewed the matrix in 2020 and will review and update it in 2022 to ensure the topics remain relevant to CSL and our stakeholders.



### Board of Directors Committee for Sustainability

CSL co-owner David Martin is the Chair of CSL's Corporate Environmental Sustainability Committee (CESC). The CESC is responsible for CSL's sustainability efforts. The Committee meets twice a year to address sustainability strategy and policies, issues and opportunities, and to review CSL's goals and progress.

## OUR PARTNERSHIPS

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CSL actively engages with a range of partners and organizations to pursue our sustainability goals. These partners include:

- > **Canadian Whale Institute**, a charity devoted to the sustainable co-existence of whales and people.
- > **Eyesea**, a non-profit organization that maps global pollution and maritime hazards.
- > **Fonds d'action Saint-Laurent**, a charity that supports projects created to improve the ecosystem of the St. Lawrence River and Gulf.
- > **Future Care**, an international medical management and telemedical service provider dedicated to meeting the needs of the maritime industry.
- > **Green Marine**, an environmental certification program.
- > **Group for Research and Education on Marine Mammals**, a non-profit organization dedicated to research on marine mammals in the St. Lawrence River.
- > **IMPA ACT**, a sustainable procurement program developed by the International Marine Purchasing Association.
- > **Innovation maritime**, an applied research centre affiliated with the Institut maritime du Québec.
- > **Institut des sciences de la mer de Rimouski**, an institute dedicated to the discovery and advancement of knowledge about coastal environments from a sustainable development perspective.
- > **Marine Animal Response Society**, an organization that aids stranded, injured or entangled marine mammals.
- > **Marine Mammal Observation Network**, a non-profit organization that works to protect and conserve marine mammals and their habitats in the Gulf of St. Lawrence.
- > **Maritime Anti-Corruption Network**, a global business network dedicated to ending corruption in the marine industry.
- > **MeRLIN**, an innovation centre for the marine industry from Technopole maritime du Québec.
- > **Moisson Montréal**, Canada's largest food bank.
- > **Neptune Declaration on Seafarer Wellbeing and Crew Change**, a declaration promoting four main actions to protect seafarers during the COVID-19 pandemic.
- > **White Ribbon**, a movement to end violence against women and girls.
- > **World Wildlife Fund**, an international organization dedicated to wilderness preservation and the reduction of human impact on the environment.

## THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS

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As a global shipping company, CSL has a responsibility to advance the United Nations Sustainable Development Goals. We may not have a direct impact on every one of the 17 goals, but we actively work to make a meaningful and positive contribution to those of concern to our company and industry.

Throughout our Sustainability Report, you will find icons corresponding to the Sustainable Development Goals where CSL's programs are most closely aligned.

# HEALTH AND **SAFETY FIRST**

The maritime transportation environment presents a vast array of challenges and exposes seafarers to many types of risks on a daily basis. Providing a zero harm workplace free of incident or injury is the goal of our SafePartners program and our single most important responsibility.

The safety of our crews and employees, and of our customers, suppliers and communities, is our primary consideration and explicit priority in every decision we make.







# Year Two of the COVID-19 Pandemic



In 2021, CSL's global fleet continued navigating the uncertain waters of the COVID-19 pandemic.

Our operational focus across our regions ensured that our COVID-19 vessel contingency plans remained robust and up-to-date as the situation evolved and that our seafarers continued to respect all precautionary measures and protocols.

Because of the scale of global pandemic cases, CSL did not escape unscathed. A number of seafarers on board some of our vessels tested positive for COVID-19, and it is with great sadness that we report the COVID-19-related death in February 2021 of a serving Captain in command of a CSL vessel.

The safety and well-being of our crews remained a critical imperative as we worked with local health authorities to contain the spread, ensure proper treatment was provided, and determine the causes of transmission.

In 2021, COVID-19 vaccines became accessible in our operating regions and we worked hard to make them available to our crews. Early success depended largely on how different governments prioritized seafarers as essential workers.

In the latter part of 2021, however, it became easier to obtain vaccine supplies. Approximately 65 percent of our crew members were vaccinated against COVID-19 by the end of 2021.

We are grateful for the sacrifices our seafarers made during the pandemic. They endured disrupted swing shift patterns, extended contracts, quarantine periods, border closures, shore leave restrictions and reduced travel options. All of these factors continued to make crew changes challenging throughout the year.

## FiRM Achievements in Numbers

**4** Ships equipped with Close-Circuit Television (CCTV)

**4** Ships equipped with E/R smoke and flame detection systems

**5** Self-unloaders equipped with linear heat detection systems

**6** Self-unloaders equipped with automated Hi-Fog® or foam systems for water suppression

**4** Self-unloaders equipped with open deck suppression

## FIRE PREVENTION AND MITIGATION

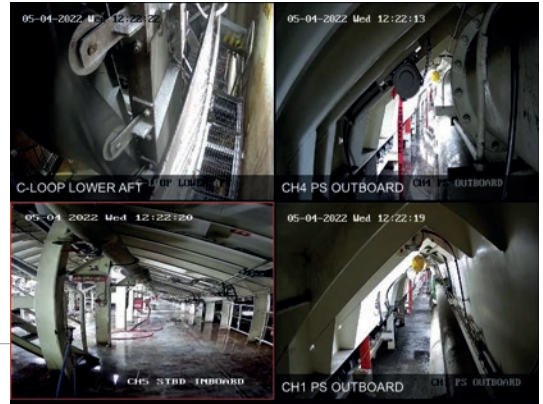
In 2021, five vessels were added to CSL's Fire Integrated Risk Management (FiRM) project. We launched FiRM in 2019 as an initiative across our global fleet to improve our ability to prevent, detect and suppress fires by installing engineering systems and other solutions.

The additional vessels include the newbuild diesel-electric self-unloader *Nukumi*, the recently converted self-unloaders *CSL Koasek* and *CSL Kajika*, and the two newbuild self-unloaders *Starnes* and *Fjordnes*, co-owned as part of our joint venture with Hartmann.

The FiRM project expanded during COVID-19, requiring the team to contend with the many challenges resulting from the pandemic. Despite those challenges, the team kept its momentum and achieved key milestones by installing and commissioning detection and suppression systems across seven vessels in the global fleet during 2021.

By working with regional HSEQ and technical teams, the FiRM project team also produced training packages for ship and shore personnel on industry-leading firefighting technologies. The training features key decision-making tools in deploying FiRM systems on vessels. These tools include flow charts and initial action checklists that form part of the vessels' emergency contingency documentation.

*FiRM close-circuit television (CCTV) integrated into the ship's linear heat detection system.*



## SAFEPARTNERS AWARDS CELEBRATE SAFETY MILESTONES

2021 was a solid year for our crews' safety performance. A total of 16 vessels achieved new safety milestones for the number of days they operated without a lost-time injury. The SafePartners Awards program provides us with an important way of celebrating the safety milestones achieved by our crews across our global fleet.

In total, 31 vessels across the global fleet had earned a Safety Pennant as of December 31, 2021. Each new pennant level a ship achieves (Bronze, Silver, Gold, Platinum, Double Platinum, Triple Platinum, Quadruple Platinum) indicates an increasing number of days the ship has operated without a lost-time injury.

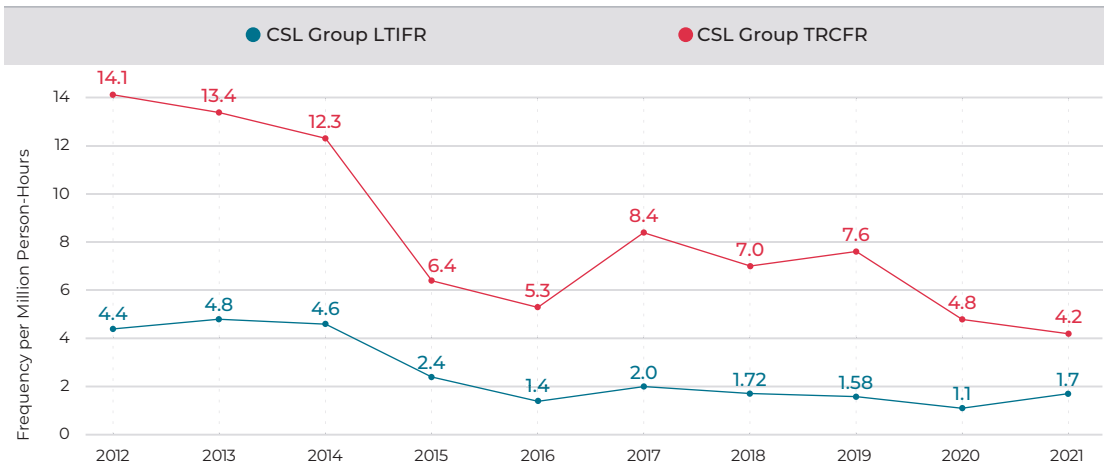


- 2  Quadruple Platinum
- 5  Triple Platinum
- 1  Double Platinum
- 2  Platinum
- 3  Gold
- 2  Silver
- 1  Bronze

# Historical Injury Trend

In 2021, CSL's Total Recordable Case Frequency Rate (TRCFR) dropped year over year, continuing its downward trend since 2012 – the year we introduced the SafePartners program. The TRCFR includes lost-time injuries, cases requiring medical treatment, and cases resulting in work restrictions. This rate dropped despite cases of COVID-19. The Lost-Time Injury Frequency Rate (LTIFR) was up slightly, at 1.7 in 2021, compared to 1.1 in 2020.

## GLOBAL TRC AND LTI FREQUENCY RATES



## SAFETY RESULTS

### 2020 vs 2021



The lost-time injury frequency rate (LTIFR) refers to the number of lost-time injuries occurring in a workplace per 1 million person-hours worked.



The total recordable case frequency rate (TRCFR) refers to the sum of lost-time injuries, restricted work cases and medical treatment cases occurring in a workplace per 1 million person-hours worked.



**1,553 in 2020 vs 1,426 in 2021**  
Safety observances refer to safe acts, unsafe acts and safety observations.

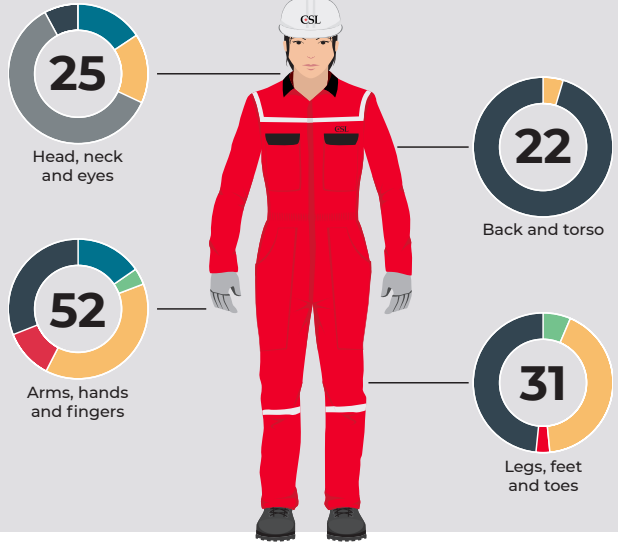


The average days off per injury decreased from 62 in 2020 to 51 in 2021.

## INJURIES BY BODY AREA 2021

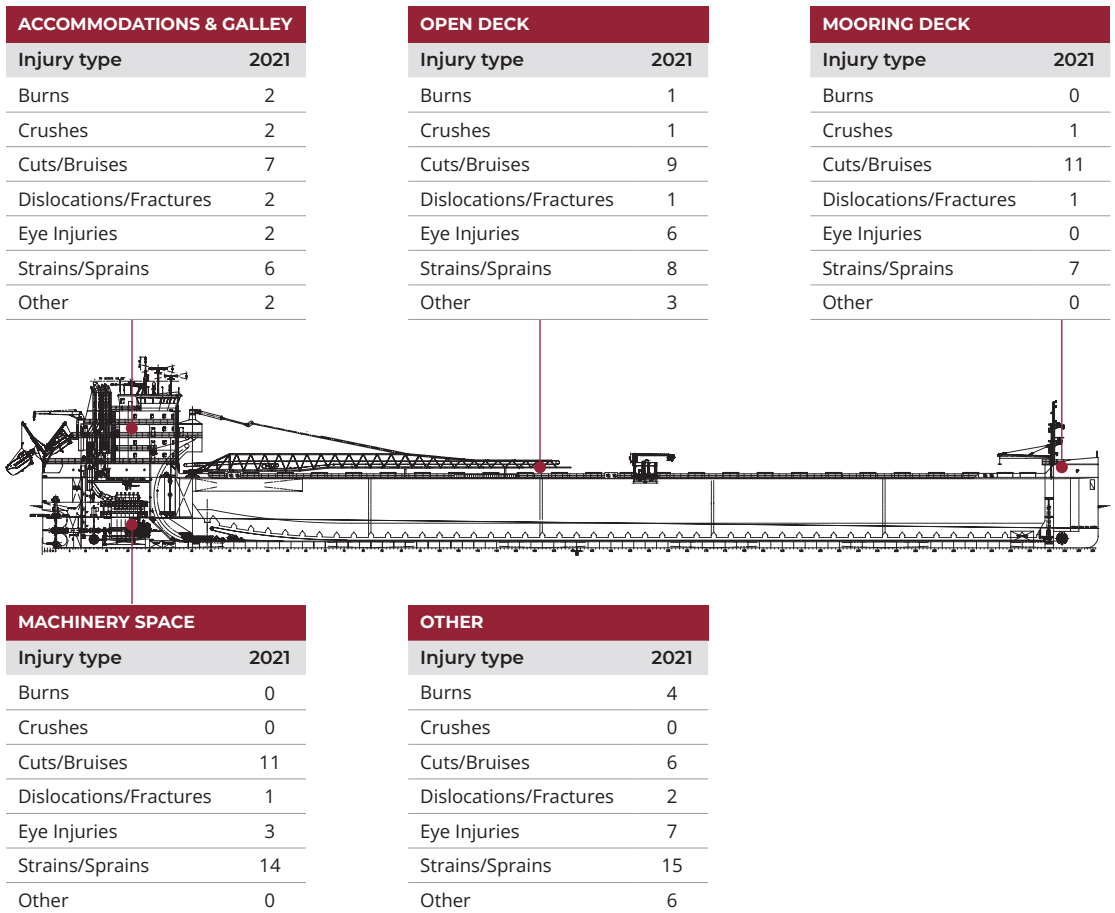
This image depicts the number of safety incidents and locations on the body where people injured themselves in 2021. All injuries requiring First Aid and medical treatment and/or resulting in restricted work and lost-time injuries are included.

- Burns
- Crushes
- Cuts/Bruises
- Dislocations/Fractures
- Eye Injuries
- Strains/Sprains



## INJURIES BY SHIP AREA 2021

This graphic depicts ship areas where injuries occurred in 2021.



# Continuous Improvement Through SafePartners



PHOTO: CARL TREMBLAY

CSL's flagship SafePartners program drives our global safety performance. We are always looking for solutions to make any high-risk work activity safer for our crews. Each year, we strive to strengthen the program to create safer environments on board our ships.

In 2021, we added two superintendents to our Health, Safety, Environment and Quality (HSEQ) team in Canada. Each will support specific vessels within the Canadian fleet.

We also spent the year planning our future safety strategy and identifying ways the SafePartners program could help us achieve our safety goals.

## SAFETY MANAGEMENT SYSTEM SOFTWARE UPGRADE

In 2021, we began planning for an agile, mobile and efficient new system as a means of upgrading the software we currently use to manage daily ship and shore vessel-related tasks. The system we implement will:

- > improve reporting and safety management;
- > streamline the Short Message Service (SMS), making it easier to update and access as a guide for procedures;
- > centralize major procedures and introduce global vessel standards;
- > streamline critical onboard task workflows.

## SAFETY PERFORMANCE METRICS

Strengthening our safety leadership culture is a key area of focus to influence future safety performance. Traditionally, we have relied on analyzing our safety record by comparing the number of days since a Lost-Time Injury or the Lost-Time Injury Frequency Rate. Moving forward, we will add additional indicators of our safety performance.

Initiatives to support this effort include:

- > launching a "What Went Right" safety campaign;
- > increasing fleet participation in reporting safety observations;
- > initiating safety leadership coaching for ship and shore managers.

CSL is confident the work plan we are developing will result in a safer, more streamlined and efficient experience for our crews. By removing some of the administrative burden, crew members will be able to focus increasingly on executing critical tasks safely and more efficiently.

# Zero Harm



**SAFE + PEOPLE**

- > CSL employees and customers
- > Contractors and suppliers
- > Community



**SAFE + PLANET**

- > Air
- > Water
- > Resource use



**SAFE + PROPERTY**

- > Vessels
- > Infrastructure

## OUR COMMITMENT

- > Achieve Zero Harm
- > Build on SafePartners through focused vessel safety design and risk management
- > Focus on preventing catastrophic losses by tracking and learning from high potential occurrences (HIPOs)
- > Leverage technology and reporting/analysis to anticipate and prevent future accidents
- > Increase the maturity of CSL's safety culture

## PROGRESS IN 2021

- > Reduced TRCFR by 12.5 percent over 2020, continuing downward trend from 2012
- > Put in place strong HSEQ foundations for Canada and Australia with added support of global HSEQ team
- > Expanded the FiRM project with the installation of detection and suppression systems, and the release of crew training and decision-making support material
- > Managed the COVID-19 pandemic and supported crews to maintain safe vessel operations – Rolled out crew vaccination across regions
- > Selected and developed a new Learning Management System to address training needs of crew better
- > Introduced Lifesaving Rules quick reference documents for Canadian and Australian fleets

## MOVING FORWARD

- > Develop leading safety indicators as a measure of safety performance to complement LTIFR/TRCFR trends
- > Continue to implement SafePartners roadmap
- > Select an upgraded safety management IT tool for Canadian and Australian fleets
- > Mitigate fire risk in all high-risk spaces on board vessels
- > Provide Safety Leadership Training for key ship and shore managers
- > Increase focus on Bridge Resource Management Training with enhanced navigation and BRM audits
- > Develop a roadmap to mitigate risks associated with mooring and confined space entry

# DECARBONIZATION

Reducing carbon emissions and avoiding the worst consequences of climate change is a global imperative. At CSL, we recognize our responsibility not only for decarbonizing our own operations, but also for working with our partners to encourage deep decarbonization along the value chain.

As we continue to work to achieve net-zero shipping, we know our success in decarbonizing our operations relies on our customers' willingness to embrace carbon-neutral transport as a value-added product.







# CSL's Biodiesel Program Gains Traction



## CSL's Biodiesel Program in Numbers

### Eight-vessel trial

from May to October 2021

More than **27,000 hours** burning B100 biodiesel

More than **16,000 MT** of **biodiesel** B100 delivered

More than **38,478 MT** of **carbon** avoided on a life-cycle basis

To achieve decarbonization in the maritime industry at the scale and speed required to meet the goals of the Paris Agreement, we need to adopt solutions for the existing shipping fleet to reduce our greenhouse gas emissions. To this end, CSL began a biodiesel demonstration project in 2019 on one vessel's auxiliary engine, progressing to the main and auxiliary engines of two ships in 2020. In 2021, we rolled out our biodiesel project to eight ships. Our pilot project has demonstrated the technical feasibility of using biodiesel to power existing marine engines.

## ESTABLISHING A LEVEL PLAYING FIELD

CSL is working closely with different levels of government to establish durable, long-term and competitive decarbonization strategies for the marine sector. New regulations must be region-specific and take into account the size and assortment of local fleets. They must include incentives to increase the production of biodiesel and other measures to ensure that the cost of alternative fuels remains competitive.

## CONSIDERING LIFECYCLE EMISSIONS IN DECISION-MAKING

A lifecycle perspective is an important part of the decision-making process for adopting alternative fuels. CSL wants to make sure the options we explore don't have unintended negative consequences up or down the value chain. A lifecycle greenhouse gas (GHG) accounting process evaluates and reports on full lifecycle GHG emissions associated with the raw materials extraction, manufacturing or processing, transportation, use, and end-of-life management of a good or service.

CSL's biodiesel supply originates in North America and is produced from the waste soy oil left from processing the soy plant for animal feedstock. We evaluated the biodiesel supply using the government of Canada's GHGenius Lifecycle Emissions Model, a lifecycle emissions inventory tool. According to this measure, using biodiesel can reduce GHG emissions by more than 80 percent, compared to fossil fuels.

# 80%

Using biodiesel on CSL ships can reduce GHG emissions by more than 80 percent, compared to fossil fuels.

# Improving Propeller Efficiency

As part of CSL's energy efficiency upgrades, we have installed propeller boss fin caps on selected vessel propellers as well as Becker Mewis Ducts®, devices attached to the hull in front of the propeller to help improve fuel efficiency.

The propeller boss fin caps work by eliminating the hub vortex generated by the rotating propeller, requiring less power to propel the vessel at a given speed. The Becker Mewis Duct® straightens and accelerates the hull wake into the propeller to produce more thrust, hence requiring less energy to maintain a given speed.

In 2021, sister ships *CSL Koasek* and *CSL Kajika* were fitted with Becker Mewis Ducts®, bringing the total number of ships in the fleet with energy saving hull appendages to 10.

# 10

Energy-saving hull appendages installed across the fleet





## REAL-TIME ENERGY EFFICIENCY MONITORING

CSL's proprietary Operational Optimizer (O2) energy management system leverages onboard sensors and fuel flow meters to provide the crew with real-time, accurate information on vessel performance. In addition to aiding energy efficient operations on board vessels, O2 data helps us compare vessel performance against sister ships and historical benchmarks.

This information helps us make the best possible decisions to increase the energy efficiency of our ships. Our scheduling teams can also use the system to predict estimated times of arrival at the next port and to support just-in-time arrival, a concept that is gaining traction globally as a tool with significant potential to improve the overall efficiency of the shipping sector.

In 2021, we continued to install O2 hardware and sensors in our Australia and Americas fleets, despite the challenges the ongoing COVID-19 pandemic presented. We intend to have O2 hardware and sensors connected and running on the entire fleet by late 2022.

## CAPTURING DATA USING A DIGITAL TWIN

A significant aspect of CSL's O2 system concerns the digitization of vessel data. We use a digital twin on shore to capture and archive system data and crew inputs. We add voyage, geofencing, traffic, compliance, weather and user inputs to data collected on vessels and combine this data for our onshore analytics.



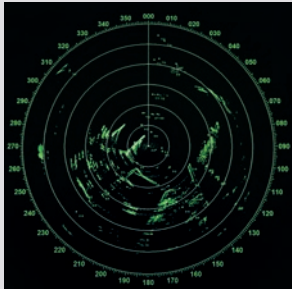
# Hydrogen Injection R&D

As part of our research and development efforts to reduce greenhouse gas emissions, CSL has been exploring hydrogen injection fuel systems. In 2021, we investigated two systems that looked promising. The first system involves injecting hydrogen into a vessel’s main engine. The second system involves a mix of hydrogen and methanol. Both technologies improve fuel consumption and engine fuel efficiency. If the systems were able to use renewable forms of hydrogen and methanol, they could help reduce greenhouse gases even further. In 2022, we will continue to look at possible trial projects using these fuel injection systems.

## DRAFT OPTIMIZATION THROUGH RADAR MEASUREMENTS

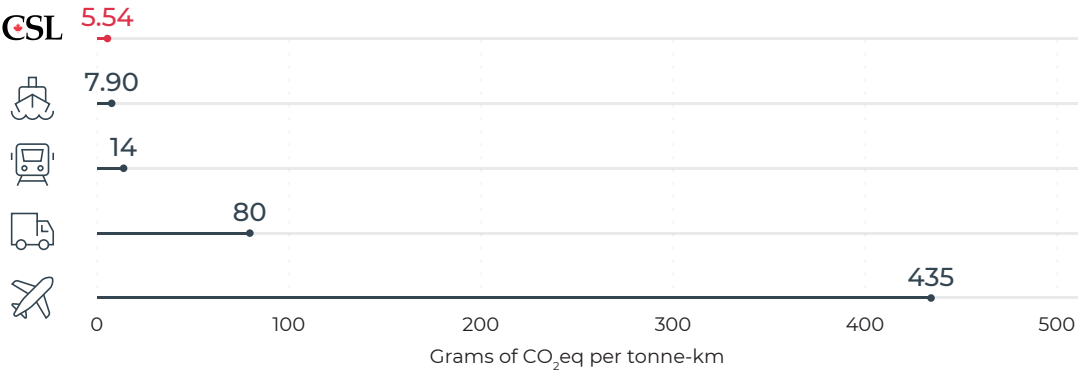
Measuring a ship’s draft is crucial to enable crew to load cargo to the vessel’s maximum safe limit. Radar measurements show promise in providing crews with more precise readings of a ship’s draft.

In 2021, we worked with a partner to install radar measurement equipment on board one vessel in the fleet as part of a trial. In 2022, we plan to activate the system to maximize onboard cargo space and improve overall efficiency.



## EFFICIENCY IN CARGO TRANSPORTATION

Ships move approximately 80 percent of the world’s goods. When compared to other forms of transportation, marine shipping is the most energy-efficient mode of moving cargo. As shown in the graph below, transporting cargo on CSL’s global fleet is 10 times more efficient than moving cargo by truck, and 55 times more efficient than sending cargo by air.



Based on the IMO GHG 2009 study. Trucks >40 tonnes – Bulk Carriers 10,000 – 34,999 DWT.

# CSL 2030 Goal

Emit 35 percent less CO<sub>2</sub>eq per tonne of cargo moved, compared to 2005.

## How did we do?



Achieved a **26 percent reduction** of CO<sub>2</sub>eq per tonne of cargo moved in 2021 compared to 2005.



Achieved an annual **reduction of 2.6 percent** for total GHG emissions per tonne-nautical mile.



Achieved **86 percent** of our 2030 goal to reduce 35 percent of GHG emissions emitted in 2005 per tonne of cargo moved.

# Shore Power Feasibility Study

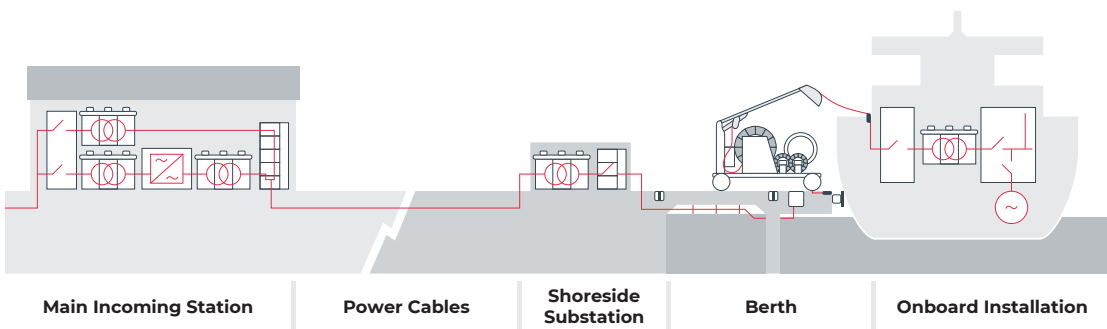
In mid-2021, CSL began studying the feasibility of using shore power at Australian ports for our coastal fleet, rather than generating power from the ship's engines while docked.

The marine industry has studied the use of shore power and associated technology on an array of vessel types, ports and trades, and this trend is being adopted globally. CSL Australia's pneumatic cement fleet lends itself well to the use of shore power because the ships call at port regularly and because of their fuel consumption during unloading operations. These vessels call weekly (sometimes biweekly) at the ports of Melbourne and Sydney and use fuel when running the onboard pneumatic unloading system.

Using shore power not only reduces the quantity of fuel a vessel burns, it also cuts air emissions and vessel noise, thus minimizing the impact of cargo operations on surrounding communities. Utilizing green shore power will also contribute to CSL's compliance under the upcoming 2023 MARPOL regulations.

As part of our shore power study, CSL is liaising with customers and external stakeholders, including port and government authorities, to understand the infrastructure requirements, both on board and on shore. In 2022, CSL will work towards having our pneumatic fleet and eventually our hybrid self-unloaders use shore power.

## KEY COMPONENTS OF ONSHORE POWER SUPPLY



## FREON ELIMINATED FROM CSL FLEET

CSL has successfully eliminated Freon, an aerosol propellant and ozone-depleting substance, from our fleet, well ahead of our 2030 target. We achieved this reduction by systematically removing all refrigerant gases (R22 and R409A, also known as Freon) from onboard systems during scheduled vessel dry docks. In 2021, we removed Freon from the last vessel in the fleet. Removing Freon will continue to be a mandatory requirement for any future vessels we acquire.



### CSL 2030 GOAL

- › Produce 35 percent less CO<sub>2</sub>eq per tonne of cargo moved than in 2005
- › Reduce fleet sulphur emissions by 95 percent compared to 2010
- › Eliminate ozone-depleting refrigerants from the fleet

### PROGRESS IN 2021

- › Eliminated ozone depleting refrigerant gases R22 and R409A from the fleet
- › Utilized B100 biodiesel on eight vessels
- › Installed one propeller boss fin cap and two Becker Mewis Ducts®
- › Deployed O2 on CSL Australia and CSL Americas vessels
- › Trimmed the propeller on one vessel
- › Completed energy efficiency lighting upgrades on six ships
- › Upgraded Eco-Torque on four vessels

### MOVING FORWARD

- › Expand the use of biodiesel on the CSL fleet
- › Trial draft optimization radar technology on one ship
- › Complete a shore power feasibility study in all CSL operating regions
- › Trim one more propeller and upgrade two Eco-Torques

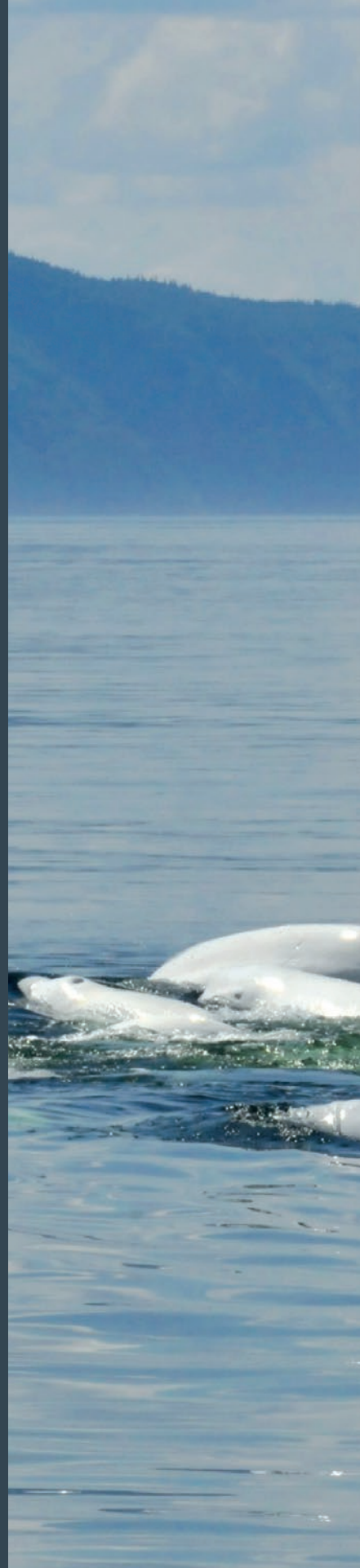
### SUSTAINABLE DEVELOPMENT GOALS



# PROTECTING LIFE **BELOW WATER**

Healthy lakes, oceans and waterways are crucial for the wellbeing of people and our planet. More than three billion people depend on marine and coastal biodiversity for their livelihood.

At CSL, we understand that the sustainability of our business relies on healthy, thriving marine ecosystems. As our oceans and waterways are being increasingly threatened by acidification, pollution, climate change and overfishing, we identify the most material aspects we can influence and work to improve them. These include reducing ship discharges, preventing oil spills, protecting marine mammals by avoiding collisions with vessels and reducing the underwater noise our vessels emit.







# Underwater Radiated Noise

Sound is critical to the survival of many marine animals. Underwater Radiated Noise (URN) has both short-term and long-term impacts on marine life. For these reasons, CSL has made understanding and reducing underwater noise from vessels a priority.

## MEASURING OUR IMPACT



In 2021, CSL obtained underwater noise footprints for three vessels through our partnership with the Marine Acoustic Research Station (MARS) project. The project involved installing 12 hydrophones in the St. Lawrence River, in Quebec, Canada. The Institut des sciences de la mer de Rimouski and Innovation maritime managed the hydrophones. The project's purpose was to identify the source of vessel noise and assess the success of operational measures to reduce and mitigate the impact of that noise.

The data from this study allows us to estimate the contribution of our fleet to underwater noise. The next step in the research is to install sensors on board ships to evaluate the role of vibration and to measure the effects of noise reduction technologies and techniques, including speed reduction, propeller modifications and hull form.

## CAVITATION MONITORING

CSL completed a real-time cavitation monitoring project on the MV *Ferbec* in 2021. Cavitation occurs when a propeller begins to make bubbles. When those bubbles collapse, they emit noise. Cavitation can also damage the propeller.

Our cavitation monitoring project involved installing a monitoring system consisting of pressure sensors and an accelerometer to measure water pressure fluctuations in the direct vicinity of the propeller. The cavitation state of the propeller was then fed into CSL's proprietary O2 real-time data monitoring system, allowing the bridge crew to see when the propeller was cavitating.

The system also estimates the underwater noise level at different speeds. The bridge crew can then use this information to minimize noise when operating in sensitive marine habitats.

The project was eye-opening for CSL and our research partners, JASCO and the government of Canada. We look forward to supporting the project's next steps and any future use of cavitation monitoring to help us protect marine mammals.

# 36%

**Percentage of CSL fleet with measured underwater noise footprints.**

Through underwater noise measurement initiatives such as ECHO Vancouver and the Canadian Department of Fisheries and Oceans, CSL has now measured the underwater noise footprints of 17 vessels across our fleet.

## UNW-M Notation for MV *Nukumi*

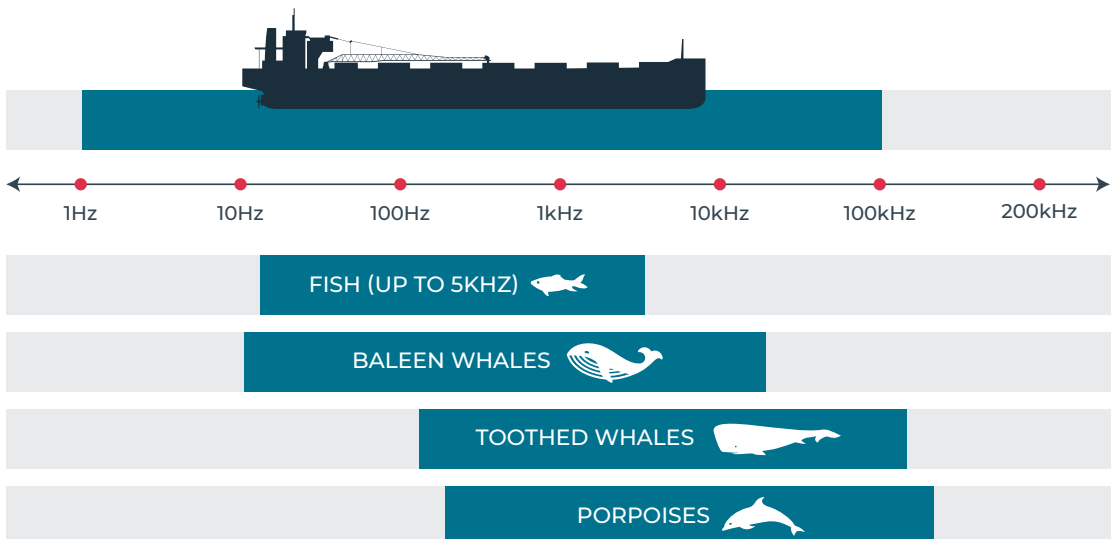
MV *Nukumi*, CSL's newest self-unloading Laker, received an Underwater Noise – Measured (UWN-M) notation from the classification society Lloyds Register. Lloyds awards this notation to vessels that have measured the underwater noise they create during their sea trials. Due to background noise that severely affected noise measurements during the sea trial, *Nukumi's* noise levels will need to be measured anew in areas with less background noise, to obtain a "Quiet Ship" notation.

PHOTO: STEVE FARMER



## UNDERWATER NOISE FREQUENCY

Ships produce noise at frequencies ranging from 20 to 100,000 Hertz. This noise overlaps with the frequencies whales and other marine mammals use to communicate, feed, navigate and reproduce. If ships emitting this noise frequent the waters where whales and other marine mammals reside, the noise thus generated reduces the area within which these mammals can function.



# Coastal Protection in the Magdalen Islands



In 2021, CSL formed a new partnership with the Fonds d'action Saint-Laurent (FASL) to support their work in marine ecosystem conservation. The partnership completed two projects in 2021. The first project was designed to control and eradicate an invasive species called yellow tunicate at Cap-aux-Meules. The project involved conducting an inventory and inspection of floating docks in the port of Cap-aux-Meules, removing docks, changing materials, applying anti-fouling paint and encapsulating any untreated docks. Eliminating invasive species helps preserve biodiversity in the area.

The second project concerned wetland conservation in Fred Jomphe Park. It involved delimitating conservation areas, constructing observation platforms, increasing awareness of habitats and species that need preservation, and promoting a code of ethics for kite surfers. CSL looks forward to protecting more coastal environments during our partnership with FASL in the coming years.

## OIL SPILLS

CSL had nine minor oil-to-water incidents in 2021. The total oil spilled to water was 36 litres. Even one drop of oil spilled is too much, however, and we continue to learn from the incident investigations and to work hard on reaching our goal of zero oil spills every year.

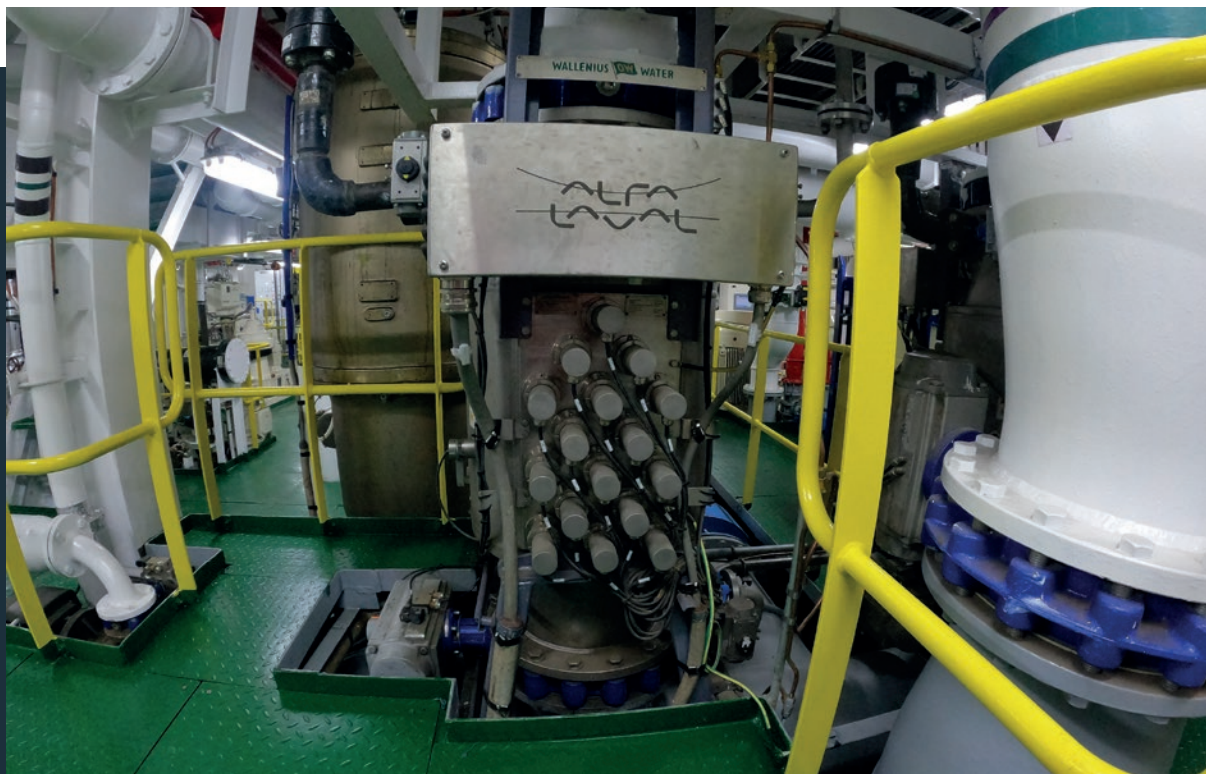


**9 minor oil spills**  
**=**  
**36 litres**

# Ballast Water Treatment in the Great Lakes

The unique waters of the Great Lakes, with zero salinity, low UV transmissivity and temperatures below zero degrees, combined with the short voyage lengths of ships operating in the Lakes, make ballast water treatment a challenge. In 2021, Transport Canada released its final regulations mandating the installation of ballast treatment systems on all vessels calling at Canadian ports. The date by which vessels have to comply with the regulations depends on their year of construction. Newer vessels built after 2009 need systems in place before September 2024, while all other ships must comply by 2030.

To prepare for these regulations and the installation of ballast water treatment systems across our Canadian fleet, we tested a system on the Trillium Class vessel *Whitefish Bay*. The installation, completed in the winter of 2020-2021, was the first retrofit of a ballast water treatment system on a Laker vessel. The system was in use throughout 2021 and generated valuable performance information, which we are using to guide installations on the rest of the Canadian fleet.



## 16 systems

Since the International Ballast Water Management Convention came into force in 2017, CSL has installed 16 ballast water treatment systems across the fleet, six of which were completed in 2021.

# CSL Wins Speed Reduction Award to Save Whales



The U.S National Oceanic and Atmospheric Administration presented CSL Americas with an award recognizing its commitment to abiding by voluntary speed reduction initiatives in North-Central California.

When transiting through vessel traffic lanes outside the Golden Gate bridge during whale feeding season (May through mid-November),

ships are asked to slow to 10 knots (about 11.5 mph) or less. The marine sanctuaries of Greater Farallones, Cordell Bank and Monterey Bay are prime foraging grounds for several endangered whale species.

CSL is committed to abiding by all mandatory and voluntary speed reduction measures throughout our areas of operation, to help protect whales.

## CSL Joins Eyesea to Support Pollution-Free Oceans

CSL joined the Eyesea Initiative in 2021. Eyesea is a not-for-profit organization that is creating a global map of ocean pollution and improving the efficiency of pollution clean-up efforts. Eyesea has developed a simple but effective app that allows users to take quick photos of ocean pollution and geotag its location. Cleaning our oceans is a cause close to the hearts of our seafarers and the entire CSL team.



## PARTNERSHIPS TO REACH SHARED GOALS

CSL is proud to work in partnership with the following organizations, whose important work supports the protection of whales:



PHOTO: GREMM

- > Canadian Whale Institute
- > Dalhousie University
- > Eyesea
- > Fisheries and Oceans Canada
- > Green Marine
- > Group for Research and Education on Marine Mammals
- > Innovation maritime
- > Institut des sciences de la mer de Rimouski
- > Marine Animal Response Society
- > Marine Mammal Observation Network
- > MeRLIN
- > Parks Canada
- > Transport Canada
- > Université du Québec à Rimouski

### CSL 2030 GOAL

- > Sustain zero oil spills
- > Reduce the risk of marine aquatic invasive species transfer
- > Understand the impact of vessel underwater noise on marine mammals and actively work to reduce it

### PROGRESS IN 2021

- > Completed installation of six ballast water treatment systems in the global fleet
- > Complied 100 percent with mandatory speed restrictions to protect the North Atlantic right whale
- > Obtained underwater noise footprints for an additional three vessels
- > Supported the development and testing of a real-time cavitation monitoring system

### MOVING FORWARD

- > Continue underwater noise data collection via the Marine Acoustics Research Station on the St. Lawrence River and explore technical and operational measures for noise reduction
- > Continue to participate in underwater noise policy work with Transport Canada and the Department of Fisheries and Oceans

### SUSTAINABLE DEVELOPMENT GOALS



# RESOURCE CONSERVATION AND **SUPPLY CHAINS**

CSL's approach to resource conservation starts with our biggest assets, our ships, and flows through to our waste management and procurement practices. Our focus is on building collaborative supply chains to gain efficiencies across the entire life-cycle of a ship and seeking waste to asset options across the value chain. As our sustainability programs evolve, we are looking at ways to improve our supply chain practices and make them even more sustainable.







# Responsible Ship Recycling

The entire lifecycle of a vessel must be considered when creating a responsible supply chain in the marine industry, both at the beginning and end of its useful life. Ship dismantling can generate many environmental, safety and health hazards, which is why we have identified responsible ship recycling as a business fundamental.

We work closely with our long-term partners and stakeholders to ensure we complete the ship recycling process in the most responsible way possible.

In 2021, CSL bid farewell to three vessels that had reached the end of their useful life: *CSL Rhine*, *Salarium* and *Acacia*.

We outline our commitment to responsible ship recycling in our Ship Recycling Policy, which has been in place since 2009. The standards

we adhere to go beyond current regulatory requirements and include an obligation to work with ship recycling experts who vet and approve the shipyards we use, adding an additional level of scrutiny to the process.

As part of the vessel recycling process, we approve a ship recycling plan from the yard before it begins the work. We also receive the yard's audit report and follow up on any corrective actions the audits identify. Once recycling is under way, we review weekly supervision reports. At the end of the process, we receive a "completion of recycling" report. This thorough level of communication and transparency is part of CSL's commitment to best practice ship recycling. We value a clean environment and human lives over any profit from ship disposal.



## SHIP RECYCLING IN INDONESIA

Since the closure of Chinese shipyards to foreign vessels in 2019, CSL has been exploring options for ship recycling in Southeast Asia for our Australian fleet. Finding shipyards in the region that meet CSL's exacting standards for environmental protection and safety is no small feat. Thanks to Greig Green, the firm we use to provide us with third-party yard oversight and support, we undertook our first ship recycling project with an Indonesian yard in 2021.

Greig Green vets and audits the shipyards on behalf of CSL, ensuring a transparent recycling process that adheres to international regulations and our own ship recycling policy. We look forward to continuing to help develop the capabilities and practices of shipyards in this region, as we introduce additional sustainable options for our future fleet recycling needs.

## END OF SHIPBOARD INCINERATION IN CANADA

The last ship in the Canada Steamship Lines fleet stopped using its incinerator in October 2021. Our entire Canadian fleet now disposes of all its waste material on shore, working with our shoreside removal partner. Recognizing that recycling is higher in the waste hierarchy than incineration, CSL's strategy behind decommissioning the incinerators is to improve shipboard recycling and organic composting, with the added benefit of reducing emissions on board.

# 2.4%

**CSL's Canadian fleet reduced shipboard incineration to just 2.4 percent of total waste in 2021, down from almost 75 percent of the waste stream in 2010. In 2022, incineration will go down to zero.**



# impa|save

People, Planet, Profit, Purpose

CSL is an active member of the IMPA SAVE initiative, which aims to significantly reduce the use of plastic water bottles on board ships by 2025. The project aligns with the United Nations' 2030 Agenda and addresses the urgent need to reduce the use of plastics, which threaten ocean life and the health of the planet. On average, CSL crew members consume more than 150,000 bottles of water per year.

A single plastic bottle takes at least 450 years to degrade completely in a landfill. Plastic bottles also become highly toxic to marine animals if they break down into microplastics in our oceans. That's why we are proud to join this initiative and the 5,700 other like-minded ships and crews who share the same concerns.

We are committed to reducing our consumption of single-use plastics and finding safe, cost-effective alternatives to water bottles – alternatives that demonstrate our respect for the planet we share.

Achieved  
**25.2 percent**  
recycling as a percentage  
of total waste.

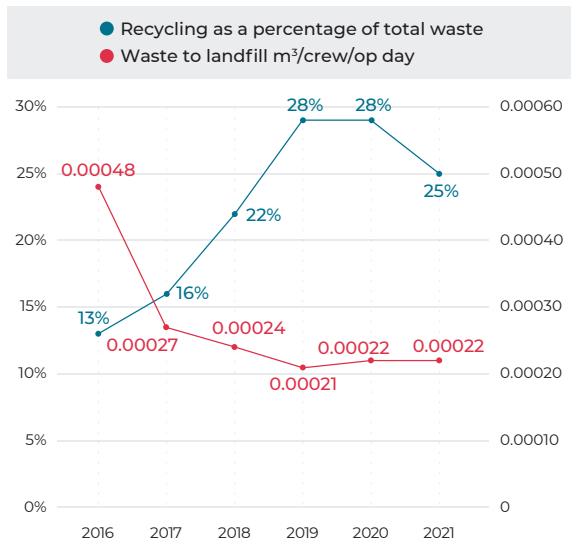
Total **waste**  
**per crew**  
**member**  
was the same in 2021  
as in 2020.



## WASTE AND RECYCLING PERFORMANCE

The graph shows CSL historic global waste performance. Recycling on board the fleet as a percentage of total waste has steadily increased while the waste to landfill figure, on the basis of m<sup>3</sup> per crew member per operational day metrics, has slowly declined.

The success of CSL's waste management program relies on collaboration with our local waste providers shoreside who help with vessel audits to improve waste management practices and ensure re-purpose and recyclability for the maximum number of products.



### CSL 2030 GOAL

- > Produce 75 percent less shipboard waste than in 2010
- > Increase shipboard recycling by 50 percent
- > Conduct environmental impact assessments of critical suppliers
- > Work with others to pursue circular economy opportunities

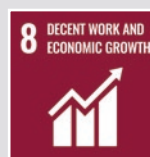
### PROGRESS IN 2021

- > Produced 61 percent less shipboard waste per crew per operational day than in 2010
- > Recycled 25.2 percent of total waste
- > Recycled three vessels
- > Eliminated incinerator use in the Canadian fleet
- > Issued Inventory of Hazardous Material Certificates for all ships in CSL Americas and one vessel in CSL Europe
- > Completed waste audit on two vessels
- > Upgraded water purifier on four vessels

### MOVING FORWARD

- > Perform more waste audits and increase recycling to reduce amount of waste going to landfill
- > Communicate Supplier Code of Conduct
- > Complete inventories of hazardous materials on one more vessel in 2022, completing the inventory of the entire fleet

### SUSTAINABLE DEVELOPMENT GOALS



# ETHICS AND **INTEGRITY**

Integrity is a fundamental CSL value and the foundation of our business. We promote a fair and honest culture and our employees are champions of high ethical conduct and comply with all laws and regulations.

Our employees understand they cannot compromise when it comes to ethical conduct. Consequently, we are recognized as an industry leader in all areas of legal and ethical compliance.





# CSL's Code of Corporate Responsibility

CSL's Code of Corporate Responsibility underpins our ethical commitment and practices. The Code establishes our ethical responsibilities. It provides clear rules outlining appropriate conduct toward customers and business partners, our respect and fair treatment of employees, compliance with law, the need to protect the environment, and our zero tolerance for any form of corruption.

The Code is part of our social licence to operate. Observing the Code is the obligation of every CSL director, officer, and employee.

## COMPLIANCE WITH LAWS AND REGULATIONS

Our strict compliance program and a skilled team ensure we carry out our business in compliance with the laws and regulations of the countries in which we operate.

All dealings among CSL employees and public officials are conducted in a manner that upholds the integrity and reputation of the officials and of CSL. In addition to observing all laws applicable to individuals and CSL, all our employees are expected to uphold CSL's ethical standards.

## THE UNITED NATIONS GLOBAL COMPACT AND COLLECTIVE ACTION



### United Nations Global Compact

CSL actively supports the 10 principles of the United Nations Global Compact. The Compact is a voluntary corporate responsibility initiative created to “advance a sustainable and inclusive global economy that delivers lasting benefits to people, communities, and markets.” CSL actively ensures and verifies that each of our directors, officers, and employees complies with the 10 principles.

## FIGHTING CORRUPTION

Since introducing our Anti-Corruption Program, CSL has been at the forefront of the movement to end bribery, extortion and corruption in the shipping industry. Now in its 11<sup>th</sup> year, the Program is designed to ensure CSL's business operations are corruption-free. We achieve this objective through four components:

- > a strict policy against any form of corruption;
- > due diligence and verification of everyone representing CSL in any dealings with government officials;
- > training employees on corruption avoidance and best practices;
- > a system of checks and verifications to prevent corruption.

Adopted in 2012, the CSL Anti-Corruption Manual outlines the policies and procedures that form CSL's Anti-Corruption Program. The Manual applies to CSL and all our officers, directors, and employees.

We also require our partners, agents, and other representatives to abide by the same ethical standards our Program and our Manual outline.

## HUMAN RIGHTS

CSL recognizes its obligation to act responsibly toward people. This commitment rests on our fundamental respect for, and support of, internationally recognized principles contained in the UN Global Compact, as made operational with the UN Guiding Principles on Business and Human Rights (UNGPs).

To act responsibly, we have committed to adopting a system that identifies, prevents, mitigates and accounts for potential and actual material adverse impacts on society that we cause or contribute, or that are linked to our company by our business relationships. This includes remediating material adverse impacts our business causes or contributes to on all human and labour rights referenced in the International Bill of Human Rights (IBHR). We also abide by the International Labour Organization's Declaration on Fundamental Principles and Rights at Work (ILOD).

CSL also has an established process to prohibit discrimination based on religious creed, colour, race, national origin, ancestry, age, disability, family status, gender, sexual orientation, veteran status, pregnancy, childbirth or any other characteristics protected by law. We outline our expectations for our employees in our Employee Handbook.

In accordance with CSL's Code of Corporate Responsibility, CSL always:

- › respects human rights throughout its operations in every country;
- › provides fair and competitive employment terms;
- › promotes equal opportunity employment;
- › treats employees fairly and complies with applicable laws and regulations.



### Maritime Anti-Corruption Network

CSL is a leading member of the Maritime Anti-Corruption Network (MACN), a global business network dedicated to eliminating corruption in the marine industry. CSL's Chief Legal and Compliance Officer, John Synnowich, served as Chair from 2018 to 2022.

Since its inception in 2011, MACN has grown to more than 170 members globally. Those members represent more than half of the world's shipping industry. The network has become a pre-eminent example of an industry-led organization taking collective action to eliminate corruption across the maritime industry and the wider supply chain.



## WHISTLEBLOWING

We encourage our employees, customers and the public to report any breaches to CSL’s policies and commitments. To this end, we use EthicsPoint, a confidential, anonymous, third-party reporting service. We investigate and address all reports filed through EthicsPoint. We keep these reports confidential. You can submit an anonymous and confidential report through EthicsPoint online or via telephone.

In 2021, we received 21 alleged breaches to CSL policies and commitments. Below is a summary of the complaints and the actions we took.



## EthicsPoint Hotline

EthicsPoint is a confidential, third-party reporting service available to anyone who would like to report anonymously any wrongdoing related to CSL.

Submit a report online at [www.cslships.com/ethicspoint](http://www.cslships.com/ethicspoint)

or call toll-free in Canada and the United States,

**1-866-384-4277.**

Consult the website if calling from elsewhere in the world.

## 2021 ALLEGED BREACHES AND ACTIONS

Nature of Complaint	Number of complaints	Number of breaches detected	Number of corrective actions
Accounting and Auditing Matters	0	0	0
Bribery	0	0	0
Conflict of Interest	1	0	0
Discrimination or Harassment	17	8	8
Embezzlement	0	0	0
Falsification of Contracts, Reports or Records	0	0	0
Misconduct or Inappropriate Behaviour	0	0	0
Sabotage or Vandalism	0	0	0
Substance Abuse	0	0	0
Theft	0	0	0
Unsafe Working Conditions	1	0	0
Violation of Policy	0	0	0
Violence or Threat	0	0	0
Other	2	0	0

## INTEGRITY TRAINING

CSL's employees received integrity training in 2021 to increase their awareness of the dynamics and impact of corruption, and to provide them with the tools and insight necessary to identify and address risks.

Employees working in our operations and purchasing departments in all regions received specific training to reinforce the importance of CSL's Anti-Corruption Program and our zero-tolerance stance on corruption in any form.



### OUR COMMITMENT

- › Consistently and rigorously uphold the highest ethical standards in every aspect of the business
- › Ensure all employees and agents are educated about and comply with policies, laws and ethical conduct

### PROGRESS IN 2021

- › Chaired the Maritime Anti-Corruption Network
- › Provided ethics training to all shore-based employees
- › Provided MACN Anti-bribery training to all vessel operations staff and vessel masters
- › Trained Operations teams on strict compliance with the Anti-Corruption Program
- › Trained designated employees on investigation techniques for harassment complaints
- › Investigated 11 complaints filed through anonymous whistleblowing and 10 complaints reported directly within CSL. Reports were treated appropriately and communicated to the Audit and Risk and the Human Resources Committees of the Board of Directors.

### MOVING FORWARD

- › Assume industry leadership role in combatting corruption in all its forms worldwide
- › Provide education and training on ethical conduct and legal compliance on board vessels as part of onboarding new employees
- › Ensure all ship and shore employees are educated and trained on the prevention of harassment and workplace violence

# INVESTING IN **OUR PEOPLE**

At CSL, we understand that the people we hire, train and promote are our greatest assets and the most important factor in creating a successful and sustainable business.

Our commitment to our ship and shore employees begins with creating work environments in which they are safe, supported, fulfilled and empowered to forge ahead in their careers. Every year, CSL invests considerably in training and development, and promoting a values-based workplace culture that puts people first and where performance is recognized and rewarded.





# Employee Engagement and Wellbeing



## Employee Engagement Score

CSL employee engagement increased in 2021, with an average engagement score of 7.9 out of 10 compared to 7.7 in 2020.

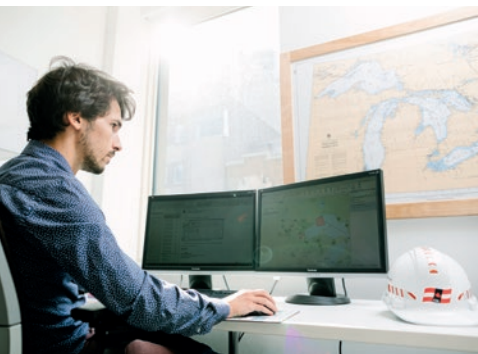
The last two years brought many changes as we have all learned to adapt to and manage the impacts of the COVID-19 pandemic. Employees have questioned their personal and professional priorities, and organizations have reviewed and improved their operating methods and approaches.

Throughout this challenging period, we have maintained a constant dialogue with our employees and worked hard to adapt to their needs. Getting honest and meaningful feedback took many forms, including interviews with employees in key positions and weekly surveys via the Officevibe platform.

Based on the feedback received, we continued to offer mental health training and team building activities, and maintained constant, transparent communications at all levels of the organization.

We are committed to teaching our leaders how to support the mental wellbeing of their teams and lead career conversations.

## DEFINING OUR NEW WORK REALITY



The pandemic has accelerated the evolution of work practices and made everyone rethink the need for all employees to be present in the office. The last two years have shown us that our employees perform well in person and remotely.

Respecting our employees' need for flexibility, we consulted both employees and managers about their expectations and needs with regard to returning to the office. We arrived at a consensus and adjusted company policies so that every employee and team would have the freedom to determine their own schedule in accordance with operational requirements. We're striving to offer as much flexibility as we can, when we can.

# Developing Our Officers

## EDUCATIONAL SUPPORT

Becoming an officer can be challenging for seafarers, especially since it requires returning to college. Last year, we launched a new assistance program to help permanent unlicensed crew members who want to become officers realize their career goals.

Since then, three employees have embarked on this intensive, year-long program, which includes online courses and in-class training, in partnership with marine schools. CSL covers all program costs, provides all the equipment, and pays the employees their annual base salary, so they can concentrate on their studies.



## DEVELOPING MANAGERIAL SKILLS

To ensure our officers have the soft skills they need to safeguard the physical and emotional wellbeing of the employees they manage, we have launched a new Officers Professional Development Program. This program is intended to provide officers with personalized tools to help them develop the soft skills they need to excel in their positions, learn to manage effectively, practice healthy working habits and reach their career goals sooner.

Offered on a voluntary basis, the program begins with psychometric tests. Based on these results, a complete training curriculum is delivered via a dedicated learning platform. The pilot program is currently available to Canadian officers, with an aim to implement it in other regions in the future.



# Fostering CSL Talent

Employees with specialized skills are in increasing demand. As a result, CSL believes it is particularly important to develop internal competencies to prepare our future generation of leaders.

We created the Talent Voyage initiative as a key element of our succession planning. In 2021, 45 directors, managers and emerging leaders took advantage of the program. The training provides coaching, mentoring and development, and participants undertake case studies to prepare them for future leadership positions at CSL.



## Workplace Diversity

At CSL, we recognize that varied ideas, perspectives and backgrounds create a stronger, more creative work environment and a better company. Hiring diverse employees also brings us closer to our customers and the communities in which we operate. In 2021, we established the new position of Talent Acquisition, Diversity and Inclusion Specialist. We also created a diversity vision, statement and targets.

Through partnerships with Georgian College, the Seafarers' International Union (SIU) and Ontario's Indigenous communities, we will be able to offer an Unlicensed Officer Training Program to members of these communities in 2022, and inform more people about the opportunities available in the marine sector.

## PARTNERSHIP WITH Learning

Distance learning now represents one of the most efficient and sustainable teaching options available, reducing the costs and the ecological footprint of training. Since April 2021, CSL office employees have been able to access the LinkedIn Learning Platform. The platform hosts more than 16,000 virtual courses from international trainers and is accessible from any device.

Over 150 employees have since logged 423 hours of training on LinkedIn Learning. The most sought-after courses involve the habits of high performers, project management, motivating employees, reinventing work in the new normal and leading at a distance.

## LEARNING HOURS

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Although we can all agree on the importance of continuous learning, it's hard to find time when we are focused on completing daily tasks. To promote a learning culture, we now provide every employee with two hours a month of dedicated learning time.

Employees can use this time to catch up on mandatory training requirements, build new skills or take advantage of courses offered through the CSL Learning Management System and LinkedIn Learning. Alternatively, people can also use these hours to learn something new from their mentors or colleagues.



## CSL Receives Top Montreal Employer Award for Third Year Running



During a period of unprecedented challenges, CSL was named one of Montreal's Top Employers for the third consecutive year.

The award recognizes CSL for its progressive employee programs that put safety and wellbeing first, advance professional development and growth, promote a culture built on shared values, and provide exceptional health and financial benefits.

Montreal's Top Employers is an annual competition that recognizes Montreal-area companies that lead their industries in offering exceptional workplaces.

## NEW CREWING SOFTWARE AND LEARNING MANAGEMENT SYSTEM

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New crewing software and learning management systems researched and developed in 2021 will be introduced progressively in 2022 and 2023 as part of our commitment to provide seafarers with more modern, efficient and integrated tools. Once available, crew members will be able to

access both systems 24/7 from any personal device, through a self-service portal. These new systems are intended to simplify administrative tasks and offer seafarers the best employee experience in the industry.

## COMPENSATION THAT'S COMPETITIVE

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We know how important it is to make sure our compensation packages are fair and competitive. In 2021, following an extensive review, an external compensation expert confirmed that CSL's wages and benefits are aligned with those of industry competitors. To inform our managers and employees, we held a series of information sessions on good compensation practices and how we apply them.



## LINKING JOBS THROUGH A CAREER WHEEL

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Over the past year, CSL has been working with each company business line to create a framework linking each job to the competencies they require. Once complete, this Career Wheel will guide employees in their career development and path. The Career Wheel will also help CSL pinpoint the skills to look for in potential candidates and increase new employees' chances of success.

### OUR COMMITMENT

- › Attract, select, develop and retain people with the right skillset and "fit"
- › Foster employee satisfaction to enhance productivity and the customer experience
- › Provide greater development and growth opportunities for employees and empower them to take ownership of their career progression
- › Improve employee communication and engagement
- › Prioritize employee health and safety at work

### PROGRESS IN 2021

- › Conducted succession and development planning process
- › Continued high potential leadership development program
- › Strengthened partnership with Indigenous communities to attract and recruit talent
- › Provided strategic change management support for key transformation projects
- › Enhanced Lifesaving Rules training on board
- › Ensured a safe and healthy return to the office and initiated a transition toward a hybrid work environment
- › Deployed learning to improve negotiation skills in commercial excellence
- › Optimized processes and usage of employee data
- › Accelerated succession planning for key positions
- › Deployed Unlicensed to Officer Development Program
- › Launched two hours of learning hours per month
- › Deployed LinkedIn Learning for all office employees
- › Created a Talent Acquisition, Diversity and Inclusion role
- › Developed CSL change management approach

### MOVING FORWARD

- › Develop and deploy CSL competency framework
  - › Deploy new learning management system for Canadian and Australian crews
  - › Ensure smooth transition to new work environment
  - › Strengthen talent acquisition function
  - › Deploy change management toolkit
  - › Increase accountability for employee engagement at management level
  - › Improve system infrastructure to increase efficiency of global crewing
  - › Optimize payroll systems and processes
  - › Accelerate leadership skills development for onboard leaders
  - › Review external employer branding identity and strategy
  - › Review and streamline selection process
  - › Identify opportunities to improve seafarer wellbeing
  - › Expand benefit offering to include broader scope of wellness activities
  - › Revamp CSL performance management program
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# EMPLOYEE AND COMMUNITY **ENGAGEMENT**

Being an agent of positive change in our communities is not just a slogan to us. It's how we operate.

At CSL, we constantly search for ways to be a better corporate citizen and environmental leader. We want a cleaner, greener future for ourselves and our children and grandchildren, and a global society that looks out for the most vulnerable among us.

*CSL volunteers in Boston embarked on a shopping spree to purchase new clothing, toys and sports equipment to support Beverly Bootstraps' Adopt-A-Family program. The non-profit organization provides emergency and long-term assistance to families in need.*





## CORPORATE GIVING BASED ON SHARED VALUES

In 2021, the continuing toll of the global pandemic reinforced the importance of CSL's corporate values. We know that if we want to build a better world, we must start by giving back to organizations in the communities where we work.

Our corporate giving focuses on education, the environment, and social affairs that empower communities. We are involved in arts and cultural activities, community outreach, health and human services.

Every year, we donate one percent of our net profit (before any extraordinary items) to disaster relief and charitable causes. We also foster change by supporting our employees

in the volunteer activities they undertake. Our employees choose projects close to their hearts.

Although COVID-19 lockdowns and safety protocols made volunteering with local not-for-profit organizations and charities more complicated, CSL employees came through despite those challenges.

From helping wildlife rescue organizations to restoring coastal habitat, raising funds to battle Multiple Sclerosis, cancer, hearing loss and domestic violence, restoring a tall ship and an exhibit in a maritime museum, and supporting humanitarian relief, CSL and our teams on land and sea made their communities better.

## Supporting Our Young Seafarers

Students at maritime colleges around the world become the next generation of seafarers – and CSL employees. We are proud of helping them succeed, by providing scholarships and bursaries as well as cadetships on our vessels and internships in our shoreside departments.

We support students at the following academic institutions:



- > Australian Maritime College
- > British Columbia Institute of Technology
- > Georgian College
- > Institut maritime du Québec
- > Maine Maritime Academy
- > Marine Institute of Memorial University
- > Marine Society and Sea Cadets
- > Massachusetts Maritime Academy
- > Nova Scotia Community College – Nautical Institute

In 2021, we hosted qualified students from maritime schools in Canada, Australia, the Philippines and the United Kingdom. We applaud their accomplishments and hope to see them back on our decks and in our offices in the years to come.

## Nautical Skills Competitions

In 2021, CSL sponsored nautical skills competitions at the Marine Institute of Memorial University and the Nautical Institute at the Nova Scotia Community College. During the competitions, students showcased their marine knowledge to industry partners through various activities such as safety demonstrations, simulations, etc. The sponsorship money went toward bursaries for the winning teams.



# Protecting Our Environment

Environmental stewardship is one of our core values. Living that value means CSL supports research, education, and conservation projects.

We work with organizations that protect marine animals and their habitats and educate the maritime industry and the public on what they can do to make sure the natural resources we share continue to nurture us all. The organizations we supported in 2021 include:

- › Anderson Cabot Center for Ocean Life at the New England Aquarium
- › Bali Animal Welfare Association
- › Canadian Whale Institute
- › Currumbin Wildlife Hospital, Queensland
- › Dolphin Research Institute
- › Fonds d'action Saint-Laurent
- › Group for Research and Education on Marine Mammals
- › National Marine Life Center, a marine animal hospital and education centre in Massachusetts
- › Salem Sound Coastwatch



## SALEM SOUND COASTWATCH PROTECTS VITAL WATERSHED

From providing microscopes to donating to a boating program, members of the CSL Americas' team found creative ways to support Salem Sound Coastwatch – an organization devoted to protecting the Salem Sound and its watershed. Programs we supported included the innovative Talking Trash 4 Clean Oceans, which was led by 12 adolescent girls who installed cigarette butt bins and erected billboards to warn against the dangers of butts slipping down storm drains and polluting the water supply.

## CSL VOLUNTEERS PLANT SALT MARSH GRASS

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Salt marsh grasses are crucial ingredients of marsh meadows, which stabilize shorelines to stave off erosion, flooding and storm surges. To support the restoration of a natural coastal bay in Massachusetts, a group of CSL employees planted 200 native grass plants.

The CSL team's efforts added to the more than 15,000 salt marsh grass plants planted over the past two years. By allowing the plants to grow and spread their roots, the resulting marsh will slowly convert the sand to peat, stabilize the shoreline and buffer the coast from storms.

## CLEAN UP AUSTRALIA

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As part of the annual Clean Up Australia Day, a crew of CSL employees scoured campsites at Fitzgerald Bay, picking up approximately 30 kg of general rubbish (bottles, cans, plastic, paper, disposable wet wipes) and an astonishing 700 kg of larger items, including wooden doors, tires and a car seat.



## PROTECTING VULNERABLE ANIMALS

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From a wildlife hospital in Queensland, Australia to an organization helping Indonesian animals threatened by an eruption and an animal welfare charity in Bali, CSL employees proved they have generous hearts when it comes to animals in need.

CSL Australia became a corporate partner of Currumbin Wildlife Hospital in Queensland, helping the rehabilitation and release organization ensure as many animals as possible are treated and returned to the wild. Our donations will ensure that the veterinary team is able to continue its work for "patients" such as Noah, a koala joey that Currumbin cared for alongside his mother.



*Identified as #4633, this whale is a five-year-old female seen on July 6, 2021, off the mouth of Gaspé Bay. It was also observed on May 12, 2021, in the Gulf of St. Lawrence.*

## SUPPORTING THE CANADIAN WHALE INSTITUTE

The North Atlantic right whale is one of the most endangered of all large whales. In 2021, we continued our long-standing support of efforts to protect the right whales by donating to the Canadian Whale Institute.

CSL's donation will support North Atlantic right whale research in the Gulf of St. Lawrence and outreach programs aimed at the shipping and fishing industries, and the public. This includes working with Transport Canada and Fisheries and Oceans Canada on right whale protection measures.

## PARTNERSHIP WITH THE DOLPHIN RESEARCH INSTITUTE

CSL Australia became a proud partner of the Dolphin Research Institute, which focuses on mammal protection in Port Phillip Bay near Melbourne, a major port for CSL Australia's activities.

The DRI's research focuses predominantly on the marine mammals of South-East Victoria, with particular emphasis on the local common and bottlenose dolphin populations that have long inhabited Port Phillip Bay.

Thanks to donations from CSL and other supporters, the DRI launched the Research Fellowship Program, creating an opportunity for a young scientist to start their career and contribute to DRI's mission.



# Committed to Our Communities

CSL's charitable giving, fundraising and employee volunteer hours support a variety of organizations and causes that work to empower individuals and communities, provide disaster relief and support culture, history and the arts.

In 2021, organizations we supported included Moisson Montréal, the Mission to Seafarers, Red Cross Disaster Relief, the CHU Ste-Justine Foundation, Beverly Bootstraps, the Open Door, the Breakfast Club of Canada, the Starlight Foundation, the Community Giving Tree, the Berkshire Community Foundation, Kirkens Bymisjon, the Scottish Shipping Benevolent Association, the Norwegian Sea Rescue Society, the Marine Museum of Kingston, the Musée maritime du Québec and Dans la rue.



## SUPPORTING OUR EMPLOYEES' PHILANTHROPIC CHOICES

Every year, the CSL Donations Committee establishes a budget for philanthropic giving and evaluates requests based on specific criteria.

A portion of that budget is dedicated to matching employee gifts to educational institutions, sponsorships or other fundraising efforts, up to CAN\$250 per employee. We are proud of our employees' desire to volunteer and give back to their communities.

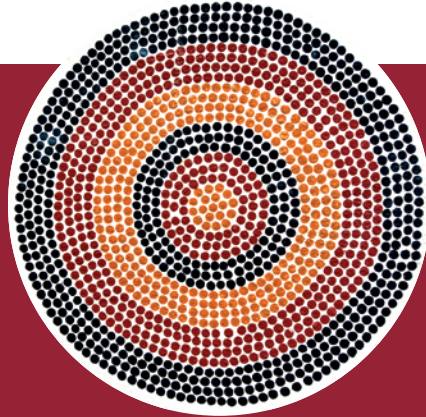
### Funding for Indigenous Communities

In 2021, the CSL Donations Committee added a new pillar to its corporate giving program to support Indigenous organizations and initiatives in the communities in which we operate.

#### Kahnawà:ke Cultural Village Building Project

CSL was proud to provide financial assistance to support the Kanien'kehà:ka (Mohawk) community of Kahnawà:ke's vision to build a new cultural center, museum and theatre. The new gathering place will be a central location to promote the traditional language, which is in danger of disappearing, as well as the enrichment of culture, history and art.

Located on the south shore of the St. Lawrence River, across from the city of Montreal, Kahnawà:ke is one of seven Mohawk communities located in Quebec, Ontario and New York state.



#### Emergency Relief for Waltja

In Australia, CSL is a proud sponsor of Waltja, which means 'family.' This Aboriginal organization co-ordinates a range of programs to support 22 Indigenous communities across the Northern Territory.

When the Northern Territory experienced a year's rainfall in one week, many remote communities were cut off by road due to flooding. CSL provided funding to support Waltja's emergency relief fund.

The donation helped those stranded and unable to return to their homes by providing them with food, clothing, blankets and emergency shelter.

## HOLIDAY E-CARD RAISES \$10,000 FOR CHILDREN'S CHARITIES

Since 2014, CSL has celebrated the holiday season by giving back to the communities in which we operate. For every click on our holiday e-card, we donate to a local children's charity selected by employees in each of our operating regions.

Our holiday e-card this year recognized the strength and resilience of our seafarers during the pandemic.



## CSL AUSTRALIA RECOGNIZES THE MISSION TO SEAFARERS

The Mission to Seafarers (MTS) has a distinguished history of supporting seafarers who work long periods away from home – a sacrifice compounded during the COVID-19 pandemic.

During the pandemic, the close partnership between MTS and CSL Australia bore fruit when MTS donated a bus to serve as a vaccination clinic during the initiative to immunize seafarers against COVID-19. To recognize MTS's vital support, CSL presented the Sydney MTS with a \$2,500 donation.

### CSL Cyclists Raise \$8,500 for Multiple Sclerosis

In what has become an annual tradition, 12 Montreal-based CSL employees cycled 45 kilometres through the Eastern Townships of Quebec to raise money for Multiple Sclerosis (MS) research and home care. Despite a bit of rain, the team, known as the CSL Steamers, raised \$8,500 for a great cause and had a lot of fun doing it.



## OUR COMMITMENT

- › Seek, identify and support causes that enrich lives, improve our environment and create opportunities for communities to thrive
- › Donate approximately one percent of net profit (before extraordinary items) to charitable organizations

## PROGRESS IN 2021

- › Donated one percent of net profit (before extraordinary items)
- › Established a new corporate donation pillar to support Indigenous organizations and initiatives
- › Reached donations objectives in the education, environment and social pillars
- › Continued to support food banks in Canada and the USA

## MOVING FORWARD

- › Increase participation in the CSL Matching Gift and Employee Sponsorship Program
- › Increase employee participation in volunteer and community engagement initiatives
- › Educate employees on the impact of CSL's philanthropic efforts

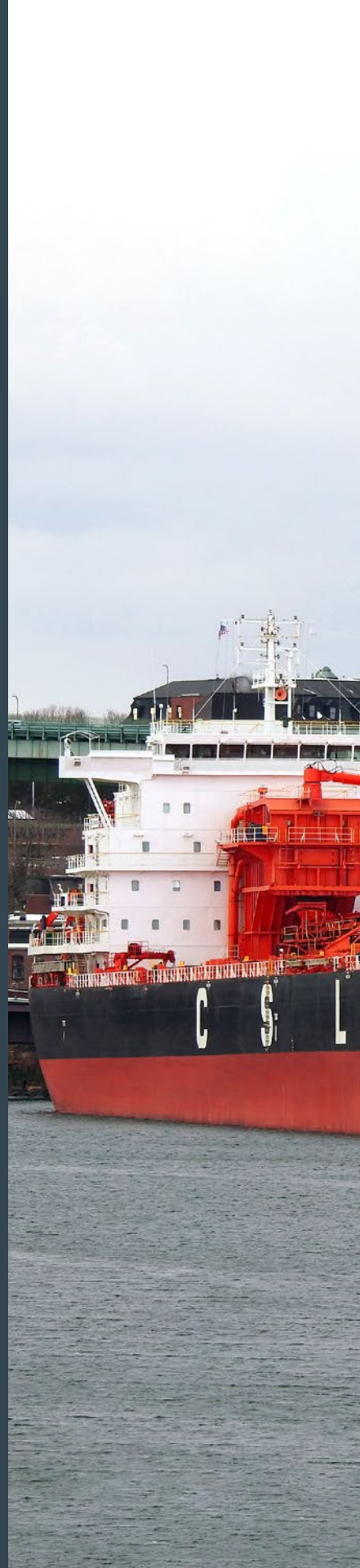
## SUSTAINABLE DEVELOPMENT GOALS



# CREATING VALUE FOR OUR **CUSTOMERS**

Striving for zero harm and minimizing our impact on the environment are central components of the way we do business. These values are increasingly important to our customers, who want to make sure we transport their cargo in the safest, most sustainable way possible.

Throughout 2021, we provided our customers with dependable, innovative solutions and introduced new initiatives to reduce our environmental impact and increase the safety of everyone involved in our operations.





CSL TARANTAU



CSL TARANTAU

# CSL Helps Construct World's Largest Floating Offshore Wind Farm

In the summer of 2021, CSL was proud to assist in the construction of Equinor's Hywind Tampen offshore wind power project, which will provide electricity to offshore oil and gas platforms in the Norwegian North Sea.

Working with Bring Cargo AS, Fjeld Consultant and The Peak Group, CSL's MV *Tertnes*, a 11,400 DWT fall pipe self-unloader, transferred olivine sand into 11 floating foundations for 11 wind turbines.

The floating wind farm will have a combined capacity of 88 megawatts and will reduce CO<sub>2</sub>eq emissions by 200,000 tonnes and NO<sub>x</sub> emissions by 1,000 tonnes per year.

We are excited about providing sustainable solutions to minimize emissions output per tonne/mile, and collaborating with partners who are developing world-class innovative infrastructure. Equinor's Hywind Tampen wind farm is the second large-scale infrastructure project MV *Tertnes* has serviced. In 2019, the vessel also discharged aggregates into caissons for the Portier Cove Land Reclamation project in Monaco.



## EXPLORING SHORE POWER FEASIBILITY

Midway through 2021, CSL began a study on the feasibility of using shore power at Australian ports for our coastal fleet. Shore power and the associated technology have been studied and globally implemented on various vessel types, ports and trades.

CSL's pneumatic cement fleet lends itself to using shore power in Australia because the ships call weekly or biweekly at the ports of Melbourne and Sydney and consume large amounts of fuel during their unloading operations to power the pneumatic unloading system that blows cement powder ashore.

Connecting to shore power not only reduces the quantity of fuel the ships burn, it also cuts emissions and vessel noise, minimizing the impact of our cargo operations on surrounding communities. Utilizing green shore power will also help CSL comply with 2023 MARPOL regulations.

As part of our shore power study, CSL is liaising with customers and external stakeholders, including port and government authorities, to better understand the infrastructure required on board and on shore. In 2022, we will work toward connecting to shore power for our vessels beginning with our pneumatic fleet and ultimately including our hybrid self-unloaders.



# Tailor-Made Solutions

An essential part of CSL's business strategy includes developing customized solutions to serve our customers' specific needs.

## CSL-HARTMANN TAKES DELIVERY OF MV *FJORDNES*

MV *Fjordnes*, a 40,700 DWT gravity self-unloader, and the second of two CSL-Hartmann joint venture ships built at Chengxi Shipyard, was successfully delivered on June 25, 2021.

The vessel can self-discharge at a rate of 5,500 tph and is equipped with a 90.5 m boom, which is one of the longest ever built for a self-unloader. The self-unloading system can handle lump sizes of up to 300mm and free-flowing materials with a bulk density in the range of 1.2-3.5t/m<sup>3</sup>, which represents a significant improvement to the discharging efficiency. MV *Fjordnes* is fitted with

energy-saving hub fins, an exhaust scrubber and a ballast water treatment system that complies with IMO and USCG standards. The vessel also has a state-of-the-art fire detection system, installed as part of our fleet-wide Fire Integrated Risk Mitigation (FiRM) program.

MV *Fjordnes* joins a fleet of six other Hartmann self-unloading ships, bringing the fleet's total loading capacity to over 220,000 tonnes. MV *Fjordnes* will carry aggregates between Norway, Germany and the United Kingdom.

## THREE ADDITIONAL CEMENT CARRIERS ORDERED FOR EUREKA

As part of a continued effort to modernize its fleet, Eureka signed a contract with Bodewes Shipyard in the Netherlands to build an additional three 4,200 DWT cement carriers.

CSL acquired 50 percent of Eureka, a pneumatic cement shipping business, in a joint venture with SMT Shipping in 2018. The agreement for the additional ships follows the delivery of three new vessels in 2019. These new vessels share a highly fuel-efficient design. Customers will see a demonstrably reduced greenhouse gas footprint, even without shifting to different fuel systems in the future.

Initial conversations with our customers revealed their interest in potentially using methanol as a source of fuel, which Eureka will continue to explore as the program advances.



# Improving Fleet Efficiency and Flexibility



In 2021, we continued to upgrade our fleet, with the ongoing construction of one new vessel and the successful delivery of three others. Our goal in expanding the fleet is to increase efficiency and serve our customers better.

## IN CANADA

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In March 2022, CSL's brand new 26,000 DWT self-unloader MV *Nukumi* completed her maiden voyage arriving in Halifax, Nova Scotia. Built at Chengxi Shipyard in China, the state-of-the-art diesel-electric powered vessel is the result of a strategic partnership between CSL and Windsor Salt. The partnership's purpose is to deliver deicing salt safely, sustainably, and reliably from Windsor Salt's Mines Seleine salt mine in the Magdalen Islands over the long term. On her first voyage, MV *Nukumi's* modern hull design and twin-fin diesel-electric propulsion system demonstrated her ability to transit through narrow channels with exceptional manoeuvrability. Windsor Salt and CSL also worked together to design several innovations to reduce MV *Nukumi's* environmental footprint such that the vessel will emit approximately 25 percent less greenhouse gas than previous ships servicing the salt trade.

## IN EUROPE

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On January 18, 2021, CSL Europe took delivery of MV *OC Agnes*, a 30,000 DWT self-unloading bulk carrier. We renamed the vessel MV *CSL Thames* and earmarked it for future use in our European fleet. MV *CSL Thames* will allow us to displace older tonnage and increase the overall efficiency of our trade routes in Northern Europe.

## IN THE AMERICAS

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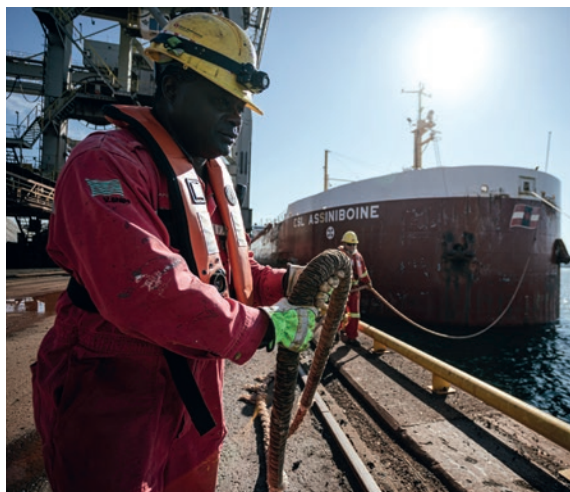
This year, CSL took delivery of MV *CSL Koasek* and her sister vessel, MV *CSL Kajika*. At 77,250 DWT, the two vessels are the largest in our fleet, and will bring significant trading efficiencies to the CSL International Pool. As part of their conversion, each ship received a complete self-unloading system, new generators and a new ballast water treatment system. We also installed our Operational Optimizer energy management software (O2) and the full suite of Fire Integrated Risk Mitigation (FiRM) equipment on the vessels.

# Engaging With Customers on Safety

## CANADA STEAMSHIP LINES' PORT SAFETY PROGRAM

Initiated in 2018, CSL's Port Safety Program leverages our experience at ports across the globe to provide customers with feedback that could improve the safety of their shoreside facilities and cargo operations. Our suggestions can include upgrades to infrastructure such as lighting or mooring bollards, or the identification of hazards in the water that could affect manoeuvring or the amount of cargo our vessels can safely load.

In addition to working with our customers to make operations safer, Canada Steamship Lines also maintains a Customer Information System (CIS) where crew members can load critical information and photos to share knowledge. This year, crew members made more than 500 entries in the CIS, making it an even more effective resource for our captains across the fleet.



## GANGWAY SOLUTION ENHANCES PORT SAFETY IN AUSTRALIA

In the Port of Gladstone, Queensland's largest multicommodity port, Fisherman's Landing Number 4 is a dedicated berth for vessels loading cement and clinker directly from Cement Australia's production facility. Vessels in CSL Australia's pneumatic fleet call at the berth regularly, as do our three handymax hybrid self-unloaders *MV Adelle*, *MV CSL Reliance* and *MV Elanora*.



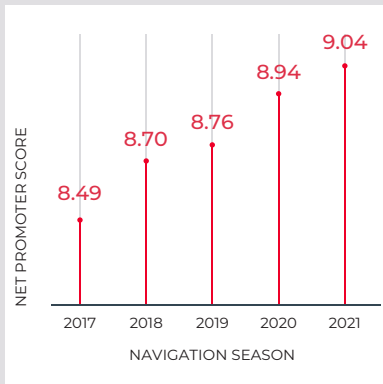
We recently identified a safety challenge related to the hybrid ships, because of their higher freeboard (the distance between the waterline and the main deck) compared to the pneumatic vessels. The freeboard, in combination with the length of our customer's shore-based gangway and the angle of descent, made it unsafe for ship and shore representatives to move between the wharf and the vessel. To solve the problem, we worked with Cement Australia to design and install a bespoke engineered platform on each hybrid ship. These platforms connect seamlessly to a new gangway to facilitate safe access to and from shore. The gangway resides permanently at Fisherman's Landing, a reminder of the collaborative safety partnership between CSL and Cement Australia.



## HOW ARE WE DOING?

### Tracking Customer Satisfaction

Our latest customer satisfaction survey is our fifth edition since we first launched the questionnaire in 2016. The survey is a critical tool that allows us to gauge our performance and better understand what our customers consider good value. In 2021, CSL achieved a net promoter score of 9.04/10, continuing the trend of improved results each year. We are especially proud of responses regarding our Environmental Social and Governance (ESG) policy, with customers across the globe giving us an average score of 4.4/5 and 60 percent of respondents rating our policy as “very sufficient.”



## CSL BIOFUEL PROGRAM IN THE GREAT LAKES

Following successful trials using 100 percent biodiesel (B100) on MV *Rt. Hon. Paul J. Martin* and MV *CSL Welland* in 2020, last season we expanded the use of this green fuel to half of our Canadian fleet (eight vessels). This project is the world's longest-running trial of B100 biodiesel on marine engines, with the accumulation of nearly 30,000 running hours. When calculating lifecycle fuel emissions, these trials have prevented 38,478 MT of carbon emissions from entering the atmosphere — the equivalent of the annual emissions from more than 9,300 passenger vehicles.

This trial, conducted in partnership with Canada Clean Fuels and in collaboration with Sterling Fuels, confirmed the feasibility of biodiesel as a drop-in solution that works seamlessly on a variety of engine types. We can adopt biofuel without modifying any existing equipment on board our vessels, allowing us to service our customers while reducing our carbon footprint.

As a critical element of CSL's decarbonization path, these trials have demonstrated that biofuels also represent the best interim solution for customers who want to reduce the overall carbon footprint of their supply chains. Our use of biofuel allows them to reduce their Scope 3 emissions, emissions that are the result of activities from assets they do not own or control. The success of our biodiesel tests has generated the interest of several customers. We look forward to collaborating with them, as well as with governments, to find a sustainable, competitive way to reduce our carbon footprint along our entire supply chain.



### Customer Feedback

*"The safety program is something you should be proud of."*

*"The biofuel program shows CSL is positioning for the future."*

*"The CSL Americas team is very professional, very responsive and attentive."*

*"CSL is and has always been an amazing partner, and in my opinion, best in class. Keep up the great work."*

PHOTO: JASON DESJARDINS



## CSL ACQUIRES MINORITY STAKE IN EMS-TECH

In late 2021, CSL acquired a strategic minority stake in Canadian engineering firm EMS-Tech Inc., an industry leader in the design and supply of bulk material handling systems. For over three decades, EMS-Tech has provided innovative solutions to the bulk material handling industry, many of which can be found on self-unloading ships and transshipment assets owned and operated by CSL worldwide. This investment signals our mission to provide complex cargo handling solutions for our customers across the globe, and builds on the synergies developed between CSL and EMS-Tech over 25 years.



***“Reducing the carbon footprint of our fleet is a strategic imperative and our trials clearly demonstrate the viability of biodiesel as a practical and effective option to drastically reduce our GHG emissions.”***



**Louis Martel,**  
President and CEO

### OUR COMMITMENT

- › Maintain the highest standards of safety, ethical conduct and environmental responsibility
- › Respond to customer needs and maintain an open dialogue
- › Exceed customer expectations by creating high value through efficiency, innovation and continuous improvement
- › Position customers for the future through advocacy and partnerships

### PROGRESS IN 2021

- › Served customers and developed customized solutions
- › Conducted eight biofuel trials on the Great Lakes
- › Designed and invested in a newer, more sustainable global fleet
- › Completed annual customer survey and received a Net Promoter Score of 9.04
- › Delivered four vessels to meet customer requirements
- › Continued with one newbuild project

### MOVING FORWARD

- › Expand biofuel trials beyond the Great Lakes and work with suppliers and customers to promote the use of biofuel in the marine sector
- › Engage with customers to develop metrics for tracking and improving performance
- › Form partnerships with customers and other stakeholders to promote a sound policy and regulatory framework for marine transportation

**ANNEX**





# Green Marine Performance

Green Marine is a marine environmental certification program that helps shipowners, ports, terminals, Seaway corporations and shipyards improve their environmental performance. The program is voluntary. Participants agree to publish their results annually, and have an external auditor verify those results every two years.

Because program requirements vary in different operating jurisdictions, CSL's participation in Green Marine is divided between Canada Steamship Lines, which encompasses our entire Canadian fleet, and CSL International, which includes all our other shipping fleets.

## LEVELS ACHIEVED IN 2021

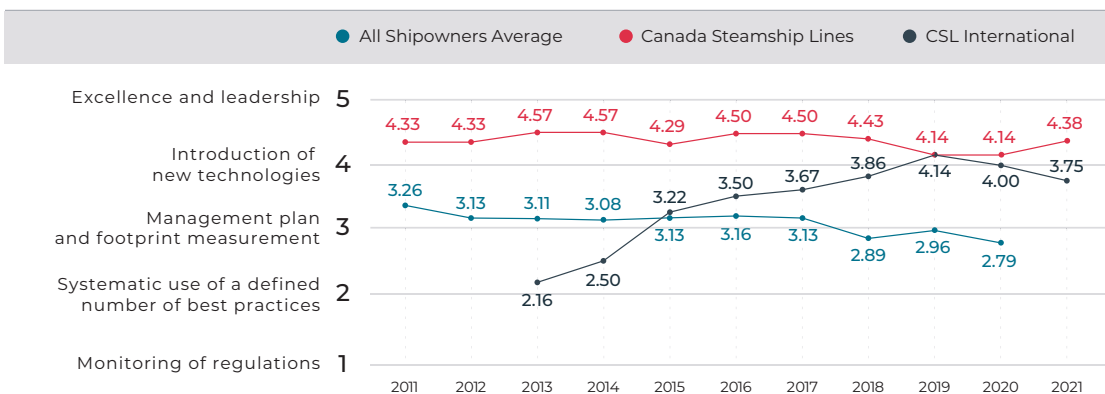


The Green Marine program scores performance indicators on a scale of one to five. Reaching Level 1 indicates a company is in regulatory compliance, while reaching Level 5 demonstrates the organization's leadership and excellence.

In 2021, Canada Steamship Lines reached Level 5 for the Aquatic Invasive Species indicator, because we commissioned and operated a ballast water treatment system retrofitted on *Whitefish Bay*. Additionally, thanks to improved energy efficiency and our biofuel program, the Canadian fleet achieved Level 5 for the greenhouse gas indicator. Reaching this level acknowledges our average annual reduction of 2.3 percent since 2008 in greenhouses gases emitted.

Performance Indicators	Canada Steamship Lines	CSL International
Aquatic Invasive Species	5	4
Pollutant Air Emissions (SO <sub>x</sub> and PM)	4	4
Pollutant Air Emissions (NO <sub>x</sub> )	4	3
Greenhouse Gas Emissions (GHG)	5	3
Oily Discharge	4	4
Waste Management	5	5
Underwater Noise	4	4
Ship Recycling	4	3

## GREEN MARINE PERFORMANCE LEVELS AND HISTORICAL TREND



The total participant average for 2021 was not known at report publication.

# ESG Scorecard

CSL is committed to disclosing our environmental, social, and governance (ESG) metrics transparently. Our voluntary reporting is guided by the following frameworks:

- > The **Sustainability Accounting Standards Board (SASB)**'s Marine Transportation Standard (version 2018-10)
- > The **Global Reporting Initiative (GRI)** Standards
- > The **Green Marine** environmental certification program

CSL discloses metrics that are relevant to the topics we identify through our materiality-setting process. As a privately owned company, we are not driven to disclose this data because of demands from or obligations to shareholders. Rather, we believe increased transparency about ESG metrics is key to sustainable business practices. We hope that through comparable and credible data and disclosures, we will enhance our stakeholders' trust, and elevate the ambitions and practices of the entire shipping industry.

In this year's ESG scorecard, we have included new metrics for total joint venture ships, number of time charter voyages, average EEDI of new vessels, and the number of incidents of discrimination reported.

## 2021 ACTIVITY METRICS

Number of shipboard employees	1,878
Total distance travelled by vessels (nautical miles)	1,681,445
Operating days	13,771
Deadweight tonnage ('000s)	1,752
Number of vessels in total shipping fleet	47
Number of vessels in joint venture arrangements	16
Number of time charter voyages	86
Number of vessel port calls	3,074

## GOVERNANCE

Metrics	2018	2019	2020	2021
<b>Ethics and Anti-Corruption</b>				
Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	-	-	95	117
Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index (%)	-	-	3.50%	3.80%
Total amount of monetary losses because of legal proceedings associated with bribery or corruption	-	-	0	0
<b>Right to Privacy</b>				
Total number of substantiated complaints received concerning breaches of privacy	-	-	0	0
Total number of identified leaks, thefts, or losses of data	-	-	0	0

## ENVIRONMENTAL

Metrics	2018	2019	2020	2021
<b>Accidents and Oil Spills</b>				
Total number of oil spills	6	7	7	9
Total oil spilled (litres)	3.45	17.22	229.50	36
Release of any other hazardous or noxious substance	-	1	1	1
<b>Marine Pollution</b>				
Treated bilge discharged to sea (m <sup>3</sup> )	13,020	7,232	6,495	5,959
<b>Air Pollutants</b>				
Emissions of oxides of sulphur (SO <sub>x</sub> ) in MT	2,895	2,123	525.30	316
Fuel sulphur average (%)	1.59%	1.17%	0.33%	0.20%
Emissions of oxides of nitrogen (NO <sub>x</sub> ) in MT	12,802	13,350	12,216	12,292
NO <sub>x</sub> (kg/tonne-fuel)	70.30	64.10	76.40	78.30
Emissions of particulate matter (PM10) in MT	812	566	349	201
<b>Greenhouse Gases</b>				
<b>Energy efficiency</b>				
Total (gCO <sub>2</sub> eq/tonne-nm)	19.13	17.42	17.40	16.95
Loaded voyages only (gCO <sub>2</sub> eq/tonne-nm)	10.25	9.86	9.61	10.12
Total absolute CO <sub>2</sub> eq emissions (Scope 1 GHG protocol)	620,960	570,731	494,368	520,162
Average EEDI for new ships	-	-	-	3.7815
<b>Total energy consumed</b>				
Heavy fuel (GJ)	5,363,102	4,828,747	3,578,280	3,890,949
Distillate (GJ)	2,651,976	3,146,866	2,864,972	5,846,057
Renewable (GJ)	0	0	49,270	827,990
Heavy fuel as % of total fuel	-	-	55%	37%
Renewable energy as a % of total fuel	-	-	1%	8%
<b>Waste and Hazardous Materials Management</b>				
Landfill waste (m <sup>3</sup> )	2,537	2,405	2,085	2,278
Landfill waste as a percentage of total waste	59%	61%	60%	56%
Recycling (m <sup>3</sup> )	928	1,099	949	900
Recycling as a percentage of total waste	22%	27%	28%	25%
Incinerated (m <sup>3</sup> )	837	454	414	314
Organic (m <sup>3</sup> )	101.30	193.15	189	204
Organics as a percentage of total waste	4.02%	8.26%	9.82%	4%
Sludge disposed ashore (m <sup>3</sup> )	3,415	3,366	3,681	2,659
<b>Ecological Impacts</b>				
Fleet implementing ballast water exchange (%)	-	-	44%	21%
Fleet implementing ballast water treatment (%)	-	-	24.40%	38%
<b>Environmental Compliance</b>				
Number of incidents of non-compliance associated with environmental impacts or non-compliance with environmental laws and regulation	4	3	1	0

## SOCIAL

Metrics	2018	2019	2020	2021
<b>Health and Safety</b>				
Fatalities	1	0	0	0
Lost Time Injuries (LTI)	13	13	8	14
Lost Time Incident Frequency Rate (LTIFR)	1.70	1.60	1.10	1.70
Total Recordable Cases (TCR)	46	63	37	29
Total Recordable Case Frequency Rate (TRCFR)	7	7.50	4.80	4.20
Number of Conditions of Class	-	-	48	82
Number of Port State Control deficiencies	-	-	99	79
Number of Port State Control detentions	-	-	2	1
<b>Diversity and Inclusion</b>				
Shore employees	-	-	249	249
Gender with the lowest representation ♀ (%)	-	-	41%	41%
Number of incidents of discrimination and corrective actions taken	-	-	-	0
<b>Total number of employees by age group and gender with the lowest representation – Shore</b>				
< 30	-	-	25	28
< 30 ♀ (%)	-	-	48%	46%
30 - 50	-	-	153	160
30 - 50 ♀ (%)	-	-	44%	44%
> 50	-	-	71	61
> 50 ♀ (%)	-	-	31%	31%
<b>Gender with the lowest representation by employee category ♀ (%)</b>				
Senior management	-	-	25%	31%
Management	-	-	34%	36%
Professional and technical operations	-	-	39%	40%
Support staff	-	-	85%	80%
<b>New Employees</b>				
Total number of new hires	-	-	28	35
Gender with the lowest representation ♀ (%)	-	-	32%	46%
<b>Total number of new employees by age group</b>				
< 30	-	-	6	8
< 30 ♀ (%)	-	-	50%	50%
30 - 50	-	-	17	23
30 - 50 ♀ (%)	-	-	35%	43%
> 50	-	-	5	4
> 50 ♀ (%)	-	-	0%	50%



# Comments on ESG Performance Data

## Boundary Setting

The data provided in CSL's ESG Scorecard includes all the assets CSL owns and operates, including vessels under third-party management, as well as employees CSL Group or its subsidiaries directly employ. We excluded assets and employees in CSL's joint ventures from the data, as well as any vessels engaged through charter arrangements.

## Activity Metrics

The activity metrics provide an important point of reference for the other ESG disclosures. The number of port calls and distance travelled excludes transshipment operations, and the total deadweight tonnage excludes the transshipment platform and barges.

The total number of port calls includes any stops for repairs or fuelling. This is a change from 2020, when the total number of port calls only included loading and discharge ports.

## GOVERNANCE

### Ethics and Anti-Corruption

In 2021, 64 countries ranked in the bottom 20 on Transparency International's Corruption Index, because many countries received equal ranking. In the order of most- to least-visited, Mexico, Dominican Republic, Guatemala and Honduras were the four countries CSL visited that ranked in the bottom 20 of the index.

CSL strongly believes that the most effective way to combat corruption, however, is to proactively work with stakeholders to identify and address the root causes of corruption and not by simply avoiding regions where corruption is perceived to occur. This is why CSL has implemented a zero-tolerance policy regarding any form of corruption where we carry on business and a robust anti-corruption program, which focuses on due diligence and controls to ensure all business remains corruption free.

That is also why CSL has taken a leadership role in the Maritime Anti-Corruption Network, which is working with governments, non-governmental organizations and civil society to identify and mitigate the root causes of corruption where it is most likely to occur and by creating a culture of integrity within the maritime community as a whole.

### Right to Privacy

We received no complaints related to breaches of privacy in 2021, and neither did our EthicsPoint hotline. Our cyber security monitoring and response systems detected no leaks, thefts, or loss of data during the reporting period.

## ENVIRONMENTAL

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### Accidents and Oil Spills

This disclosure includes all oil-to-water incidents across the entire fleet. The nine oil spills were all minor in nature and we reported them to the relevant authorities.

### Marine Pollution

Treated bilge water is the water legally discharged after treatment through a vessel's oily water separator. In the Great Lakes, ships must comply with 5 parts per million (ppm) oil to water content in the bilge discharged. Internationally, the limit is 15 ppm.

### Air Pollutants

Sulphur Oxide emissions are calculated from the SO<sub>x</sub> percentage mandated and declared on the bunker delivery note. Nitrous Oxide emissions and particulate matter calculations and emission factors are based on those Green Marine provides for different engine speeds and fuel types.

### Greenhouse Gases

We used the following standard conversion factors for fuel metric tonnes to gigajoules: heavy fuel oil 39,000 KJ/KG, marine diesel oil 42,000 KJ/KG, biodiesel 37,000 KJ/KG.

We used the measured carbon content of the biodiesel our supplier provided in the reporting of GHG emissions. The life-cycle emissions reductions are not included, but we discuss them throughout this report.

The fleet average EEDI is a newly included metric from the SASB Marine Transportation Standard (SASB reference TR-MT-110a.4). The fleet average EEDI covers CSL's two new Kamsarmax conversion vessels, which joined the CSL Americas' fleet in 2021. Both vessels attained EEDI ratings six to seven percent better than their required EEDI number.

### Waste and Hazardous Management

This disclosure includes all waste generated on board the global fleet, but excludes office-generated waste. Organic waste refers to all organic material generated on board, which is sent to composting facilities through our dedicated waste management supplier. We do not include Dry Cargo Residues (DCR) in the waste data. CSL will continue to look for better measures of DCR discharges.

### Ecological Impacts

The ratio includes all vessels and ballast water treatment systems that were in operation for the majority of 2021. Transshipment vessels that operate within the same port are not required to install ballast water treatment systems. However, we have counted these vessels in the total.

### Environmental Compliance

There were no reported breaches of environmental compliance during the reporting period.

## SOCIAL

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### Health and Safety

All safety data applies only to CSL employees. The data does not include any hours or injuries of contractors. The Lost-Time Injury Frequency Rate and Total Recordable Case Frequency Rate is per million hours worked.

### Diversity and Inclusion

CSL's diversity and inclusion disclosure includes gender representation by age and employment type. For shoreside employees, our data includes permanent employees in all regions as of December 31, 2021.

In 2021, CSL increased the percentage of women represented at our senior management and management levels. In future reporting, we are committed to expanding our diversity and inclusion disclosures beyond gender representation. We are also establishing new data governance processes to enable us to report diversity metrics for our shipboard employees.

### New Employees

The new employee disclosure metrics include all new permanent employees hired during the 2021 calendar year, in every region. This disclosure includes shoreside employees only.



## **THE CSL GROUP**

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The CSL Group Inc. (CSL) of Montreal, Canada is a world-leading provider of marine dry-bulk cargo handling and delivery services. Through its major operating regions, Canada Steamship Lines, CSL Americas, CSL Australia, CSL Asia and CSL Europe, CSL owns and operates a highly diversified fleet of specialized self-unloading vessels, off-shore transhippers and bulk carriers, and delivers cargo to industrial customers annually. CSL's history can be traced back to 1845.



**From:** [Francisco Ambriz](#)  
**To:** [Melgoza, Elizabeth@ARB](#); [Storelli, Nicholas@ARB](#)  
**Cc:** [Lee Rocha](#); [Sergio Mazzocato](#)  
**Subject:** Request for information on bulk operations for CARB's Interim Evaluation  
**Date:** Friday, July 22, 2022 2:36:06 PM  
**Attachments:** [CARB RESPONSE 2022 PORT OPS.docx](#)

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**CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Hello Elizabeth and Nicholas,

Attached is our response to your question regarding Bulk operations in Pabco Gypsums Port facility in the Port of Redwood City. I am responding for Alan Sabawi our old Plant manager.

Thanks,

Francisco Ambriz

Plant Operations Engineer

W 510.896.1033

[francisco.ambriz@pabcoypsum.com](mailto:francisco.ambriz@pabcoypsum.com)

37851 Cherry Street, Newark, CA 94560



[www.PABCOgypsum.com](http://www.PABCOgypsum.com)

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- The percentage of bulk/general cargo vessels using line-hauling operations (where a vessel shifts up and down a berth using the vessel's mooring lines and an onboard winch to help facilitate unloading operations).

Pabco Gypsum has a Warf in the port of Redwood city were designated vessels doc to be unloaded. During the whole onloading process the vessel is in a fixed position and does not require to be move up or down the berth to be offloaded.

- What has been the trend in bulk/general cargo visits over the past five years? Specifically, have throughput/vessel visits increased or decreased?

Cargo visits and throughput has had an upward trend over the past 5 years for Cargo Vessels offloading Gypsum Ore to Pabco Gypsum's Port Facility in the Port of Redwood City.

- Is there any commodity that shifted from containerized cargo to bulk vessel transport? If so, what commodity/commodities were impacted and how did this change impact your operation?

There is no commodity that has shifted operations from containerized cargo to bulk vessel transport.

- Over the past five years, have there been any bulk activity expansions at your port, or are there current plans to expand?

There are no plans to expand bulk activity at the Port facility. There are only plans to upgrade the existing conveyor system.

- What is the age distribution of the bulk/general cargo vessels that visit your port or terminal?

In the past 5 years the vessels listed below have been used to offload Gypsum Ore to Pabco's Facility in the port of Redwood City with an average age of 15 years.

CSL – Algoma Vision (2013)  
CSL – Tecumseh (2013)  
CSL – Spirit (2001)  
CSL – Shiela Ann (1999)  
CSL – Frontier (2001)  
CSL – Koasek (2015)

More information on the fleet can be found at [Fleet | CSL Group \(cslships.com\)](https://www.cslships.com)

- What percentage of vessels operate on liner vs. tramp schedules at your port/terminal?

100% of the vessels received operate on a tramp schedule.

- Information about new technologies designed to control emissions from bulk/general cargo vessels.

Pabco Gypsum uses on shore foam systems and a self enclose receiving hopper to reduce dust emissions during unloading operations.



**From:** [Katindoy, Jason](#)  
**To:** [Melgoza, Elizabeth@ARB](#)  
**Cc:** [Storelli, Nicholas@ARB](#); [Wingfield, Jeff](#)  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation  
**Date:** Tuesday, July 26, 2022 12:36:51 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)

**CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.**

Hi, Lizzy.

Please see below responses:

- The percentage of bulk/general cargo vessels using line-hauling operations (where a vessel shifts up and down a berth using the vessel's mooring lines and an onboard winch to help facilitate unloading operations).

- o Line Hauls/Total Vessels:

2021	2020	2019	2018	2017
81/263	74/219	77/211	95/227	95/246

- What has been the trend in bulk/general cargo visits over the past five years? Specifically, have throughput/vessel visits increased or decreased?

- o General Cargo/Dry Bulk Vessels:

2021	2020	2019	2018	2017
184	138	137	149	162

- Is there any commodity that shifted from containerized cargo to bulk vessel transport? If so, what commodity/commodities were impacted and how did this change impact your operation?

- o Commodities that have shifted from containerized to break bulk:

- Torque Tubes and other solar power components
- Machinery (primarily Tesla-related)
- Plywood and other forest products
- Auto parts
- Refrigerated cargoes
- Bagged cargoes (animal feed, rice, fertilizer, misc. grains, PET resin, etc.)
- Steel commodities

- o Driven by the need for increased cargo velocity, the primary operational impact has been the necessity to evacuate the cargo from the marine terminal during vessel operations in order to clear the marine terminal for the next working shift or the next vessel's cargo. The combination of the significant increase in general cargo tonnage and evacuation of cargo from the marine terminal during vessel operations has resulted in increased utilization of off-terminal warehouses and open yard areas to accommodate warehousing and distribution operations

- Over the past five years, have there been any bulk activity expansions at your port, or are there current plans to expand?

- Dry bulk: In 2021, the Port executed a lease with a Denmar to support development of a bulk soda ash export facility. Currently, construction of the facility is anticipated to commence in April of 2023
- What is the age distribution of the bulk/general cargo vessels that visit your port or terminal?
  - Based vessel calls from CYTD 2022, vessel age range is 1yr-27yrs with approx. 65% of vessels ranging in age from 7yrs to 17yrs
- What percentage of vessels operate on liner vs. tramp schedules at your port/terminal?
  - None operate on liner schedules
- Information about new technologies designed to control emissions from bulk/general cargo vessels.
  - Due to Port physical constraints (narrow channel), type of vessel that call the Port (multi-purpose general cargo/dry bulk), and services/schedule type (100% tramp), the Port is following developments in the shore based bonnet type capture technology

Any question, please let us know.

Thanks,  
Jason

Jason Katindoy | Deputy Port Director, Maritime & Real Estate | Port of Stockton  
2201 W. Washington Street | Stockton, CA 95203  
Office: 209.946.0246 ext. 8231  
jkatindoy@stocktonport.com  
[www.portofstockton.com](http://www.portofstockton.com)



**From:** Melgoza, Elizabeth@ARB <elizabeth.melgoza@arb.ca.gov>  
**Sent:** Friday, July 22, 2022 11:12 AM  
**To:** Katindoy, Jason <jkatindoy@stocktonport.com>  
**Cc:** Storelli, Nicholas@ARB <Nicholas.Storelli@arb.ca.gov>; Wingfield, Jeff <jwingfield@stocktonport.com>  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation

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Thanks for the heads up Jason.



**Lizzy Melgoza**  
California Air Resources Board  
Transportation and Toxics Division  
Marine Strategies Section  
1-279-208-7467  
[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)

---

**From:** Katindoy, Jason <[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)>  
**Sent:** Friday, July 22, 2022 9:35 AM  
**To:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Cc:** Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>; Wingfield, Jeff <[jwingfield@stocktonport.com](mailto:jwingfield@stocktonport.com)>  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation

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Hi, Lizzy.

We're in the process of gathering data, we should be able to complete COB 7/27.

Thanks,  
Jason

Jason Katindoy | Deputy Port Director, Maritime & Real Estate | Port of Stockton  
2201 W. Washington Street | Stockton, CA 95203  
Office: 209.946.0246 ext. 8231  
[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)  
[www.portofstockton.com](http://www.portofstockton.com)



**From:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Sent:** Monday, July 18, 2022 12:38 PM  
**To:** Katindoy, Jason <[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)>  
**Cc:** Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>; Wingfield, Jeff <[jwingfield@stocktonport.com](mailto:jwingfield@stocktonport.com)>  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation

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We'd like to stick as close to this date as possible, but seeing that is next week, realize it might be tight for you to pull together in time. When do you think you'd be able to provide the information to us?



**Lizzy Melgoza**  
California Air Resources Board  
Transportation and Toxics Division  
Marine Strategies Section  
1-279-208-7467  
[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)

---

**From:** Katindoy, Jason <[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)>  
**Sent:** Monday, July 18, 2022 12:19 PM  
**To:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Cc:** Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>; Wingfield, Jeff <[jwingfield@stocktonport.com](mailto:jwingfield@stocktonport.com)>  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation

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Thanks, Lizzy.

How firm is your 7/22 deadline?

Thanks,  
Jason

Jason Katindoy | Deputy Port Director, Maritime & Real Estate | Port of Stockton  
2201 W. Washington Street | Stockton, CA 95203  
Office: 209.946.0246 ext. 8231  
[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)  
[www.portofstockton.com](http://www.portofstockton.com)



**From:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Sent:** Monday, July 18, 2022 11:47 AM  
**To:** Katindoy, Jason <[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)>  
**Cc:** Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation

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Hello Jason,

Sorry for the late response as I was out of the office last week. Yes, we are interested in obtaining data from all bulk terminals.

Please let me know if you have any questions.



**Lizzy Melgoza**  
California Air Resources Board  
Transportation and Toxics Division  
Marine Strategies Section  
1-279-208-7467  
[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)

---

**From:** Katindoy, Jason <[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)>  
**Sent:** Wednesday, July 13, 2022 3:10 PM  
**To:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Subject:** FW: Request for information on bulk operations for CARB's Interim Evaluation

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Hi, Lizzy.

Touching base as I rec'd your below enquiry from an external colleague. Is CARB's intent to capture data for vessel calls at the Port of Stockton?

Thanks,  
Jason

Jason Katindoy | Deputy Port Director, Maritime & Real Estate | Port of Stockton  
2201 W. Washington Street | Stockton, CA 95203  
Office: 209.946.0246 ext. 8231  
[jkatindoy@stocktonport.com](mailto:jkatindoy@stocktonport.com)  
[www.portofstockton.com](http://www.portofstockton.com)



**Port of Stockton**  
CALIFORNIA

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**From:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Sent:** Friday, July 8, 2022 9:53 AM  
**To:** [alan.sabam@pabcoyypsum.com](mailto:alan.sabam@pabcoyypsum.com); [martin.jeppeson@calamco.com](mailto:martin.jeppeson@calamco.com); [mark.darling@yara.com](mailto:mark.darling@yara.com);  
[brian.crets@yara.com](mailto:brian.crets@yara.com); [jay.prosch@yara.com](mailto:jay.prosch@yara.com); [Oystein@frontiership.com](mailto:Oystein@frontiership.com);  
[rmcintosh@eagleaggregates.com](mailto:rmcintosh@eagleaggregates.com); [andrew.lennox@cslships.com](mailto:andrew.lennox@cslships.com); [garth.mitcham@cslships.com](mailto:garth.mitcham@cslships.com);  
John Dunlap <[john@dunlapgrp.com](mailto:john@dunlapgrp.com)>; [jeffrobbins@gensteam.com](mailto:jeffrobbins@gensteam.com); [ron.garcia@yara.com](mailto:ron.garcia@yara.com);  
[Greg.Knapp@lehighhansen.com](mailto:Greg.Knapp@lehighhansen.com); [brian.hobdy@pabcoproducts.com](mailto:brian.hobdy@pabcoproducts.com); Simon Brown  
<[sbrown@pacificbasin.com](mailto:sbrown@pacificbasin.com)>; [joe.carillo@ssamarine.com](mailto:joe.carillo@ssamarine.com); Carlos Dejesus JR  
<[Carlos.Dejesus5@SSAMarine.com](mailto:Carlos.Dejesus5@SSAMarine.com)>; Raymond Arciniega <[Raymond.Arciniega@SSAMarine.com](mailto:Raymond.Arciniega@SSAMarine.com)>;  
[wray.bartling@psterminals.com](mailto:wray.bartling@psterminals.com)

**Cc:** Soriano, Bonnie@ARB <[Bonnie.Soriano@arb.ca.gov](mailto:Bonnie.Soriano@arb.ca.gov)>; Csondes, Angela@ARB <[acsondes@arb.ca.gov](mailto:acsondes@arb.ca.gov)>; Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>  
**Subject:** Request for information on bulk operations for CARB's Interim Evaluation

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Hello everyone,

The 2020 At Berth Regulation was adopted in 2020 with emission control requirements for certain vessel types starting on January 1, 2023. The new regulation aims to increase emissions reductions from ocean-going vessels while at berth in California ports. The rule expands the requirements to roll-on-roll off and tanker vessels and includes additional ports and terminals in California. CARB staff is developing an Interim Evaluation as outlined in section 93130.14(d) of the 2020 regulation. As part of the Interim Evaluation, CARB staff will assess the progress made in adopting control technologies for use with tanker and ro-ro vessels, as well as review control technologies for ocean-going vessels at anchor. In addition, as part of this effort, CARB staff was directed by our Board to include an assessment of control technologies for use on bulk and general cargo vessels.

We are seeking your assistance and requesting information to assist with this evaluation. CARB staff evaluated the bulk and general cargo sector several years ago but there are data gaps we would like to better understand. CARB solicited input from stakeholders in support of the development of the Interim Evaluation, but to date, has not received any data or information from the bulk sector. CARB wants to sufficiently reflect any updates and/or changes that have occurred in this sector since the At Berth rulemaking, to ensure that up-to-date industry sector data is considered.

Specifically, for bulk and general cargo vessels, we are interested in information on:

- The percentage of bulk/general cargo vessels using line-hauling operations (where a vessel shifts up and down a berth using the vessel's mooring lines and an onboard winch to help facilitate unloading operations).
- What has been the trend in bulk/general cargo visits over the past five years? Specifically, have throughput/vessel visits increased or decreased?
- Is there any commodity that shifted from containerized cargo to bulk vessel transport? If so, what commodity/commodities were impacted and how did this change impact your operation?
- Over the past five years, have there been any bulk activity expansions at your port, or are there current plans to expand?
- What is the age distribution of the bulk/general cargo vessels that visit your port or terminal?
- What percentage of vessels operate on liner vs. tramp schedules at your port/terminal?
- Information about new technologies designed to control emissions from bulk/general cargo vessels.

The information requested above will assist CARB staff by providing an up-to-date evaluation of the bulk sector operations in our Interim Evaluation. As part of developing the Interim Evaluation Report, CARB staff will consider all information submitted, including terminal specific engineering evaluations, logistical considerations, public engagement, and independent studies. Additionally, we would welcome any other relevant information that you deem important to be considered for inclusion in the Interim Evaluation pertaining to the bulk and general cargo vessel sector. By December 1, 2022, staff will publish an analysis and findings in a report and make it available for public review. We request that you provide us feedback to the questions listed above and any additional information you would be interested in sharing with staff.

Please submit responses via e-mail by July 22, 2022, to Elizabeth Melgoza ([elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)) and Nicholas Storelli ([nicholas.storelli@arb.ca.gov](mailto:nicholas.storelli@arb.ca.gov)).

Please let us know if you have any questions.

Have a great weekend.



**Lizzy Melgoza**  
California Air Resources Board  
Transportation and Toxics Division  
Marine Strategies Section  
1-279-208-7467  
[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)

**From:** [Joe Carrillo](#)  
**To:** [Melgoza, Elizabeth@ARB](#); [Storelli, Nicholas@ARB](#)  
**Cc:** [Raymond Arciniega](#)  
**Subject:** RE: Request for information on bulk operations for CARB's Interim Evaluation  
**Date:** Wednesday, August 3, 2022 6:05:47 PM  
**Attachments:** [image001.png](#)

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Good Evening Elizabeth and Nicholas,

Excuse the delay. Please find responses to your questions below for our SSA Pacific Inc. (SSA Marine) operations in the Delta. In West Sacramento and Stockton we service similar vessels (general and bulk cargo vessel) in our operations. The Port of Stockton also has Liquefied vessels and tankers but I do not have their detailed information.

### **SSA Pacific Feedback below**

Specifically, for bulk and general cargo vessels, we are interested in information on:

- The percentage of bulk/general cargo vessels using line-hauling operations (where a vessel shifts up and down a berth using the vessel's mooring lines and an onboard winch to help facilitate unloading operations). **65-70% of the vessels that call the Port require line-hauling. This is only required for imported bulk cement.**
- What has been the trend in bulk/general cargo visits over the past five years? Specifically, have throughput/vessel visits increased or decreased? **The import bulk cement volumes have increased significantly over the past five years.**
- Is there any commodity that shifted from containerized cargo to bulk vessel transport? If so, what commodity/commodities were impacted and how did this change impact your operation? **None of the commodities have shifted in/out of containers for this port. In Stockton, Lumber (plywood), Bagged feed, Finished steel (Pipe for solar) and Bagged nutrients have been cargoes we have seen come out of a container back to breakbulk**
- Over the past five years, have there been any bulk activity expansions at your port, or are there current plans to expand? **There has been no expansion over the past 5, However, SSA Pacific, in conjunction with the City of West Sacramento, hopes to grow the business and help support the supply chain issues for the region. There is current talks for possible container storage opportunities and steel coil business. We hope to see container operations in the future to alleviate road congestion and emissions from Oakland.**
- What is the age distribution of the bulk/general cargo vessels that visit your port or terminal? **Vessel builds range from 1982- 2020.**
- What percentage of vessels operate on liner vs. tramp schedules at your port/terminal? **There is no liner service for this port, all vessel calls are 100% trampers.**
- Information about new technologies designed to control emissions from bulk/general cargo vessels. **SSA Pacific is currently in the process of upgraded our heavy lift fleet to zero emissions, by the end of September we will have deployed (14)**



**36,000 lb. forklifts. Along with our efforts to help reduce emissions for the region, the city of West Sacramento is installing 14 electric charging stations on the terminal.**

If you would like to discuss in more detail I am available at your convenience.

Sincerely,  
Joe Carrillo  
Regional Vice President- NorCal  
SSA Pacific Inc.  
(209)420-5693

---

**From:** Melgoza, Elizabeth@ARB <[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)>  
**Sent:** Friday, July 8, 2022 9:53 AM  
**To:** [alan.sabam@pabcogypsum.com](mailto:alan.sabam@pabcogypsum.com); [martin.jeppeson@calamco.com](mailto:martin.jeppeson@calamco.com); [mark.darling@yara.com](mailto:mark.darling@yara.com); [brian.crets@yara.com](mailto:brian.crets@yara.com); [jay.prosch@yara.com](mailto:jay.prosch@yara.com); [Oystein@frontiership.com](mailto:Oystein@frontiership.com); [rmcintosh@eagleaggregates.com](mailto:rmcintosh@eagleaggregates.com); [andrew.lennox@cslships.com](mailto:andrew.lennox@cslships.com); [garth.mitcham@cslships.com](mailto:garth.mitcham@cslships.com); John Dunlap <[john@dunlapgrp.com](mailto:john@dunlapgrp.com)>; [jeffrobbins@gensteam.com](mailto:jeffrobbins@gensteam.com); [ron.garcia@yara.com](mailto:ron.garcia@yara.com); [Greg.Knapp@lehighhansen.com](mailto:Greg.Knapp@lehighhansen.com); [brian.hobdy@pabcoproducts.com](mailto:brian.hobdy@pabcoproducts.com); Simon Brown <[sbrown@pacificbasin.com](mailto:sbrown@pacificbasin.com)>; [joe.carrillo@ssamarine.com](mailto:joe.carrillo@ssamarine.com); Carlos Dejesus JR <[Carlos.Dejesus5@SSAMarine.com](mailto:Carlos.Dejesus5@SSAMarine.com)>; Raymond Arciniega <[Raymond.Arciniega@SSAMarine.com](mailto:Raymond.Arciniega@SSAMarine.com)>; [wray.bartling@psterminals.com](mailto:wray.bartling@psterminals.com)  
**Cc:** Soriano, Bonnie@ARB <[Bonnie.Soriano@arb.ca.gov](mailto:Bonnie.Soriano@arb.ca.gov)>; Csondes, Angela@ARB <[acsondes@arb.ca.gov](mailto:acsondes@arb.ca.gov)>; Storelli, Nicholas@ARB <[Nicholas.Storelli@arb.ca.gov](mailto:Nicholas.Storelli@arb.ca.gov)>  
**Subject:** Request for information on bulk operations for CARB's Interim Evaluation

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Hello everyone,

The 2020 At Berth Regulation was adopted in 2020 with emission control requirements for certain vessel types starting on January 1, 2023. The new regulation aims to increase emissions reductions from ocean-going vessels while at berth in California ports. The rule expands the requirements to roll-on-roll off and tanker vessels and includes additional ports and terminals in California. CARB staff is developing an Interim Evaluation as outlined in section 93130.14(d) of the 2020 regulation. As part of the Interim Evaluation, CARB staff will assess the progress made in adopting control technologies for use with tanker and ro-ro vessels, as well as review control technologies for ocean-going vessels at anchor. In addition, as part of this effort, CARB staff was directed by our Board to include an assessment of control technologies for use on bulk and general cargo vessels.

We are seeking your assistance and requesting information to assist with this evaluation. CARB

staff evaluated the bulk and general cargo sector several years ago but there are data gaps we would like to better understand. CARB solicited input from stakeholders in support of the development of the Interim Evaluation, but to date, has not received any data or information from the bulk sector. CARB wants to sufficiently reflect any updates and/or changes that have occurred in this sector since the At Berth rulemaking, to ensure that up-to-date industry sector data is considered.

Specifically, for bulk and general cargo vessels, we are interested in information on:

- The percentage of bulk/general cargo vessels using line-hauling operations (where a vessel shifts up and down a berth using the vessel's mooring lines and an onboard winch to help facilitate unloading operations).
- What has been the trend in bulk/general cargo visits over the past five years? Specifically, have throughput/vessel visits increased or decreased?
- Is there any commodity that shifted from containerized cargo to bulk vessel transport? If so, what commodity/commodities were impacted and how did this change impact your operation?
- Over the past five years, have there been any bulk activity expansions at your port, or are there current plans to expand?
- What is the age distribution of the bulk/general cargo vessels that visit your port or terminal?
- What percentage of vessels operate on liner vs. tramp schedules at your port/terminal?
- Information about new technologies designed to control emissions from bulk/general cargo vessels.

The information requested above will assist CARB staff by providing an up-to-date evaluation of the bulk sector operations in our Interim Evaluation. As part of developing the Interim Evaluation Report, CARB staff will consider all information submitted, including terminal specific engineering evaluations, logistical considerations, public engagement, and independent studies. Additionally, we would welcome any other relevant information that you deem important to be considered for inclusion in the Interim Evaluation pertaining to the bulk and general cargo vessel sector. By December 1, 2022, staff will publish an analysis and findings in a report and make it available for public review. We request that you provide us feedback to the questions listed above and any additional information you would be interested in sharing with staff.

Please submit responses via e-mail by July 22, 2022, to Elizabeth Melgoza ([elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)) and Nicholas Storelli ([nicholas.storelli@arb.ca.gov](mailto:nicholas.storelli@arb.ca.gov)).

Please let us know if you have any questions.

Have a great weekend.



**Lizzy Melgoza**  
California Air Resources Board  
Transportation and Toxics Division  
Marine Strategies Section  
1-279-208-7467  
[elizabeth.melgoza@arb.ca.gov](mailto:elizabeth.melgoza@arb.ca.gov)

