

CORPORATE  
SUSTAINABILITY REPORT  
2017



Photo: Tom Faiva



The cover of the 2017 Corporate Sustainability Report features a rare photo of MV *Sheila Ann* sailing side by side MV *Rt. Hon Paul E. Martin* in San Francisco Bay, California.

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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. We believe it is not only 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 progress in advancing a performance-based sustainability culture and embracing internationally recognized best practices in measurement and reporting including the Global Reporting Initiative's G4 Sustainability Guidelines and the United Nations Sustainable Development Goals.

By understanding the impacts of our business from both a social and environmental perspective, and by fostering continuous improvement in all aspects of our operations, we believe we can take the necessary steps toward a sound 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).

# 2017 REPORT HIGHLIGHTS

## Health and Safety First

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Although CSL experienced a slight increase in its overall lost time injury and frequency rates, the severity of injuries dropped by 48 percent, as evidenced in a dramatic reduction of days lost to lost-time injuries from 160 in 2016 to 52 in 2017.

## Sustainability Governance

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CSL expanded the SafePartners Program to promote zero harm not only to people, but to the environment and property as well. Broadening the scope of SafePartners now provides CSL with a holistic and consistent approach to responsible shipping.

## Improving Air Quality

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A continued focus on improving vessel efficiency and performance contributed to a 5.6 percent reduction in gCO<sub>2</sub>/tonne-nautical mile for loaded voyages compared to 2016. Sulphur emissions were also reduced by 4.5 percent, for a total SO<sub>x</sub> reduction of 114 MT.

## Protecting Biodiversity and Ecosystems

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The ERMA First Fit ballast water treatment system was installed on the newly converted cement vessel, MV *Kondili*. In Canada, all vessels fully complied with mandatory speed restrictions to protect North Atlantic Right Whales.

## Resource Conservation and Supply Chains

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CSL achieved an eight percent increase in general waste recycling from vessels as well as a five-percent reduction in total incinerated waste. One vessel, *Pineglen*, was recycled in 2017 in accordance with the Hong Kong Convention and CSL's own rigorous ship recycling policy.

## Corporate Ethics

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Anonymous whistleblowers reported a total of eight alleged breaches of CSL policies and commitments in 2017. Each of these alleged breaches were investigated and of the eight, four were found to constitute actual breaches of company policy. Corrective actions were put in place.

## Positive Workplace

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A new onboarding program was launched worldwide to enhance the new employee experience. CSL's worldwide succession and employee development planning process was also improved in 2017.

## Employee and Community Engagement

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CSL received an International Corporate Art Award for its collaboration with urban artists in the creation of *The Sea Keeper* fresco. The company also donated approximately 1% of total net profit to charitable causes and disaster relief, including \$17,000 for the floating hospitals of Mercy Ships.

## Value For Customers

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In collaboration with its customers, CSL is developing an inventory optimization system to identify bottlenecks and propose alternative routes by grouping and parceling loads.





## Message From the CEO

As I think about my first year as CSL's President and CEO, which began during a particularly challenging period, I present this report with great pride. It highlights the many ways our team of ship and shore employees work together to meet our customers' needs, while staying true to our core values of transparency, accountability and sustainability.

This year, our accomplishments included restructuring our global business, launching our 2030 Vision for the Environment, and redesigning our SafePartners program. Today, SafePartners embodies the values of the program our seafarers first proposed in 2012, while expanding its scope to include not only the safety of people, but also the safety of property and of the planet.

At an operational level, we are reaping the benefits of innovative technology such as our real-time vessel monitoring and inventory optimization systems, investing in new ships that help us to better protect our waterways, and reducing our sulphur and greenhouse gas emissions.

As always, we put the health and safety of our employees first. We've taken concrete steps to make sure we are not only the employer of choice in the maritime industry but also an excellent corporate citizen. Our employees are engaged volunteers in their communities, and we are delighted to support their efforts.

Perhaps the most striking symbol of our community engagement is *The Sea Keeper*, the award-winning mural we commissioned on *CSL St-Laurent*. The mural commemorates Canada's 150<sup>th</sup> birthday as well as the 375<sup>th</sup> anniversary of the City of Montreal, and the role CSL, the St. Lawrence Seaway, and marine transport played in building Canada. The day we unveiled *The Sea Keeper* was a truly memorable one.

Our accomplishments have taken place in a challenging environment. Today's economic and regulatory conditions require us to respond quickly and nimbly, which is why we consolidated our ship and shore operations in Canada and Australia.

We have embraced the current, more stringent regulatory environment as it pertains to environmental protection, and adopted new technologies that open up new business opportunities. Both regulation and innovation require us to change, however, and change is never without both costs and benefits.

Regardless of the challenges, CSL remains committed to delivering the perfect shipping day for our customers and our employees. We strive to be the partner of choice for those we serve. And we continue to place safety and sustainability at the heart of our operations.

I am grateful to the new executive team members who have helped make my job easier, and to the employees and customers who work together to try to make sure every voyage is a smooth one.

Louis Martel  
President and Chief Executive Officer

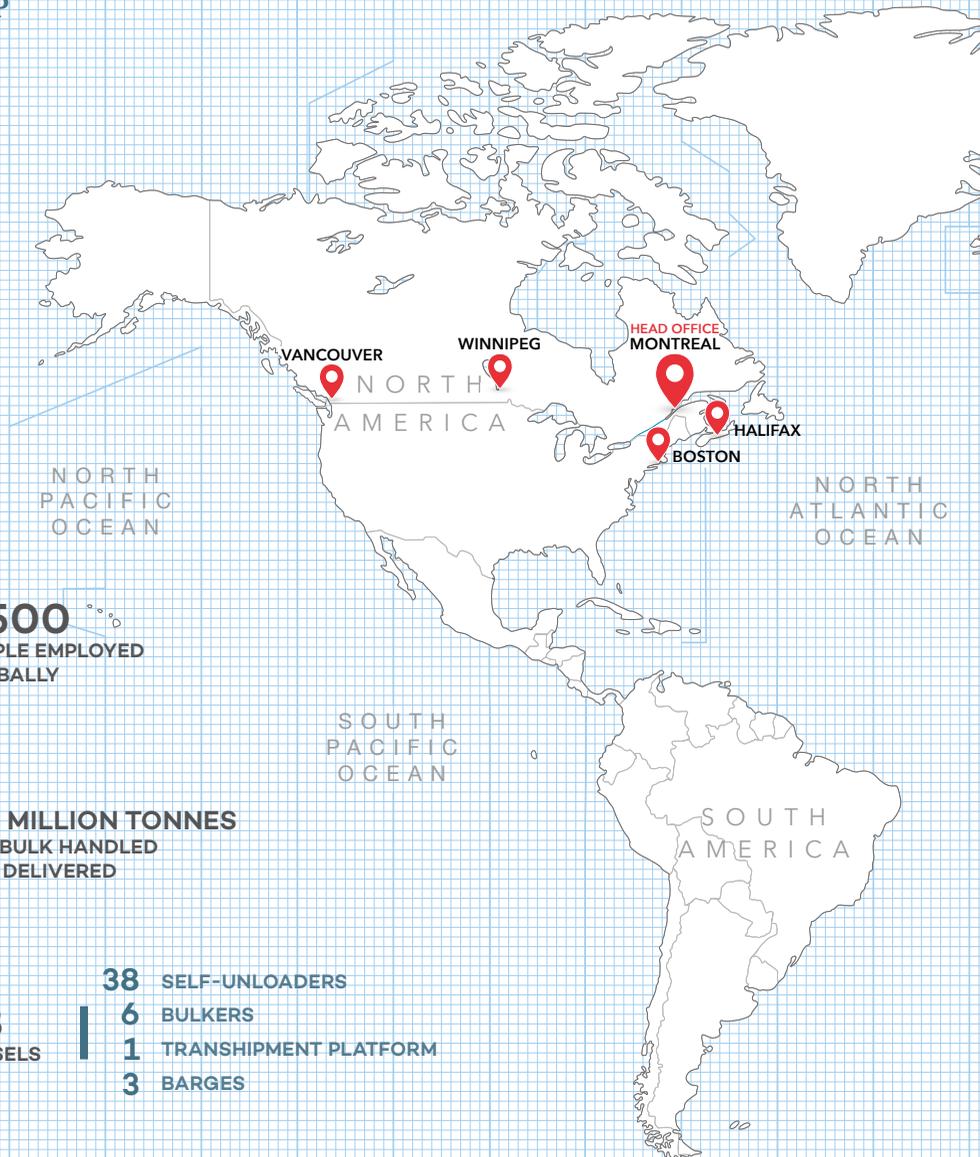
# CSL AT A GLANCE

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, Winnipeg and Vancouver (Canada), Boston (USA), London (UK), Bergen (Norway), Jakarta (Indonesia), Singapore, and Sydney, Brisbane, Whyalla and Karratha (Australia).

Through our five 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.

## THE CSL GROUP

 CSL OFFICES



**1,500**  
PEOPLE EMPLOYED  
GLOBALLY



**62 MILLION TONNES**  
DRY BULK HANDLED  
AND DELIVERED



**48**  
VESSELS

- 38** SELF-UNLOADERS
- 6** BULKERS
- 1** TRANSHIPMENT PLATFORM
- 3** BARGES

We currently operate a fleet of 48 vessels, including 38 self-unloaders, six bulkers, three barges, and one transshipment platform. In 2015, we completed the Trillium Class newbuild program, which produced a total of 11 state-of-the-art self-unloaders and bulk carriers for CSL's Canadian and international fleets.

In FY 2017 (March 31, 2018), CSL transported 62 million tonnes of dry bulk commodities for customers throughout the world. Typical commodities moved include aggregates, cement, coal, gypsum, iron ore, salt and wheat.

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

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 well-being 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.



# CORPORATE GOVERNANCE

The CSL Group is headquartered in Montreal, Canada, with offices in each of the regions in which CSL operates.

Company management is overseen by a ten-member Board of Directors, which includes CSL's three shareholders and seven independent directors. In addition to overseeing the business affairs of the Company, 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. Each committee meets and reports to the Board of Directors throughout the year.

CSL and its owners believe that strong governance practices are essential to ensure the Company is managed responsibly and ethically in accordance with each of CSL's core values.

## CSL BOARD OF DIRECTORS



**Jacques Bougie** was President, CEO and COO of Alcan and is currently Chair of the Board of Directors of Atrium Innovations Inc. He is a Director of McCain Foods Limited, SNC-Lavalin and the Gairdner Foundation. Mr. Bougie has served on the boards of 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 the President, Infrastructure at SNC-Lavalin since April 2015. He joined SNC-Lavalin in 2014 after six years in senior roles with the Leighton Group, including 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.



**Meredith H. (Sam) Hayes** was the President and CEO of CSL from 1995 to 2008. He has worked as an auditor, a bond money market trader, and in various finance and treasury positions for major Canadian companies. He serves as a board member and/or advisor to the CSL Pension Fund Society, Horizon Capital Holdings Inc., Constellation Software Inc. and the Canadian Executive Service Organization.



**William (Bill) Linton** was the Executive VP Finance and CFO of Rogers Communications and President and CEO of Call-Net Enterprises Inc. He has been Chair and CEO of Prior Data Sciences Inc. and Executive VP and CFO of SHL Systemhouse Inc. Mr. Linton currently serves as a Director of TMX Group.



**Vice-Admiral Greg Maddison** enjoyed a long career in the Royal Canadian Navy, progressing from Navigating Officer to Commander of the NATO Standing Naval Force Atlantic, Commander of the Maritime Forces Atlantic, and Chief of the Maritime Staff. He also served as Deputy Chief of the Defence Staff with the responsibility for Canadian Forces operations both domestically and abroad.



**David P. A. Martin** is the President of Bromart Holdings, owner of The CSL Group and Horizon Capital Holdings, of which he is the Co-President and CEO. He is also co-founder and General Partner of the Capital for Aboriginal Prosperity and Entrepreneurship Fund (CAPE Fund).



**R. James E. Martin** is partner and producer of High Treason Films. He began his career at Astral Television Networks in Montreal and then moved to an Astral subsidiary, TVA International, a film distribution firm in Toronto.



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



**Brian McManus** has been the President and CEO of Stella-Jones Inc. since 2001 following more than a decade of entrepreneurial success. His proven leadership qualities in both financial and corporate management, as well as his expertise in the areas of mergers and acquisitions, have helped significantly grow the company.



**Lone Fønss Schrøder** is Vice-Chairman of Saxo Bank A/S in Denmark and sits on the Board of Directors at both IKEA and Volvo. She has held senior management and board positions at A.P. Møller-Maersk A/S and was President and CEO of Wallenius Lines AB.

## CSL Australia Advisory Board



**Greig Gailey** is Independent Non-Executive Director at Caltex Australia Ltd., Chair at ConnectEast Group and at Horizon Roads Holdings Pty Ltd. He is on the Board of Directors at Caltex Australia Ltd., Victorian Opera Co. Ltd. and Energy & Minerals Institute UWA. Mr. Gailey was previously Director and VP at Business Council of Australia and CEO at Zinifex Ltd. He also served on the board at Australian Davos Connection Ltd.



**Lindsay Tanner** is a former member of the Australian Government, serving as Minister for Finance and Deregulation. He was appointed as a Vice Chancellor's Fellow and Adjunct Professor at Victoria University, and a special adviser to Lazard Australia. In 2011, the Chartered Institute of Procurement and Supply (CIPS) granted him an Honorary Fellowship (FCIPS), the first bestowed outside the UK.



## Health and Safety First

At CSL, the health and safety of our employees as well as those we work with is our first priority. Our pledge is to achieve a Zero Harm work environment by eliminating hazards and instilling a culture of safety to ensure we all return home, injury-free, to our family and friends. The introduction of our SafePartners program resulted in a sharp reduction in the frequency rate of lost-time injuries during its first five years of implementation.

In 2017, however, we saw a slight year-over-year increase in the Lost Time Injury Frequency Rate (LTIFR), the number of lost time injuries occurring in a workplace per 1 million man-hours worked. There was also a slight increase in the Total Recordable Case Frequency (TRCF) rate – the sum of Lost Time Injuries (LTI), Restricted Work Cases (RWC) and Medical Treatment Cases (MTC) that occur in a workplace per 1 million man-hours worked. Lost-time injuries were also up slightly, rising to 14 in 2017 from 10 in 2016.

The good news in 2017 is that the average number of days per lost-time injury dropped to 52, from 160 in 2016, meaning the injuries that did occur were less severe.

We know that our voyage to safety excellence is not a linear journey. We are determined to ensure that those figures drop, so we've reinvigorated the SafePartners program by adding new elements that will get us to our Zero Harm goal.

Instilling a culture of safety means we expect all employees to protect not only their own safety but that of their colleagues. Our managers lead by example and encourage transparent reporting of any hazardous conditions or safety concerns. We believe all incidents are preventable.

## Measuring our Safety Performance

Since its launch five years ago, the SafePartners program has been instrumental in dramatically improving our safety results, creating a safety culture built on prevention, training, mutual trust and a committed leadership. Between 2012 and 2016, the frequency rate of lost-time injuries dropped continuously each year, for an overall 71 percent. That remarkable achievement demonstrates the value of empowering seafarers to take ownership of their own safety and the safety of their mates.

### Lost Time Injury Frequency Rate



SINCE 2011, THE LTI FREQUENCY RATE ACROSS CSL HAS BEEN REDUCED BY MORE THAN 60 PERCENT.

## 2017 Safety Results

# 2016 vs 2017

**0 FATALITIES** / **6.9 MILLION TOTAL EXPOSURE HOURS**

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

**+30%**  
LTIFR ↑

**+39%**  
TRCF ↑

Total recordable case frequency (TRCF) refers to the sum of Lost Time Injuries (LTI), Restricted Work Cases (RWC), and Medical Treatment Cases (MTC) occurring in a workplace per **1 million man-hours worked**.

**+18%** ↑ SAFETY OBSERVATIONS REPORTED



**-9%** ↓ DEFICIENCIES PER PORT STATE CONTROL INSPECTIONS

### Severity of Lost Time Injuries



DESPITE THE INCREASE IN LTI'S IN 2017, THE AVERAGE DAYS LOST TO AN LTI WERE 52, COMPARED TO 160 IN 2016.



## Reinventing our Safety Culture with SafePartners

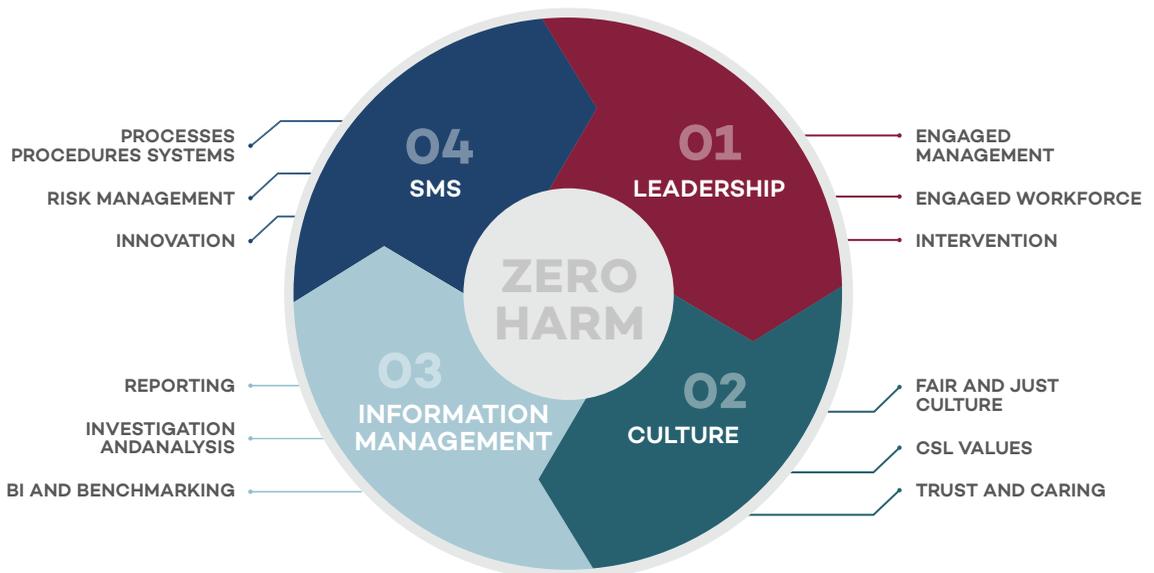
For the last five years, the SafePartners program has been key to CSL's excellent safety record. Knowing what worked well and what did not, CSL has reinvented SafePartners and directed all of its principles toward the goal of Zero Harm.

SafePartners is now based on two simple principles, or hemispheres:

- 1) "Who we are" is what we "Care" about;
- 2) This drives "What we do" and the things we "Control."

We further break these principles into four quadrants, each containing three elements.

Our Leadership (1) drives our Safety Culture (2), which produces the Information Management (3) we need to create and refine our Safety Management System (4).



## Safety Milestones

CSL takes great pride in celebrating the safety milestones achieved by the vessels in our global fleet. The SafePartners Pennant program recognizes vessels that achieve LTI-free operations in the Bronze, Silver, Gold and Platinum categories. The vessels receiving these awards represent 65 percent of the CSL worldwide fleet. They have gone at least one full year, and up to 10 years, without losing time to a workplace injury.

	VESSEL	DAYS SINCE LAST LTI	DATE OF LAST LTI	SAFEPARTNERS AWARD
CSL AUSTRALIA	CSL Crane Team	3,805	August 1, 2007	PLATINUM
CSL AUSTRALIA	FOTP Derawan	2,827	April 5, 2010	PLATINUM
CSL EUROPE	CSL Rhine	2,475	March 23, 2011	PLATINUM
CSL EUROPE	CSL Trimnes	2,060	May 11, 2012	PLATINUM
CANADA STEAMSHIP LINES	Whitefish Bay	1,481	May 16, 2013	PLATINUM
CSL AUSTRALIA	CSL Whyalla	1,886	November 1, 2012	GOLD
CSL AMERICAS	CSL Metis	1,794	February 1, 2013	GOLD
CSL AMERICAS	CSL Tecumseh	1,703	May 3, 2013	GOLD
CSL EUROPE	CSL Elbe	1,609	August 5, 2013	GOLD
CSL AMERICAS	CSL Acadian	1,561	September 22, 2013	GOLD
CSL AMERICAS	CSL Tacoma	1,545	October 8, 2013	GOLD
CANADA STEAMSHIP LINES	Thunder Bay	1,458	May 29, 2013	GOLD
CANADA STEAMSHIP LINES	CSL Assiniboine	1,165	January 26, 2014	GOLD
CSL AUSTRALIA	Goliath	1,327	May 14, 2014	SILVER
CSL AUSTRALIA	Acacia (CSL Thevenard)	1,182	October 6, 2014	SILVER
CSL AUSTRALIA	Spencer Gulf	1,143	November 14, 2014	SILVER
CSL AMERICAS	CSL Argosy	1,104	December 23, 2014	SILVER
CSL AMERICAS	CSL Spirit	1,048	February 17, 2015	SILVER
CSL AMERICAS	Right Hon. Paul E. Martin	1,022	March 15, 2015	SILVER
CANADA STEAMSHIP LINES	CSL Niagara	967	November 12, 2014	SILVER
CANADA STEAMSHIP LINES	CSL St-Laurent	934	December 13, 2014	SILVER
CANADA STEAMSHIP LINES	Baie Comeau	898	December 8, 2014	SILVER
CANADA STEAMSHIP LINES	CSL Welland	866	January 6, 2015	SILVER
CSL AMERICAS	CSL Frontier	978	April 28, 2015	BRONZE
CSL AMERICAS	CSL Tarantau	716	January 15, 2016	BRONZE
CSL AUSTRALIA	CSL Reliance	713	January 18, 2016	BRONZE
CSL AUSTRALIA	Adelie	692	February 8, 2016	BRONZE
CSL AUSTRALIA	Stadacona	611	April 29, 2016	BRONZE
CANADA STEAMSHIP LINES	CSL Laurentien	483	July 18, 2016	BRONZE
CANADA STEAMSHIP LINES	Atlantic Huron	432	September 11, 2016	BRONZE

## Safety Training

A workplace accident can change a life forever, which is why CSL is committed to empowering employees and crews with the tools, resources and training necessary to take charge of their own safety and look out for their colleagues.

Onboard safety training begins at the cadet level and continues at all ranks throughout the career of a CSL seafarer. This training is a pillar of the SafePartners program. Through training, drills and exercises, crew members learn or refresh vital skills and knowledge to recognize and mitigate workplace hazards and ensure the safe operation of our ships.



In 2017, CSL crew members worldwide completed extensive safety training, covering a wide range of areas, including:

- Energy isolation
- Confined space entry
- Best practices in mooring
- Hoisting and lifting
- Machine safety
- Occupational health and safety
- Respiratory protection
- Hearing protection
- Human Elements Leadership Management (HELM)

## CSL's Lifesaving Rules

The Mooring Safety and the Hoisting and Lifting Lifesaving Rules (LSR) are, with four other LSRs, part of CSL's Safety Management System.

The four other LSRs are: Working at Height, Confined Spaces Entry, Energy Isolation and Machine Safety.



### Mooring Safety Lifesaving Rule

Mooring operations are among the daily tasks onboard a vessel. They are one of the most difficult and dangerous jobs on ships. It is critical that all crew members involved in mooring learn the limitations of the process so that the crew carrying out mooring can act as a team.

We make sure all crew members receive training designed to ensure the safety of all those performing mooring operations. This training determines the requirements and control measures crew members need to implement to execute mooring operations safely.

The Lifesaving Rule takes into account the following standards:

- OCIMF, Effective Mooring, 2010, 3<sup>rd</sup> Edition,
- OCIMF, Mooring Equipment Guidelines, ISM Code, Preventive Maintenance Procedures.

## Hoisting and Lifting Lifesaving Rule

Hoisting and lifting operations are one of the major causes of serious injuries and damage. Every lift should be assumed to have its own set of risks that crew members must manage if they are to perform a lift safely.

The objectives of the Hoisting and Lifting Management Standard are to:

- implement the principle of “no plan = no lift”;
- ensure safety when carrying out lifting operations;
- reduce lifting incidents significantly by applying safe lifting principles; and
- list safety requirements and control measures for lifting operations.



CSL Commitment	Progress in 2017	Moving Forward
<ul style="list-style-type: none"> <li>• Achieve Zero Harm</li> <li>• Implement safety standards and procedures</li> <li>• Develop accident investigation and root cause analysis skills to prevent reoccurrences</li> <li>• Improve management of hazardous conditions and unsafe behaviours</li> <li>• Provide training to successfully implement Lifesaving Rules</li> <li>• Improve, upgrade and renew equipment for safe operations</li> <li>• Integrate world-class safety best practices</li> </ul>	<ul style="list-style-type: none"> <li>• 30 percent increase in the Lost Time Injury Frequency Rate</li> <li>• 39 percent increase in total recordable case frequency per million-man hours compared to 2016</li> <li>• Decrease in injury severity rate. 68 percent less time was required for an injured employee to recover and return to work</li> <li>• Lifesaving Rules training continued with ship and shore personnel</li> <li>• Safety training was conducted during crew conferences</li> </ul>	<ul style="list-style-type: none"> <li>• Continue implementation of Lifesaving Rules and management standards</li> <li>• Rewrite Safety Management System</li> <li>• Complete Lifesaving Rules training for ship and shore personnel in 2018</li> <li>• Develop a safety training matrix and promote a skilled workforce</li> <li>• Continue integrating world-class health and safety best practices</li> <li>• Introduce leading indicators</li> <li>• Capture and investigate high potential occurrences</li> </ul>



## Sustainability Governance

At CSL, our strong governance structure and a committed leadership team ensure clear direction and accountability for our sustainability strategy. With a new CEO at the helm, and a restructuring of the global business in 2017, we re-examined and relaunched our long-term sustainability strategy internally, as part of the expansion of our SafePartners program.

The new SafePartners program aims to achieve “Zero Harm” by continuously improving and promoting a healthy and safe working environment for all, protecting the environment in which we operate, and ensuring the safety of our ships, the ports we visit, and the communities with whom we interact.

## Building on a Powerful Program

Broadening SafePartners is the natural evolution of the program into a holistic and consistent approach to responsible shipping. Fundamentally, we're expanding on a great idea developed by CSL seafarers, and placing that idea at the core of how we operate and measure our performance.

All CSL employees, ship and shore-side, are now guided by the SafePartners priorities and rules for the safety of people, the safety of the planet and the safety of property.



### ZERO HARM TO PEOPLE

- CSL employees and customers
- Contractors and suppliers
- Community

### ZERO HARM TO THE ENVIRONMENT

- Air
- Water
- Resource use

### ZERO HARM TO PROPERTY

- Vessels
- Infrastructure

## The 2030 Vision for the Environment

CSL is proud to have launched its 2030 Vision for the Environment, setting measurable long-term reduction targets under priority areas in the SafePartners Planet Pillar. The 2030 timeline was adopted to align with the United Nations' 2030 Agenda for Sustainable Development and to commit CSL to address global sustainability priorities.

We are committed to tracking our progress toward these ambitious targets in a continuous and transparent manner, and demonstrate how changes to CSL's business affect the UN sustainable development goals (SDGs).

Air	Water	Resource Use
<div> <p>3 GOOD HEALTH AND WELL-BEING</p> </div> <div> <p>13 CLIMATE ACTION</p> </div> <ul style="list-style-type: none"> <li>• Produce 35 percent less CO<sub>2</sub>e per tonne of product moved than in 2005</li> <li>• Reduce the amount of sulphur emissions in the fleet by 95 percent, compared to 2010 levels</li> <li>• Eliminate ozone-depleting refrigerants from the fleet</li> </ul>	<div> <p>6 CLEAN WATER AND SANITATION</p> </div> <div> <p>14 LIFE BELOW WATER</p> </div> <ul style="list-style-type: none"> <li>• Continually strive for zero oil spills</li> <li>• Seek innovative protection measures to eliminate the spread of aquatic invasive species</li> <li>• Improve the understanding of underwater noise impacts on marine mammals</li> </ul>	<div> <p>11 SUSTAINABLE CITIES AND COMMUNITIES</p> </div> <div> <p>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</p> </div> <ul style="list-style-type: none"> <li>• Produce 75 percent less shipboard waste than in 2010</li> <li>• Increase shipboard recycling by 50 percent</li> <li>• Conduct environmental impact assessments of critical suppliers</li> <li>• Work with other stakeholders to pursue circular economy opportunities</li> </ul>

## Green Marine

Green Marine is a voluntary and transparent environmental certification program that provides a comprehensive framework for marine transportation companies to measure and reduce their environmental footprint. As a founding member of the program, CSL has been an active Green Marine participant and advocate since the program's launch in 2007.



The program, which was founded in North America and has since expanded internationally, has separate criteria for domestic Great Lakes' shipowners and those who trade internationally. To better reflect this distinction, CSL separates its global fleet into two participants' categories: The Great Lakes domestic fleet and the international ships.

Green Marine Issue	Level Achieved	
	Canada Steamship Lines	CSL International
Aquatic Invasive Species	4	5
Pollutant Air Emissions (SOx and PM)	5	3
Pollutant Air Emissions (NOx)	4	3
Pollutant Air Emissions (GHGs)	5	3
Oily Water	4	4
Garbage Management	5	4

## The United Nations Sustainable Development Goals

The United Nations Sustainable Development Goals (SDGs) address the most pressing issues the global community faces. As a global shipping company, with operations on every continent, CSL understands the importance of ensuring we contribute to achieving these priorities in our own way. Throughout this Sustainability Report, you will find icons corresponding to the Sustainable Development Goals where CSL's programs and efforts align.





## Improving Air Quality

As a shipping company with operations intrinsically linked to the elements, we are acutely aware of the risks posed by climate change and the urgency of reducing our impacts. Our efforts are focused on improving the efficiency of our fleet today, and developing sustainable solutions for the low-carbon shipping industry of tomorrow.

## Addressing Climate Change

The International Maritime Organization (IMO) adopted an initial strategy to cut greenhouse gases (GHG) from shipping by at least 50 percent by 2050. This was a historic move to bring the shipping industry in line with nationally determined contributions under the Paris Agreement. CSL has been continuously reducing the GHG emissions produced by its global fleets. In this regard, by 2030, we commit to reducing our GHG emissions by 35 percent based on 2005 levels. This ambitious target aligns with the United Nations Sustainable Development Agenda for 2030 and the aspirations of both Canada and Australia.

**2030 GOAL**

Produce 35 percent fewer GHG emissions per tonne of product moved than in 2005

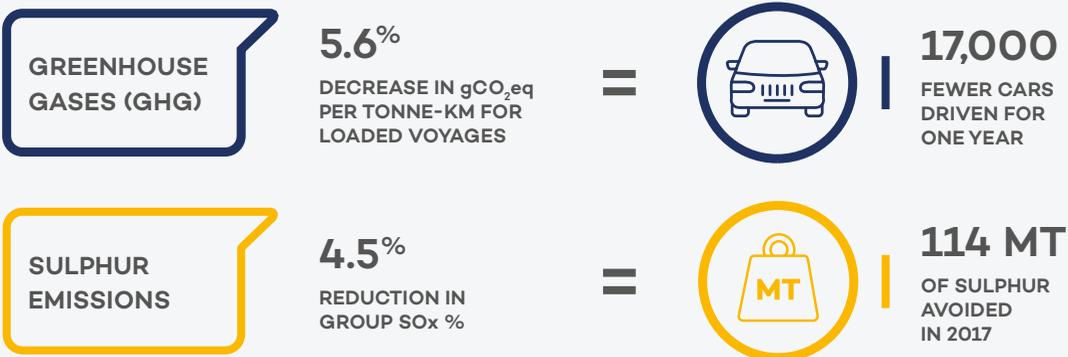
Achieving this goal is no small feat. At CSL, we will not only have to find new and innovative ways to improve our existing fleet, we will also have to plan for ways that future ships can support growth in a low-carbon economy.

## Searching for SOx Solutions

CSL has carried out several projects to test and develop solutions to reduce sulphur emissions from ships. This has included using alternate exhaust gas scrubbing materials to avoid polluted wastewater, de-sulphurization of fuel through chemical reactions, and adopting different fuel additives. CSL remains committed to finding holistic solutions that address not only sulphur but also all harmful air emissions from its vessels.



### 2017 Annual Air Emissions Reductions

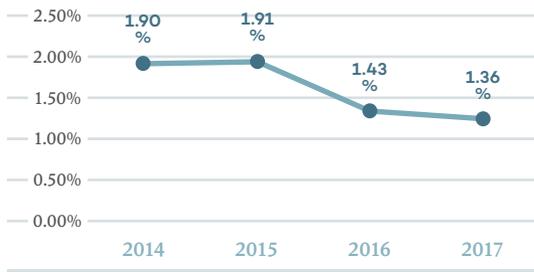


**FIGURE:** EQUIVALENCIES FROM THE U.S. EPA GREENHOUSE GAS EQUIVALENCIES CALCULATOR

## CSL Global Fleet Sulphur Emissions

CSL's vessels operate in and outside emission control areas (ECAs), which means the fuel burned on board the fleet can vary significantly and is highly dependent upon the trade and fuel availability at port. CSL independently tests the bunkers received to measure the fuel quality and the sulphur content. We measure our sulphur emissions' reduction on the basis of total sulphur emitted in metric tonnes per total fuel consumed, to account for trade and fuel consumption fluctuations. Since 2014, we've reduced the SOx percentage of fuel by 28 percent.

### Sulphur In Fuel Trend – CSL Global Fleet



## GHG Emissions

Comparison of the efficiency between different modes of transportation requires a standard metric and methodology. The metric applied by CSL consists of grams of CO<sub>2</sub> produced per tonne-kilometre. This is the metric that results in the widely published comparison showing that a bulk carrier is 10 times more efficient than a truck, and 55 times more efficient than using air freight.

Although this metric shows how efficiently an operator transports cargo, what is also important is to consider the efficiency of the entire logistics supply chain. Doing so requires inclusion of voyages for vessels under ballast, truck transport to and from loading locations, and empty rail cars transiting between loads. Often, the control over the length of a ballast journey is outside the control of a ship operator. It requires careful logistics and planning to minimize ballast legs and load to coordinate fleets in the most efficient way possible. The graph displayed on the right shows CSL's total voyage emissions on a tonne per nautical mile basis.

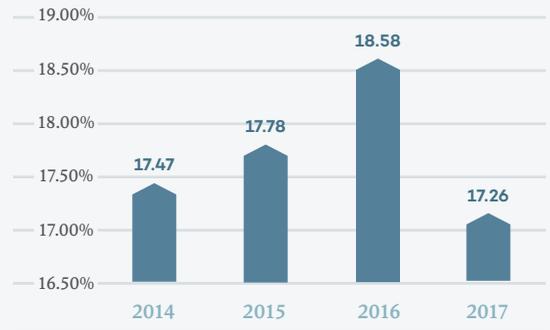
## Real-Time Performance Monitoring Trials Continue



We completed the operational optimizer ("O<sup>2</sup>") pilot phase of our real-time performance monitoring trial in 2017 onboard the CSL *Niagara* and *Thunder Bay*. This technology provides crews with invaluable operational data to improve performance and measurement continuously, in real time. CSL has now gathered a full season of information from the systems.

With the help of the National Research Council of Canada, we have analyzed vessel trends and performance, allowing for continual improvement in the system design and installation. The piloting stage has been invaluable in identifying problems and solutions, and developing the necessary training for the crew. The O<sup>2</sup> system assists crew members in optimizing vessel performance as well as automating ship-to-shore compliance reporting and streamlining the regulatory data provision process. We plan to install O<sup>2</sup> on five more vessels over the next year. As more vessels begin to operate with the system, CSL's potential for learning and performance improvements increase exponentially.

### Total Voyage gCO<sub>2</sub>e/tonne-nautical mile



## Research and Development at CSL

CSL's research and development team is constantly scanning the market for applicable technologies and potential solutions to improve fleet efficiency. The team is mandated to test and develop technologies that improve safety, reduce carbon emissions and protect machinery from wear and tear. In 2017, the team's work included an investigation into alternative fuels, such as LNG and methanol, as well as more novel solutions to address impending sulphur in fuel regulations.

The team also evaluated different wake conditioning devices to improve ship efficiency and reduce underwater noise, and shore power assessments for major ports of call for CSL vessels.

In 2018, the team will begin working on fuel additives that have the potential to reduce GHG emissions as well as testing an onboard product to increase fuel efficiency and reduce particle matter emissions.

CSL has also been actively involved in the Canadian Clean Fuel Standard working groups. The proposed regulations aim to achieve 30 megatonnes of annual reductions in GHG emissions by 2030. CSL is committed to doing its part to ensure the domestic shipping industry helps to achieve this ambitious goal.

Our Commitment	Progress in 2017	Moving Forward
<ul style="list-style-type: none"> <li>By 2030, produce 35 percent less CO<sub>2</sub>e per tonne of product moved than in 2005</li> <li>By 2030, reduce the amount of sulphur emissions in the fleet by 95 percent compared to 2010</li> <li>Eliminate ozone-depleting refrigerants from the fleet</li> </ul>	<ul style="list-style-type: none"> <li>5.6 percent reduction in gCO<sub>2</sub>e/tonne-nm for loaded voyages compared to 2016</li> <li>Fleet distance monitoring pilot project onboard two vessels</li> </ul>	<ul style="list-style-type: none"> <li>Equip 14 more vessels with onboard fleet distance monitoring by the end of 2018</li> <li>Install propeller boss fin caps for energy efficiency on one vessel</li> <li>Conduct fuel additive trial</li> <li>Formalize LED replacement program across CSL</li> </ul>

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## Protecting Biodiversity and Ecosystems

CSL is committed to conducting responsible operations that protect our waterways and marine environment. We make sure our business practices are transparent, in keeping with our core values.

CSL's approach to water stewardship is to find the right solutions that maximize environmental protection and business outcomes. Marine ecosystem challenges are complex, and the shipping industry can play a crucial part in ensuring a sustainable and harmonious future for the world's oceans and waterways.

## MV *Kondili* Ballast Water Treatment System Installation

In late 2017, the ERMA First Fit ballast water treatment system was installed on CSL's MV *Kondili* during the vessel's docking in Nantong, China. Since the International Ballast Water Management Convention came into force in September 2017, CSL decided to take the dockyard opportunity to install the system, well ahead of *Kondili's* compliance requirement date.

The ERMA First Fit is an electro-chlorination system, which uses filtration and an electrolytic cell that produces free chlorine to treat the water and eliminate any remaining organisms. During ballasting, the water passes through the filter, where organisms and sediment are separated and discharged back overboard. The filtered water then enters the electrolytic cell, which uses the salt in the water to produce chlorine through the process of electrolysis. This treated water then enters the vessel's ballast tanks. During de-ballasting, the system monitors the residual chlorine in the water and neutralizes it further when necessary. The system holds both IMO and USCG-type approval certificates.

The system's benefits include the ability to:

- handle low salinity water down to 0.9 PSU, which is necessary for ports in CSL's trades with freshwater run-off or river outlets; and
- operate in water temperatures as cold as 0° Celsius.

This is the second full ballast water treatment system CSL has installed for trial, with the OceanSaver system in operation on MV *Sheila Ann*. The design, installation and operational experience CSL gains through these trials is invaluable in ensuring the company continues to find the right technical and commercial solutions to help prevent the spread of harmful aquatic invasive species.

## Making Compliance Easy

Vessel crews are required to understand and comply with multiple regulations for vessel discharges, depending upon the area in which they trade and transit. These compliance requirements are additionally complex for CSL's Great Lakes vessels, which regularly cross between different regional waters, lakes and ports. For example, a vessel on a voyage from Thunder Bay to Montreal will cross the border from U.S. to Canadian waters 17 times.

To help crew members ensure compliance with regulated vessel discharges, CSL has implemented environmental regulatory overlays on the ship's electronic charts. A visual representation of what regulations apply and where, aids the vessel and crew in voyage planning and compliance with discharge requirements. The next evolution of this project is to automate the overlays through the office, a project that is planned for rollout in 2018.

## Phosphate-Free Galley Cleaners

High levels of phosphate in water can cause over-production of algae. In Canada, Lake Erie suffers from chronic algae blooms that harm aquatic life and produce toxins that contaminate the drinking water supply, threatening the overall health of the aquatic ecosystem. Although shipping is by no means the biggest contributing factor to phosphate in the lakes, CSL is proud that by the end of 2017, we were phosphate-free across every ship in Canada and Americas, and phosphate-free in the galley of all CSL Australia and Europe vessels.



## Protection of the Endangered North Atlantic Right Whale

The 2017 shipping season in the Gulf of St. Lawrence was marked by the tragic death of numerous North Atlantic Right Whales, which are among the most endangered whales on the planet. In response to this alarming trend, Transport Canada implemented a 10-knot speed restriction zone until the whales migrated to warmer waters in late fall.

All CSL vessels complied with the speed limit, which mirrors the voluntary speed restriction zone CSL implements within the Saguenay Marine Park to protect beluga whales. We also actively support the ongoing North Atlantic Right Whale Working Group and its work on a dynamic system that can respond to the movement and presence of whales as well as the work of researchers seeking to improve whale-sighting information and reporting in real time.

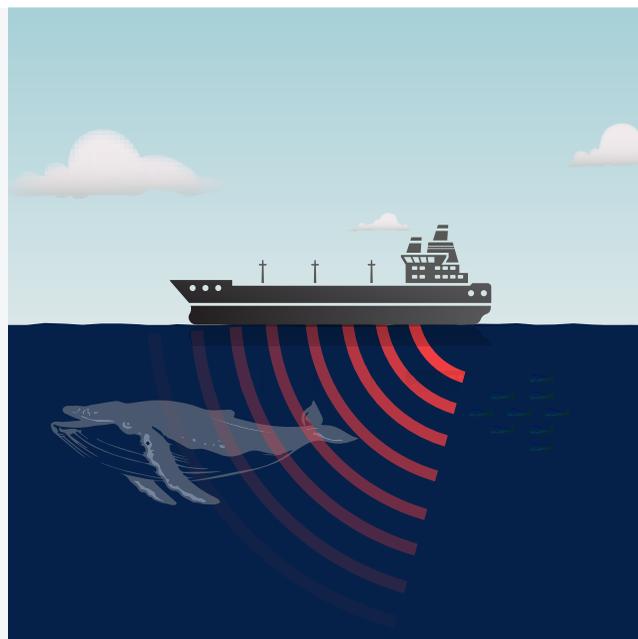


### CSL's WWF Partnership

To support the ongoing protection of North Atlantic Right Whale, CSL has joined forces with the World Wildlife Fund (WWF). CSL's long-standing partnership with WWF has helped contribute to whale protection in the Grand Manan basin, beluga studies in the Saguenay Marine Park, and the freshwater health assessment of the Great Lakes. This renewed partnership aims to promote the use of acoustic monitoring devices and science-driven solutions to protect the North Atlantic Right Whale, and to develop sound policy concerning protected marine areas in Canada.

### Underwater Noise

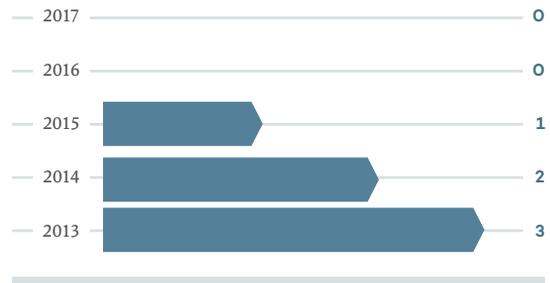
Underwater noise is becoming a serious environmental issue, and with increasing seaborne trade, the problem is only expected to grow. As part of our commitment to sustainable shipping, CSL became a founding member and contributor to MeRLIN, a network for innovation that Technopole Maritime leads. MeRLIN is focused on improving the collaboration among industry, researchers and government concerning underwater noise from vessels. In 2017, CSL received the acoustic footprints of a large portion of the Canadian fleet, thanks to research Transport Canada conducted in previous shipping seasons. The study used hydrophone installations near Les Escoumins, Quebec, to record vessels as they transited through the area. The next step for CSL is to fine-tune the details of vessel footprints, with new recordings that can provide insight into the effect of vessel speed and operational characteristics on underwater noise production.



## Historic Oil Spills

Although any oil spilled into the water is considered unacceptable to CSL, a significant spill into the water is defined as a spill greater than 100 litres. Over the past five years, CSL has focused its efforts on high-risk areas such as hydraulic hoses and bunker procedures. We will continue to invest in training and controls to protect against the risk of oil spills from our vessels.

## Historical Spills to Water



## Great Lakes Water Quality Testing

Through Canada’s Chamber of Marine Commerce (CMC), CSL undertook water quality testing at ports around the Great Lakes. When assessing ballast water treatment technology for vessels, it is vital to understand water quality parameters such as salinity, temperature, pH, total suspended solids, and UV-transmissivity. In order for ship owners to have a degree of confidence in the efficacy of a system, these water quality parameters need to be within set ranges. Due to the Great Lakes’ unique conditions, the study found many ports where these water parameters are well outside the conditions used to test ballast water systems. The next step for CSL is to undertake its own testing of a treatment system in actual Great Lakes’ conditions.

Our Commitment	Progress in 2017	Moving Forward
<ul style="list-style-type: none"> <li>• Zero oil spills</li> <li>• Reduce the risk of marine aquatic invasive species</li> <li>• Understand the impact of vessel underwater noise on marine mammals and actively work to reduce this impact</li> </ul>	<ul style="list-style-type: none"> <li>• BWTS installation on <i>MV Kondili</i></li> <li>• 100 percent compliance with mandatory speed restriction to protect the North Atlantic Right Whale</li> <li>• Five minor oil spills to water reported, total volume 14 litres</li> </ul>	<ul style="list-style-type: none"> <li>• Seek ways to measure the underwater noise footprint of CSL’s fleet</li> <li>• Continually assess ballast water treatment system technology for suitability in the Great Lakes</li> </ul>

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## Resource Conservation and Supply Chains

In a world of constrained and finite resources, responsible consumption and extending product life has become increasingly important. CSL is committed to sustainable consumption and promoting resource stewardship throughout our supply chain.

We play an important role in the supply chain of our customers and we take this responsibility very seriously. Working toward environmental solutions that improve the sustainability of the whole supply chain, from ship design and operation to ship recycling, requires collaboration and input from all stakeholders.

## Supply Chain Logistics Optimization Program

Vessels require the continuous supply and delivery of product, no matter where they are in the world. From provisions to machinery parts as well as cleaning agents, paints and chemical products, vessels need efficient resupply that neither slows them down nor leaves them wanting. In 2015, CSL's Canadian fleet implemented a warehouse consolidation program that has helped reduce truck delivery to ships to only one regular resupply per month, down from approximately 8-12 previously.

Applied in CSL's global fleet, the program sends international supplies to consolidation warehouses, one in Asia and one in Europe. They are then released as a consolidated shipment. Although this requires careful shipboard management for ordering of parts, it helps improve the efficiency of clearing goods delivered.

In Canada, supplies are sent to centralized warehouses, located near frequent ports of call for CSL's vessels, and consolidated for monthly delivery to ships.

CSL's Supply Chain Logistics Optimization Program has helped improve the efficiency of products used on board, reduced international shipments to one per month from approximately 12 per month, and dramatically reduced truck movements in the supply of CSL's vessels.

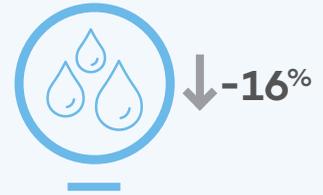
### CSL's Waste Reduction Performance



**7% INCREASE IN CREW-PRODUCED WASTE PER OPERATIONAL DAY, ALTHOUGH STILL DOWN 27% SINCE 2013**



**ACHIEVED 21% RECYCLING AS A PERCENTAGE OF TOTAL WASTE PRODUCED IN 2017**



**16% LESS OILY WASTE PER OPERATIONAL DAY COMPARED TO 2015 = 8,900 TONNES OF OIL SAVED**



### Oil Drum Compactors Contribute to Reducing Footprint

The trade patterns for CSL America vessels, which include longer voyage times in remote areas of Central and South America, make shipboard waste management a challenge. Often, these locations have no options for shipboard recycling to be handled ashore. In 2017, three oil drum compactors were installed onboard the *CSL Metis*, *CSL Tacoma*, and *CSL Tarantau*. Although primarily installed to help with storage needs for longer voyages, the compacted drums also help reduce the number of trucks required to offload trash, which in turn helps reduce the carbon footprint of the ship supply chain. Once trash gets to landfill, it is often compacted as much as possible. Compacting the drums onboard is a more efficient option.

## What happens to ship waste in Canada?

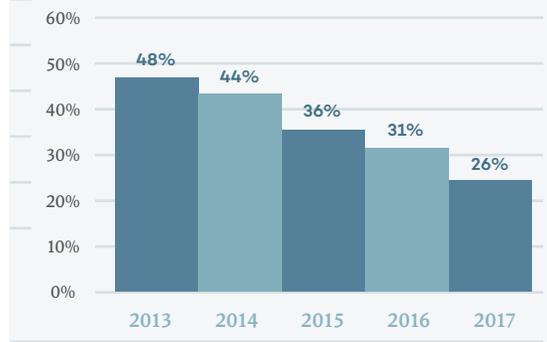
Canada Steamship Lines' recycling program was implemented in 2012 as part of the SafePartners program. Since its inception, the program has improved recycling as a percentage of total waste, increasing it to almost 25 percent in 2017, up from 6.2 percent in 2012. Recycling of waste products encompasses a circular economy initiative, where we seek to recover and regenerate materials in a sustainable manner. This aligns with CSL's 2030 Vision for responsible resource use and works to extend the life of products and finite resources. In collaboration with waste providers and partnerships, CSL can track what happens to waste when it leaves a CSL vessel:

- Aluminum becomes aluminum chips, used to create ingots that can be rolled into thin flat aluminum sheets for repurposing in beverage cans, aluminum foil and licence plate frames.
- Paper is recycled into office paper, tissue product, stationery, newsprint and even cardboard, depending on the quality of the paper recycled.
- Glass is taken to recycling plants, where it is crushed, sorted and cleaned to be mixed with other raw materials.
- Plastics can be recycled into a wide variety of products such as containers, floor tiles, drainage pipes, benches, dog houses, picnic tables, fencing, roadways and much more.
- Organics are used in compost and mulch when disposed of in Ontario, Canada.
- Cardboard is repurposed into new boxes.
- Oil filters are collected and crushed to extract the residual oil, which can be refined again as lubricants. The steel casings are sent to foundries to be transformed into recycled steel.
- Trap grease is collected and recycled into bio-diesel.
- Batteries are stripped of zinc, manganese and potassium, which are used as micronutrients to grow corn.



SHIP INCINERATOR

### Incinerated Waste as a Percentage of Total Waste Produced



### About Shipboard Incinerators

Incinerators are an important piece of machinery on board ships. They are used for both solid and liquid waste and help maintain safe and hygienic waste levels between ports, which is particularly important for ships on longer voyages. As a short sea shipping company, CSL vessels call into ports more frequently than those travelling longer distances. This enables CSL to establish relationships with waste providers to ensure proper waste segregation ashore. However, for some regions and vessels, this system isn't possible. Ships with more varied ports of call and longer times at sea require working incinerators to manage waste production. In the process of decommissioning incinerators to reduce air pollution and promote waste reuse and recycling, CSL has also undertaken a review to balance individual ship need and efficiency of incinerators. This will be a continual process as CSL strives to further reduce the need for shipboard incineration.

## Responsible Ship Recycling

CSL is a proud pioneer of responsible ship recycling practices. Our Ship Recycling Policy has been in place since 2009 and undergoes constant review.

CSL systematically performs hazardous material inventories across the fleet regardless of vessel age and end of life. This inventory helps to prepare a ship for dismantling, providing a comprehensive understanding of all materials on board, their location and the level of risk they pose to the health and safety of people and the environment.

CSL engages with a third party expert to audit the yard prior to ship recycling, supervise the entire process and provide weekly updates to CSL management. We recognize that there is always opportunity for improvement, which is why we work with recycling yards to help upgrade facilities and develop a common understanding of environmental and safety requirements.

In 2017, MV *Pineglen* was recycled at the Bereket Ship Recycling facility in Turkey.



Our Commitment	Progress in 2017	Moving Forward
<ul style="list-style-type: none"> <li>• Produce 75 percent less shipboard waste than in 2010</li> <li>• Increase shipboard recycling by 50 percent</li> <li>• Conduct environmental impact assessments of critical suppliers</li> <li>• Work with others to pursue circular economy opportunities</li> </ul>	<ul style="list-style-type: none"> <li>• 7 percent increase in waste per crew member per operational day compared to 2016</li> <li>• 8 percent annual increase in percentage of recycling to general waste</li> <li>• 5 percent reduction in incinerated waste as percentage of total waste produced in 2017, compared to 2016</li> <li>• One vessel recycled in compliance with CSL recycling policy</li> </ul>	<ul style="list-style-type: none"> <li>• Roll out the organic waste program onboard</li> <li>• Conduct environmental impact assessments of critical suppliers</li> </ul>



## Ethics

Integrity is a fundamental CSL value and the foundation of our business. At CSL, we promote a fair and honest culture and our employees are champions of high ethical conduct and compliance with all laws and regulations. Our employees understand that there can be absolutely no compromise when it comes to ethical conduct and as a consequence, we are recognized as industry leaders in all areas of legal and ethical compliance.

## CSL's Code of Corporate Responsibility

Underpinning CSL's ethical commitment and practices is a Code of Corporate Responsibility. The Code sets forth CSL's ethical responsibilities, and provides clear rules on appropriate conduct toward customers and business partners, the respect and fair treatment of employees, compliance with law, the protection of the environment, and zero tolerance for any form of corruption. The Code is part of our social licence to operate, and observing it is the obligation of every CSL director, officer, and employee.

## 2017 Whistleblowing Reports and Actions

CSL strongly encourages its employees, customers and the public to report any breaches of CSL's policies and commitments. To this end, CSL uses EthicsPoint, a confidential and anonymous third-party reporting service. All reports filed through EthicsPoint are treated confidentially, investigated and addressed. To submit an anonymous and confidential report through EthicsPoint, a report can be submitted online or via telephone.

## Compliance with Laws and Regulations

A strict compliance program and a skilled team ensure that CSL carries out its business in compliance with the laws and regulations of the countries in which it operates. All dealings between CSL employees and public officials are conducted in a manner that does not compromise the integrity or reputation of the officials or CSL. In addition to observing laws applicable to individuals and CSL, all employees are expected to uphold CSL's ethical standards.

In 2017, eight alleged breaches to CSL policies and commitments were reported through the whistleblowing system. Below is a summary of the complaints received and the actions taken.

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	0	0	0
Discrimination or Harassment	4	3	3
Embezzlement	0	0	0
Falsification of Contracts, Reports or Records	0	0	0
Misconduct or Inappropriate Behaviour	0	0	0
Sabotage or Vandalism	1	1	1
Substance Abuse	0	0	0
Theft	0	0	0
Unsafe working conditions	1	0	0
Violation of Policy	2	0	0
Violence or Threat	0	0	0
Other	0	0	0

## The United Nations Global Compact and Collective Action

CSL actively supports the ten principles of the United Nations Global Compact – 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 seeks to ensure and verify that every CSL director, officer, and employee throughout the world complies with the ten principles.

### Fighting Corruption

Since the introduction of its anti-corruption program, CSL has been at the forefront of the drive to end bribery, extortion and corruption in the shipping industry. The program’s objective is to ensure CSL’s business operations are corruption-free, which it achieves through four components: a strict policy against any form of corruption; due diligence and verification on persons representing CSL in any dealings with government officials; training of employees on corruption avoidance and best practices; and a system of checks and verifications to prevent corruption. Now in its seventh year, the program has seen the successful completion of implementation and training, and the incorporation of regular due diligence in daily operations.



**MACN**  
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. Since its inception, MACN has become one of the preeminent examples of an industry-led network taking tangible collective action to eliminate corruption across the wider supply chain. By working in partnership with the industry, governments and civil society, we have been successful in tackling corruption through country-specific actions in locations as diverse as Nigeria, Indonesia, Egypt, and Argentina.



JOHN SYPNOWICH

MACN’s initiatives have been welcomed by these stakeholders and have resulted in tangible outcomes such as the removal of trade barriers, strengthened governance frameworks, and substantially lower levels of corruption in maritime trade. With over 90 companies across the maritime industry, MACN’s members represent a significant percentage of the total global tonnage and play a key role in ocean transport.

CSL has been an active member of MACN since 2011. CSL’s Chief Legal and Compliance Officer, John Sypnowich, serves as a member of the MACN Steering Committee and in January 2018 assumed the role of Chair.



## Human Rights

CSL strictly complies with Canadian and international human rights laws and recognizes its responsibility to respect human rights principles as set out in the International Bill of Human Rights and the *International Labour Organization's Declaration of Fundamental Principles and Rights at Work*.

In accordance with CSL's Code of Corporate Responsibility, CSL endeavours at all times to:

- Respect human rights throughout its operations in every country;
- Provide fair and competitive employment terms;
- Promote equal opportunity employment, and;
- Treat employees fairly and comply with applicable laws and regulations.

### EthicsPoint Hotline



EthicsPoint is a confidential, third-party reporting service available to anyone who would like to anonymously report 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 at **866-384-4277**

Consult the website if calling from elsewhere in the world.



### Anti Corruption Manual

Adopted in 2012, the CSL Anti Corruption Manual outlines the policies and procedures that make up CSL's Anti-Corruption Program, which is designed to address the risk of corruption. The Manual applies to CSL and all officers, directors, and employees of the Company. CSL also requires its partners, agents, and other representatives to abide by its ethical standards.

#### Our commitment

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

#### Progress in 2017

- Ethics training provided to all shore-based employees
- Assumed Chair of the Maritime Anti-Corruption Network
- Continued the validation of CSL suppliers in accordance with the CSL Anti-Corruption Program
- Investigated reports filed through anonymous whistleblowing, took appropriate action and reported to the Audit and Risk Committee of the Board of Directors

#### Moving Forward

- Take industry leadership role in combatting corruption in all of its forms worldwide
- Provide education and training on ethical conduct and legal compliance onboard vessels as part of onboarding of new employees



## Positive Workplace

CSL's goal is to be the employer of choice in the maritime industry. We want to recruit, retain, and engage the best possible employees – people who seek not only a job, but a stimulating career in our inspirational working environment.

To meet that goal, we make substantial investments every year in training and developing our employees. At the same time, we promote a values-based workplace culture that puts people first. We recognize and reward good performance and we provide our employees with the training and professional development they require to not only achieve their own goals but also to excel in their chosen careers.

Just as 2016 was a year of transformation, 2017 was a year of transition. We put systems and programs in place to position the company as an industry leader and a forward-thinking employer. This past year we strengthened our HR strategy to make sure we are a competitive employer, providing the best possible conditions for our employees to learn, grow, and succeed in a safe, healthy, service-oriented and environmentally sustainable workplace.

## Ongoing Seafarer Training



A career at sea involves many risks, which is why it is critical that seafarers receive the right training to ensure both their personal safety and the smooth and effective operation of their vessel. CSL crews receive training year-round that covers many facets of working on board. Training opportunities include:

- Cadet orientation and training;
- Total Team Training (T3);
- Maritime occupational health and safety training;
- Human element and leadership management;
- Confined spaces search and rescue training;
- Working at heights training;
- Lock out tag out training;
- Risk management and incident investigation;
- Ship security officer training;
- Seatac emergency training and response;
- Seafarers Training Institute courses;
- Chief cook training;
- Specialized skills training on new systems and technologies;
- Electronic chart display and information system training;
- Pilotage and ship-handling simulator training;
- Advanced first aid;
- Transas training for deck officers;
- Ship-handling in the UK;
- Tractor training;
- MAN engine training; and
- Skills upgrade training for unlicensed crew.

## Performing for Success

### Improving and Enhancing the Employee Experience

In 2017, one of our main focuses was on recruiting the best possible candidates, and ensuring that their experience during the hiring process attracts them to CSL. To raise our profile among the talented pool of employees we want to attract, we increased our presence at career fairs and on social media, promoting CSL as a leader in the maritime industry.

We also implemented a new talent acquisition system, which accelerated and modernized our recruitment process. In addition, we completed the deployment of our new HRIS system, which provides a centralized platform that facilitates the performance management process for worldwide shore-based employees. In 2018, we will integrate a final module related to individual development plans into our HR system.

### Recognizing the contribution of our employees

#### Improving Employee Benefits

In 2017, CSL reached an agreement with a new benefit provider for Canadian employees. Our new benefit plan includes an improved health spending account for all employees. In 2018, we will review our benefit offer worldwide to ensure we are competitive with market best practices. We understand that good benefits are key to attracting and retaining talented employees.

In addition to adopting a new benefit plan, we also offered workshops to educate employees about their pensions and benefits as well as the career level structure at CSL.

## Expanding the Expertise of CSLers

### Self-Service Learning

As part of our strategy to offer our employees opportunities to learn and grow, we've developed a new Learning Management System (LMS) and self-service training centre for employees. Our online training library contains more than 30,000 courses on leadership, communication skills, time management, and other business skills. Our LMS will also be integrated into our HR Information System, meaning employees will be able to access all HR-related information and activities at a single point of entry.

## Creating an Engaged Workplace

### Measuring Engagement Through Office Vibe

In 2017, we launched a new engagement survey tool, called Office Vibe, as a pilot project. Our objective was to solicit honest feedback and suggestions in real time, so we could focus on finding opportunities for improvement and work on solutions. We measure how many employees are engaged every week, and provide feedback quickly. As a result, we've increased communication and responsiveness throughout our organization and in 2018, we will launch Office Vibe globally.

As part of our ongoing strategies to encourage employee engagement, we are also promoting wellness, by offering "lunch and learn" opportunities where we provide health tips and offer nutritious snacks.

### Opening Doors for Interns

Each year, CSL's regional offices welcome promising students as part of our corporate internship program. During the summer or for a few months during the year, students gain valuable professional experience and hands-on knowledge in a variety of departments – knowledge and experience that will serve them throughout their careers. Interns work in various departments and learn about the inner workings of a marine transportation company. More than ten of CSL's interns have become permanent employees in the past few years.

## Supporting Change

Our Human Resources team plays a critical role in adopting and implementing new technology and systems. Our HR department leads change management, which is why we put HR staff at the heart of the change management execution plan we developed to support all new projects.

We also support our employees as we undertake company-wide change, such as the restructuring that occurred in 2017. As part of that transformation, we held global leadership meetings, team impact meetings and crew conferences in each CSL region, at which our executive team clarified issues and responded to questions concerning our new strategic plan.

In 2018, we will designate a dedicated change management specialist to support major projects throughout the organization.



CSL launched its "Healthy at Work" program to promote wholesome habits and contribute to a healthier work environment for all. As a reminder, every first Monday of the month CSL helps employees take action on their health by providing helpful tips and nutritious snacks. A healthy environment is not only good for our well-being, it's good for productivity and morale.





### From Intern to Employee

Laura Espinosa, Technical Coordinator

Laura Espinosa came to CSL in 2016 as an intern through Concordia University's Co-op program before being hired full-time in 2017. She is currently posted in China, where she works on CSL's ship conversion projects. Learning about CSL's operations from a hands-on perspective and putting her own career goals into action are two things Laura enjoys most about working at CSL.



### Canadian Scholarships

As part of our cadet program, every year, CSL offers 16 one-time scholarships of \$2,500 to first-year students at the following Canadian academic institutions:

- British Columbia Institute of Technology;
- Georgian College;
- Institut maritime du Québec;
- Memorial University.

Our Commitment	Progress in 2017	Moving Forward
<ul style="list-style-type: none"> <li>• Attract, select, develop and retain people with the right skills and “fit”</li> <li>• Foster employee satisfaction to enhance productivity and customer experience</li> <li>• Enhance development and growth opportunities for employees and empower them to take ownership of their career progression</li> <li>• Improve employee communications and engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Created a worldwide onboarding program to enhance new employee experience</li> <li>• Conducted a succession and development planning process worldwide</li> <li>• Conducted change management training</li> <li>• Conducted Lunch and Learn seminars to educate employees on compensation topics such as pensions, benefits, career path</li> <li>• Introduced engagement survey tool Office Vibe as a pilot project</li> </ul>	<ul style="list-style-type: none"> <li>• Finalize the deployment of the onboarding program</li> <li>• Implement a talent management strategy</li> <li>• Create a learning culture by launching the Learning Management System platform and self-service training centre</li> <li>• Integrate change management best practices in the CSL project management culture</li> <li>• Expand training and development programs for all employees</li> <li>• Strengthen people management competencies</li> <li>• Launch Office Vibe worldwide</li> <li>• Encourage a wellness environment</li> </ul>



## Employee and Community Engagement

CSL is committed to being a good corporate citizen. That means making a positive difference in the world, and being accountable for the social and environmental impacts of everything we do.

Our goal is to build trust in the communities and the regions in which we operate around the world. We strive to foster respectful relationships with our stakeholders in those communities. Our employees are proud of the community engagement work we do and the projects we undertake, and we couldn't do it without their support.

## CSLers Take On Eco-Challenge

Over 75 CSL employees worldwide took part in CSL's Earth Day Eco-Challenge, committing to reducing their personal environmental footprint for one week. Participants undertook challenges including eliminating paper and planting trees – but the most popular activity was committing to eliminating single-use plastic items!



*"I chose zero waste because it has the biggest impact on the environment and I like tough challenges."*

- Louis Pierre Trottier,  
Logistics Optimization Analyst

## Corporate Giving

Our corporate giving and community engagement takes place in three main areas: education, the environment, and social affairs, including arts and culture, community outreach, and health and human services. Every year, CSL donates approximately one percent of its net profit (before extraordinary items) to charitable causes and disaster relief. Our employees also volunteer with local charities and not-for-profit organizations that we support.

## Supporting our Young Seafarers

Every year, CSL encourages and supports the next generation of seafarers. We award bursaries and scholarships to select students at maritime academies and colleges around the world, including the Institut Maritime du Québec, the British Columbia Institute of Technology, Georgian College, the Marine Institute of Memorial University, the Massachusetts Maritime Academy, the Maine Maritime Academy, the Australian Maritime College and the Marine Society and Sea Cadets in the United Kingdom.

CSL also provides cadetships to qualified students enrolled at marine schools in Canada, Australia, the Philippines and the United Kingdom. We also welcome student interns in a variety of shore-based departments, from Technical Operations to Accounting.



## Collaboration with Urban Artists Earns CSL an International Award

CSL received a prestigious International Corporate Art Award for its engagement with urban artists in the creation of *The Sea Keeper*, an original fresco painted on the Trillium Class bulk carrier *CSL St-Laurent* to celebrate Canada's 150<sup>th</sup> and Montreal's 375<sup>th</sup> anniversaries. Selected among 80 companies representing 18 countries, the project was recognized "for the original involvement of street artists in a moment of national celebration, and for the perfect integration between the technical skills of a corporate team and the artistic creativity of the artists."

*The Sea Keeper* was conceived by Montreal artist Bryan Beyung and created with FONKi, Ankh One, and Benny Wilding of the A'shop art collective. Thanks to a close collaboration among the artists and CSL's technical team, the monumental mural was completed in the Port of Montreal within three weeks in early 2017.

## Protecting our Environment

Environmental stewardship is a prominent feature of CSL's philanthropic activities, reflecting our commitment to support research, education and conservation efforts to protect marine wildlife and habitats.

Among the initiatives and organizations CSL supports are: WWF, Georgian Bay Forever, the Salem Sound Coastwatch, the United Kingdom-based Marine Conservation Society, the Group for Research and Education on Marine Mammals, research by the University of Queensland and Australian Maritime College, and WWF Norway.

## Committed to Communities

Through charitable giving and employee volunteerism, CSL supports a range of grassroots causes, including food banks, shelters, hospitals, cultural organizations and the arts as well as disaster relief.

Among the many charitable organizations CSL supported in 2017: the Mission to Seafarers, the Red Cross, the CHU Ste-Justine Foundation, Montreal's Old Brewery Mission, Beverly Bootstraps, the Open Door, the Breakfast Club of Canada, The Starlight Foundation, the Community Giving Tree, Berkshire Community Foundation, Kirkens Bymisjon and the Mama Children's Centre of Norway. CSL's charitable contributions included financial support, fundraising and volunteerism.

## PROMOTING ENGAGEMENT

At CSL, our Donations Committee establishes our annual philanthropic donations budget and evaluates requests, based upon specific criteria. We set aside a portion of the donations budget every year to match employee gifts to educational institutions (up to CAN\$250) and sponsorships or other fundraising efforts (up to CAN\$250). The program is an excellent way of encouraging our employees' charitable giving.



### Supporting Free Health Care Via Mercy Ships

A casino fundraiser that CSL hosted during the Marine Club festivities helped to raise awareness and \$8,500 for Mercy Ships, a floating hospital that provides free health care via ship to some of the poorest communities in the world. CSL matched the donation for a total contribution of \$17,000.



### Coastal Cleanup 2017

CSL employees in Canada and the United States once again participated in the Ocean Conservancy's annual International Coastal Cleanup Day. Throughout the world, 500,000 volunteers collected more than 18 million pounds of trash, made up of nearly 14 million items.



### 1,852 Clicks for Kids

Since 2014, CSL has celebrated the holiday season by giving back. For every click on our 2017 holiday e-card, we donated to a local children's charity that CSL employees selected in each operating region. The card accumulated 1,852 clicks, resulting in a total donation of \$10,000. We distributed that money to the following not-for-profit organizations: Community Giving Tree (CSL Americas), The Starlight Foundation (CSL Australia/Asia), The Breakfast Club of Canada (Canada Steamship Lines), and the Children's Hospital of Bergen (CSL Europe).



## Research to Protect North Atlantic Right Whales

CSL is supporting WWF-Canada on a research project to collect and advance real-time data on the location and movements of North Atlantic Right Whales in the Gulf of St. Lawrence and Roseway basin. The project is conducted in partnership with Dalhousie University and the Canadian Whale Institute.

The critical status of the endangered North Atlantic Right Whale is a major concern. This new partnership will support research into new technologies and regulations to mitigate the risk of shipping collisions with the whales. We are supporting the advancement and adoption of acoustic gliders in the Gulf of St. Lawrence. Gliders can detect and transmit whale signals and locations in near real time, which ships can then use to reroute and adapt. The University of Dalhousie is developing and operating the technology, and CSL is proud to work with the researchers there to use this cutting-edge solution to help protect whales.

### 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 2017

- In 2017, CSL donated one percent of net profit (before extraordinary items)
- CSL's support of local artists through *The Sea Keeper* project earned the company an International Corporate Art Award
- CSL donated and raised \$17,000 for Mercy Ships

### 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



## Value for Customers

Our customers' challenges are our challenges. Nothing motivates us more than solving those problems together. Our goal is to understand the needs of the companies we work with and respond to their unique requirements.

CSL's Commercial Pillar optimizes the strategic value of our services to our customers. As their needs and expectations evolve, locally and globally, our services grow to meet them. Our customers consider us a strategic partner and we pride ourselves in providing tailor-made marine transport solutions that improve performance and add value to their operations.

CSL has been in the business of transporting and handling cargo for more than 100 years. Our culture of innovation, our solid corporate values and ethics, our relentless focus on customer service, and our ability to adapt to changing market circumstances, regulatory environments, and new technologies constitute the critical characteristics responsible for our longevity.

## CSL Australia Invests in Sustainable Solutions



CSL Australia, in partnership with Cement Australia and Adelaide Brighton Cement, has invested in three new 26,000 DWT pneumatic cement vessels. These vessels will be equipped with the latest environmentally friendly technology, which will enhance the vessels' efficiency, decrease their fuel consumption, and reduce potential breakdowns. These larger cement vessels will also reduce port calls and port congestion. Together, these improvements will help us deliver a more sustainable future. We will stagger delivery of the vessels through 2018 and 2019.

### Reducing Dust Pollution

CSL Australia has invested in a CSL-owned hopper on the wharf in Geraldton for the Iluka sand trade. The new hopper will meet the port's environmental policy by reducing airborne dust significantly on the discharge of mineral sands.



### Innovative Transhipment Solutions

When Gypsum Resources Australia (GRA) faced a gypsum supply problem because of the unexpected shutdown of the port of Thevenard in 2017, CSL came to the rescue with an innovative solution. We were able to tranship gypsum in the port of Melbourne, self-discharging it directly into the Boral gypsum facility. Our solution eliminated the need to truck a full load (up to 10,000 truckloads of gypsum) of the product from Yarraville.

## Real-Time Performance Monitoring



CSL continues to test and collect valuable data from the Operational Optimizer ("O<sup>2</sup>"), a real-time vessel monitoring system that continuously checks the status of vessel systems and identifies trends so we can analyze them on board. Featuring technologies such as geo-localization, real-time monitoring and alarms, O<sup>2</sup> provides CSL personnel with the key data and reports necessary to ensure our environmental, operational and energy efficiency systems work at their best. Not only does this improve the overall operational efficiency of every vessel, it also simplifies reporting, helps to manage vessel and voyage costs, and enhances communication.

### Key Benefits of O<sup>2</sup>

- Facilitates immediate decision-making and action.
- Monitors environmental compliance including oily water, spillage and speed.
- Improves equipment reliability.
- Reduces downtime.
- Improves maintenance and inventory management and planning.
- Reduces vessel and voyage costs (including fuel consumption).
- Enhances communication among vessel and office staff.
- Simplifies manual reporting for fuel consumption, running hours, logs, voyage report, and unloading reports.
- Allows benchmarking vessels against KPIs.

## Optimizing Inventory Management for Customers

In collaboration with our customers, we are developing an inventory optimization system to meet inventory and safety stock requirements, while minimizing unnecessary trip legs by grouping and parcelling loads. Our plan is to use this tool as part of a vendor-managed inventory (VMI) system, based on the minimum and maximum inventory limit of the customer as well as its supply and demand. The tool would automatically generate a schedule.

We are developing this inventory management system for daily use in a dynamic environment. It will identify potential bottlenecks and propose alternative shipping routes to solve problems, and reduce last-minute, unnecessary shipments. CSL expects to deliver this prototype by the end of 2018.

## CSL Named 2017 Ship Operator of the Year by Lloyd's List Americas

CSL Group received the prestigious 2017 Ship Operator of the Year award presented by the Lloyd's List Americas. The award recognizes excellence in business development, safety, efficiency and reliability, and is open to ship operators in North, South and Central America.



### 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 2017

- Advanced O<sup>2</sup> data collection and optimization
- Maintained ongoing dialogue with customers regionally and globally to understand needs and expectations
- Led and participated in advocacy initiatives to ensure a thriving marine transportation industry is positioned to respond to evolving customer needs
- Invested globally in a newer and increasingly sustainable fleet for the construction materials industries

### Moving Forward

- Improve performance and tailor products and services to respond to customer specifications
- Develop key performance indicators jointly with customers to meet their requirements
- Form partnerships with customers and other stakeholders to promote a sound policy and regulatory framework for marine transportation

UNITED NATIONS  
SUSTAINABLE  
DEVELOPMENT  
GOALS





CSL  
MUMSEY

MO: 9008994

NASH

# ANNEXES

## 2017 HEALTH AND SAFETY PERFORMANCE

	2015	2016	2017	CHANGE	COMMENTS
Hours Worked	<b>7,047,965</b>	<b>7,194,486</b>	<b>6,928,734</b>	3.7%	The hours of exposure are the total number of hours worked by all employees. They do not include hours worked by contractors.  Adjustments of worked hours can occur over time to reflect the variation of crew complement as accurately as possible.
Lost Time Injuries	<b>17</b>	<b>10</b>	<b>14</b>	40%	Includes CSL employees only
Total Recordable Cases	<b>45</b>	<b>38</b>	<b>59</b>	55.3%	Includes CSL employees only
Lost Time Injury Frequency Rate	<b>2.5</b>	<b>1.4</b>	<b>2.0</b>	42.9%	Per million man hours
Total Recordable Cases Frequency	<b>6.4</b>	<b>5.3</b>	<b>8.6</b>	62.3%	Per million man hours
Fatalities	<b>0</b>	<b>0</b>	<b>0</b>	-	

## 2017 ENVIRONMENTAL PERFORMANCE

Every year, CSL measures its environmental performance based on goals and targets established through our environmental management system. In 2017, targets were set under the long-term 2030 Environmental Vision with regional fleets determining their own contributions and projects to achieve the targets. 2017 was a year of transition for CSL with new management, new systems and new ships in the global fleet. Some of our targets were not achieved and we look to 2018 with a renewed focus and commitment to ensuring projects and programs are implemented to help achieve our footprint reduction targets.

### 2017 ENVIRONMENTAL TARGETS AND RESULTS

REDUCE AIR POLLUTION		
REGION	2017 TARGETS	ACHIEVEMENT
CANADA	Achieve an annual average reduction of 2% GHG emissions in g/tonne-mile compared to 2008	Achieved. Annual average reduction of 2.46%
	Convert eight vessels to non-ozone depleting substances	Achieved. 80% of fleet now ODS free
	Achieve a 60% incinerator-free fleet	Not achieved. Only 50% converted
AMERICAS	Achieve an annual average reduction of 1.5% GHG emissions in g/tonne-mile compared to 2000	Achieved. Annual average reduction of 7.7%
EUROPE	Reduce GHG emissions by 0.5% in g/tonne-mile by 2017 compared to 2016	Not achieved. Increased by 13%
AUSTRALIA	Reduce GHG emissions by 1% in g/tonne-mile by 2017 compared to 2016	Not achieved. Increased by 7%

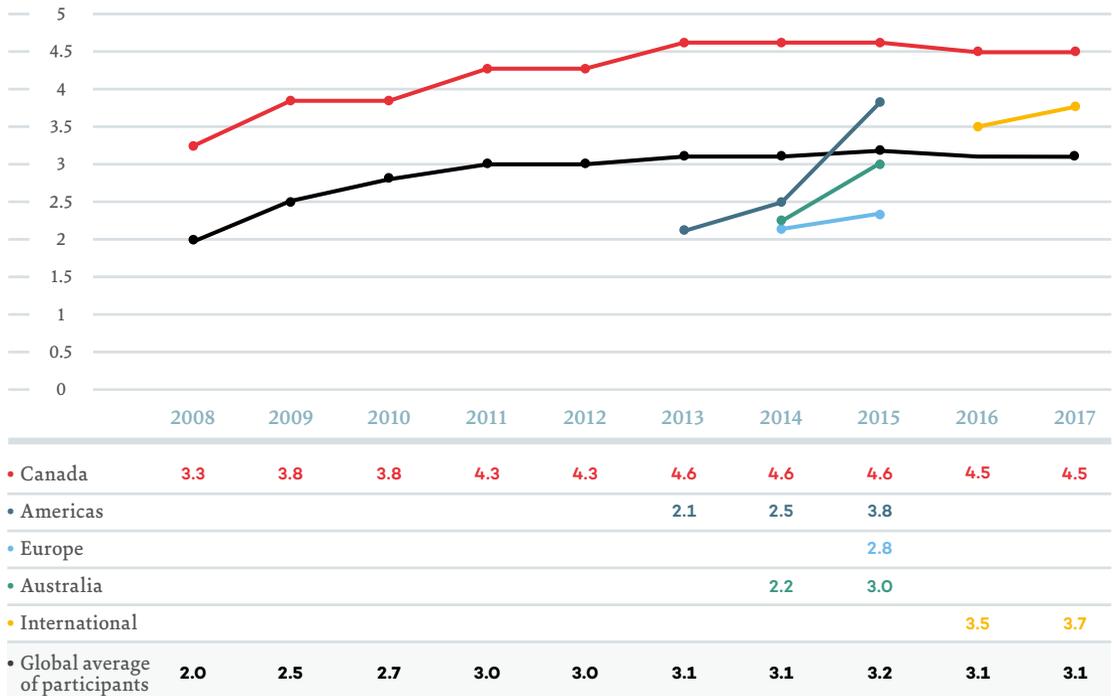
REDUCE WATER POLLUTION		
REGION	2017 TARGETS	ACHIEVEMENT
REGIONS	Zero oil spill incidents in 2017	Not achieved. 5 oil to water incidents, total of 14 litres
CANADA	Reduce bilge generation by 10% compared to 2016	Not achieved. 7% increase in bilge produced
AMERICAS	Achieve 100% shore discharge of treated sewage for Trillium Class vessels	Achieved
EUROPE	Achieve 100% biocidal and phosphate free chemical use in 2017	Achieved
AUSTRALIA	Achieve 100% biocidal and phosphate free chemical use in 2017	Achieved

## GREEN MARINE PERFORMANCE

In 2016, CSL consolidated the Green Marine performance of CSL Americas, CSL Europe and CSL Australia under one participant, CSL International. This decision was made to better conform with Green Marine's evaluation protocol which is split into two streams: 1) domestic participants operating in the Great Lakes and St-Lawrence Seaway and 2) all other international participants.

CSL International managed to improve one level in the Garbage Management criteria boosting its result for 2017 to 3.7. Canada Steamship Lines maintained level 4 and 5 across all indices, maintaining a score of 4.5 out of a possible 5.

Green Marine Performance



## 2017 ENVIRONMENTAL FOOTPRINT

2017 FOOTPRINT					
GHG	CANADA	AMERICAS	EUROPE	AUSTRALIA	TRANSHIPMENT
Total fuel by type (tonne)					
Heavy fuel oil (tonne)	66,080	29,853	1,588	40,964	0
Diesel (tonne)	8,122	0	7	1,913	4,950
Marine gas oil (tonne)	0	28,378	8,828	28.6	0
CO <sub>2</sub> eq net g/tonne-nm (excluding ballast) <sup>1</sup>	10.83	7.42	16	17.8	N/A
CO <sub>2</sub> eq gross (k tonne) including ballast <sup>2</sup>	235	186	33	137	15.84

OTHER AIR EMISSIONS	CANADA	AMERICAS	EUROPE	AUSTRALIA	TRANSHIPMENT
NO <sub>x</sub> (tonne)	7,505	5,069.50	914.34	3,548.36	61.1
NO <sub>x</sub> (kg/tonne-fuel)	108	78.00	75	85	12
PM (tonne) <sup>3</sup>	286	214	22	228	N/A
Sulphur (tonne)	700	657	1,043	55	0
Fuel Sulphur Average (%)	0.86	1.01	2.43	0.46	<.001
Hydrofluorocarbon released (kg)	450	382.95	11	53.4	1.5

WASTE	CANADA	AMERICAS	EUROPE	AUSTRALIA	TRANSHIPMENT
Garbage (m <sup>3</sup> )	756.5	1,038.1	309.3	440.2	391.9
Garbage (m <sup>3</sup> /ave crew /ops day)	0.018	0.015	0.012	0.015	0.019
Recycling (m <sup>3</sup> )	573	0	121	69	0
% Recycling of total waste	25%	-	18%	14%	-
Bilge produced (m <sup>3</sup> )	6,814	2,838	72	1,101.6	160.77
Sludge produced (m <sup>3</sup> )	1,754	375	286	423.9	108.89
% Sludge per fuel quantity (m <sup>3</sup> /tonne-fuel)	2.9%	0.6%	2.4%	1.2%	2.2%

POLLUTION	CANADA	AMERICAS	EUROPE	AUSTRALIA	TRANSHIPMENT
Total number of oil spills	3	0	1	0	1
Total oil spills (litres)	11.25	0	1	0	1

OFFICE DATA	CANADA	AMERICAS	EUROPE	AUSTRALIA	TRANSHIPMENT
Paper consumed (kg)	432	79.38	N/A	862.5	

1 Net CO<sub>2</sub>eq does not include voyages in ballast

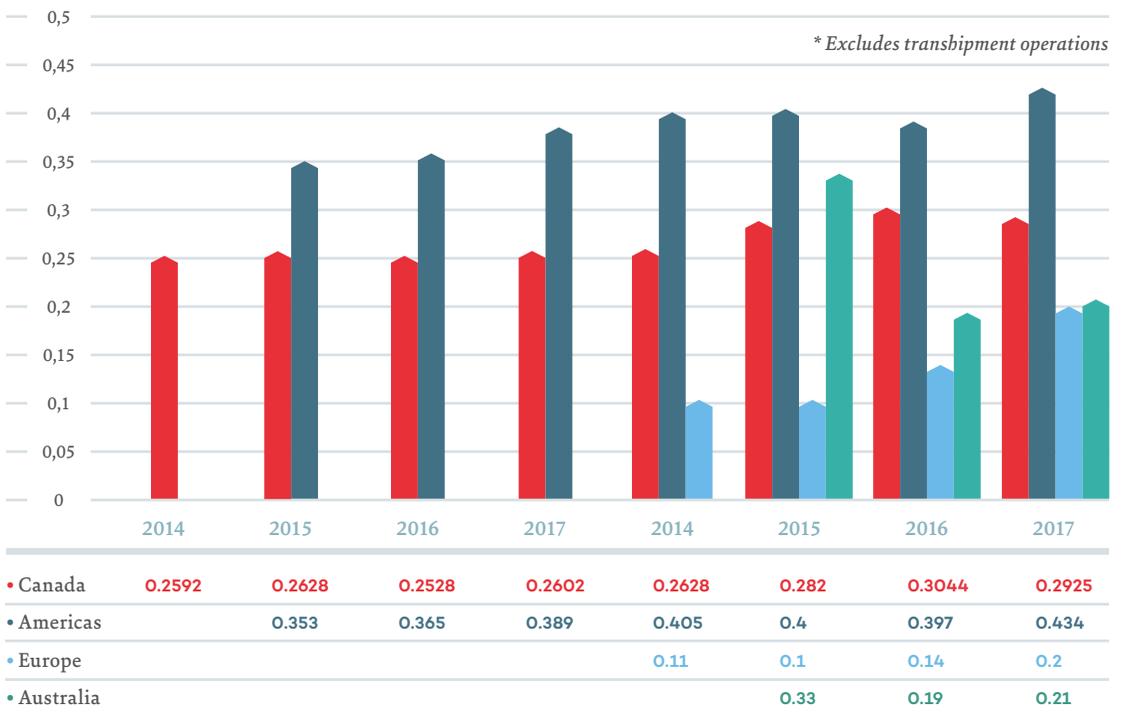
2 Gross CO<sub>2</sub>eq includes fuel consumed in the ballast and loaded voyages

3 Particulate matter less than or equal to 10 microns in diameter

## CSL FLEET FUEL EFFICIENCY

The fuel intensity described in the graph below represents how many million cargo tonnes are transported per mile for every one tonne of fuel consumed. As an efficiency metric, it should increase, which is the case for most regions at CSL. In fact, CSL Europe has improved 83 percent in net fuel efficiency since 2014 thanks to higher cargo loads. Canada Steamship Lines has improved 13 percent since 2010 and CSL Americas 23 percent, both due in large part to fleet renewals. CSL Australia, with an aging fleet and adverse weather conditions in 2017, unfortunately did not improve the fleet's net fuel efficiency. The different years for each region represent the year data capture allowed ballast and loaded voyages to be separated.

**Net Fuel Efficiency**  
(million tonne cargo\*mile per tonne fuel)

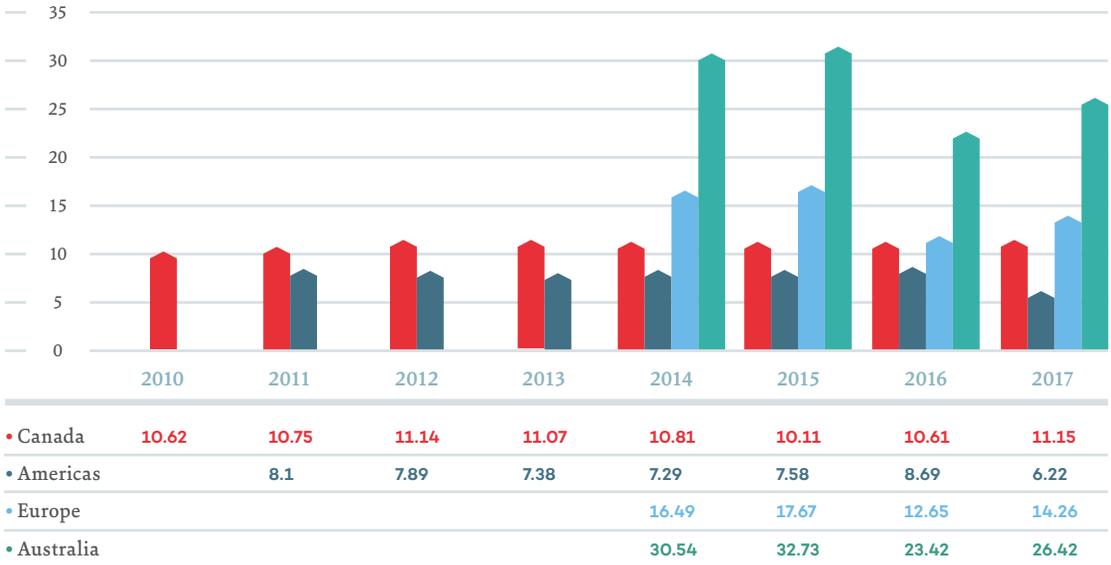


As a transportation company, it is important for CSL to use metrics that are comparable to other transportation modes. The generally accepted efficiency metric is tonnes of CO<sub>2</sub> per transport work. This means only loaded voyages contribute to the efficiency footprint. It is equally important for CSL to track the gross energy efficiency of fleets, which includes all the fuel consumed from loading to unloading and any ballasting legs between cargoes. Although ballasting distances are often a case of logistics between different customers, locations and trades, there is always an opportunity to examine efficiency in the scheduling of vessels.

## CSL FLEET AIR EMISSIONS

Canada Steamship Lines, with more steady trade routes, has the lowest fluctuation year on year for gross gCO<sub>2</sub>eq per tonne-nautical mile. CSL Americas has also remained consistent over the last seven years with the best year in 2017. CSL Europe and CSL Australia have fluctuated the most, with new customers, trade routes and varying cargo loads, but both managed to reduce gross gCO<sub>2</sub>eq/tonne-nm by roughly 13.5 percent since 2014.

Gross gCO<sub>2</sub>eq tonne-km



## 2018 FOOTPRINT REDUCTION GOALS BY DIVISION

CSL's 2018 footprint reduction goals are developed in line with the long-term 2030 Environmental Vision. Each region plans projects to achieve its contribution to the overarching footprint reduction goals, ensuring CSL stays on course to achieve its targets. Only the meaningful reduction goals are presented in the Sustainability Report.

AIR	
CSL GROUP 2030 VISION	35% REDUCTION IN GCO <sub>2</sub> EQ/TONNE-MILE BY 2030** 95% REDUCTION IN PERCENTAGE OF SULPHUR IN TOTAL FUEL CONSUMED BY 2030*
<b>REGION</b>	<b>2018 TARGET</b>
CANADA	Achieve an annual average reduction of 2% GHG emissions in g/tonne-mile as compared to 2008
	Achieve 7.5% cumulative average sulphur content by mass in 2018 (all fuel since 2012)
	Achieve an ODS Free fleet by 2019
AMERICAS	Achieve an annual average reduction of 1.5% GHG emissions in g/tonne-mile compared to 2000
	Convert one vessel ODS free in 2018
EUROPE	Achieve a 1% reduction in gCO <sub>2</sub> eq/tonne-mile in 2018 compared to 2017
AUSTRALIA	Achieve a 1% reduction in gCO <sub>2</sub> eq/tonne-mile in 2018 compared to 2017
	Achieve average sulphur content by mass of total fuel consumed less than 2.5%
	Convert one vessel ODS free in 2018

WATER	
CSL GROUP 2030 VISION	ZERO OIL SPILLS PURSUE BALLAST WATER AND BIOFOULING MITIGATION TECHNOLOGIES AND SOLUTIONS
<b>REGION</b>	<b>2018 TARGET</b>
CANADA	Participate in research and development for Great Lakes appropriate ballast water treatment technologies
	Train vessel crew on whale observations and recordings
AMERICAS	Install one ballast water treatment system onboard the fleet in 2018
	Train crew on the NOAA Right Whale guidance
EUROPE	Complete propeller polishing on an annual basis or as required
AUSTRALIA	Install two ballast water treatment systems onboard the fleet in 2018
	Participate in clean and capture hull technology trial to reduce biofouling onboard one vessel in 2018

**WATER**

<b>CSL GROUP 2030 VISION</b>	<b>75% REDUCTION IN SHIPBOARD WASTE M<sup>3</sup>/AVE CREW/OPERATIONAL DAY BY 2030*</b> <b>50% SHIPBOARD RECYCLING AS A PERCENTAGE OF TOTAL WASTE BY 2030*</b>
<b>REGION</b>	<b>2018 TARGET</b>
<b>CANADA</b>	Reduce ship incinerated waste by 5% compared to 2017 (in proportion to all waste)
	Increase recycling by 5% compared to 2017 (in proportion to all waste)
<b>AMERICAS</b>	Implement shoreside recycling at least one port of call in 2018
<b>AUSTRALIA</b>	Reduce 5% of shipboard waste m <sup>3</sup> /average crew/operational day in 2018 compared to 2017
	Increase recycling as percentage of total waste by 10% in 2018

\*Compared to 2010 baseline

\*\*Compared to 2005 baseline

## GLOBAL REPORTING INITIATIVE INDEX

This is the third year CSL has used the Global Reporting Initiative (GRI) disclosures. The guidelines cover the management approach to sustainability reporting under the Universal Standard section, then three more specific sections under Economic, Environmental and Social. In the 2017 report, CSL provides disclosures made under the Universal, Environmental and Social sections. As part of our process of continual improvement and commitment to transparency, CSL will endeavour to increase the number and variety of disclosures in future reports.

DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION OR EXPLANATION
<b>100: UNIVERSAL STANDARDS</b>		
<b>ORGANIZATIONAL PROFILE</b>		
102-1	Name of the organization	CSL Group Corporate Sustainability Report <a href="https://www.cslships.com/en/our-values/corporate-sustainability-report">https://www.cslships.com/en/our-values/corporate-sustainability-report</a>
102-2	Activities, brands, products, and services	Page 6 – CSL at a Glance
102-3	Location of headquarters	Page 6 – CSL at a Glance
102-4	Location of operations	Page 6 – CSL at a Glance
102-5	Ownership and legal form	Page 6 – CSL at a Glance
102-6	Markets served	Page 6 – CSL at a Glance
102-7	Scale of the organization	Page 6 – CSL at a Glance
102-10	Significant changes to the organization and its supply chain	Page 43 – Value for Customers
102-12	External initiatives	Page 18 – Green Marine and Sustainable Development Goals
<b>STRATEGY</b>		
102-14	Statement from senior decision-maker	Page 5 – Message from the CEO
<b>ETHICS &amp; INTEGRITY</b>		
102-16	Values, principles, standards and norms of behaviour	Page 17 – SafePartners Page 32 – CSL's Code of Corporate Responsibility
102-17	Mechanisms for advice and concerns about ethics	Page 34 – EthicsPoint Hotline & Anti-Corruption Manual
<b>GOVERNANCE</b>		
102-18	Governance Structure	Page 8 – Corporate Governance
102-22	Composition of the highest governance body and its committees	Page 8 – CSL Board of Directors
102-23	Chair of the highest governance body	Page 9 – Paul W. J. Martin, Chair of the CSL Group Board of Directors
102-26	Role of highest governance body in setting purpose, values, and strategy	Page 8 – Corporate Governance

DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION OR EXPLANATION
<b>REPORTING PRACTICE</b>		
102-50	Reporting period	CSL Group Corporate Sustainability Report 2017 – calendar year
102-51	Date of most recent report	Annual – previous year 2016
102-52	Reporting cycle	Annual
102-53	Contact point for questions regarding this report	All queries must be submitted via the CSL website <a href="http://www.cslships.com">www.cslships.com</a>
102-54	Claims of reporting in accordance with the Standards	CSL does not report in accordance with the standard. This annex shows where alignment to disclosures occurs within the report.
102-55	Content index	Page 55 – Global Reporting Initiative Index
<b>300: ENVIRONMENTAL STANDARDS</b>		
<b>ENERGY</b>		
302-1	Energy consumption within the organization	Page 50 – Environmental Footprint
302-3	Energy Intensity	Page 50 – Environmental Footprint
302-4	Reduction of energy consumption	Page 51 – CSL Fleet Fuel Efficiency
302-5	Reductions in energy requirements of products and services	Page 51 – CSL Fleet Fuel Efficiency
<b>BIODIVERSITY</b>		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Page 25 – Protection of the Endangered North Atlantic Right Whale  In addition, CSL vessels also operate in Marine Protected Areas including the Great Barrier Reef Marine Park, Roseway Basin and Grand Manan Basin.
304-2	Significant impacts of activities, products, and services on biodiversity	Page 26 – Historic Oil Spills Page 50 – Environmental Footprint
<b>EMISSIONS</b>		
305-1	Direct (Scope 1) GHG emissions	Page 50 – Environmental Footprint
305-4	GHG emissions intensity	Page 50 – Environmental Footprint Page 51 – CSL Fleet Fuel Efficiency
305-5	Reduction in GHG emissions	Page 52 – CSL Fleet Fuel Efficiency
305-6	Emissions of ozone-depleting substances (ODS)	Page 50 – Environmental Footprint
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Page 50 – Environmental Footprint
<b>EFFLUENTS &amp; WASTE</b>		
306-2	Waste by type and disposal method	Page 50 – Environmental Footprint
306-3	Significant spills	Page 50 – Environmental Footprint

DISCLOSURE NUMBER	DISCLOSURE TITLE	LOCATION OR EXPLANATION
<b>ENVIRONMENTAL COMPLIANCE</b>		
307-1	Non-compliance with environmental laws and regulations	No environmental fines or sanctions were issued during the reporting period.
<b>400: SOCIAL STANDARDS</b>		
<b>OCCUPATIONAL HEALTH AND SAFETY</b>		
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Page 47 – 2017 Health and Safety Performance
403-3	Workers with high incidence or high risk of diseases related to their occupation	Page 10 – Health and Safety First – relates to all seafaring employees



## **THE CSL GROUP**

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 Handysize bulk carriers, and delivers cargo to industrial customers annually. CSL's history can be traced back to 1845.

