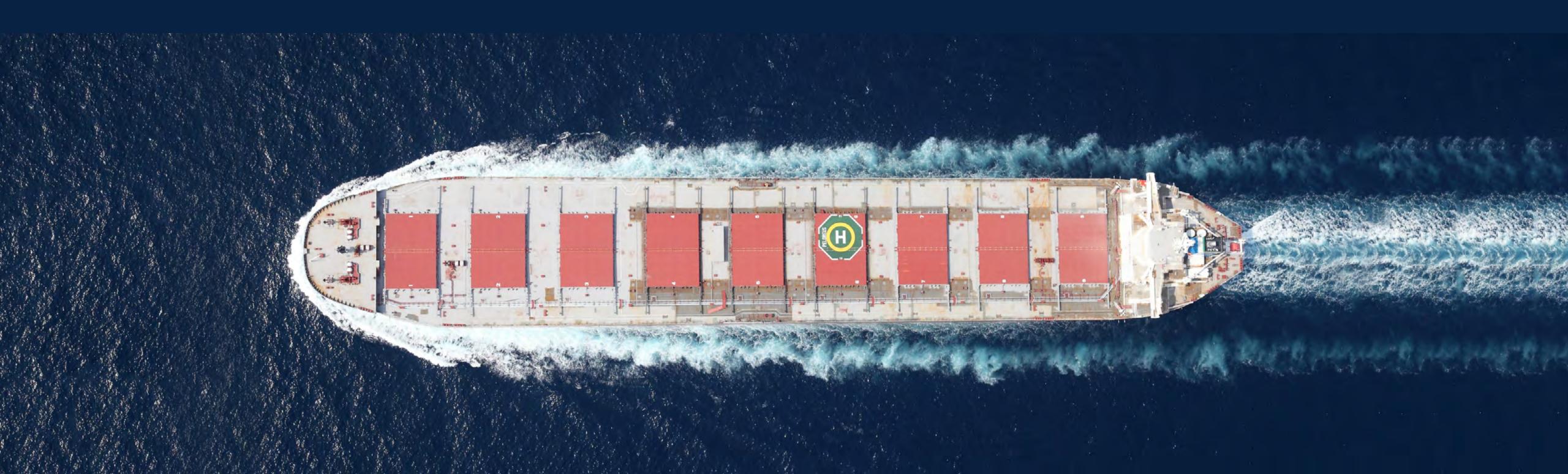


## 2019 Sustainability Report





### Message from our CEO

Star Bulk has had another year of strong growth in 2019 even though the global economy recorded its weakest pace since the global financial crisis. The significant rise in our revenues partly reflects the increase in the average number of vessels in our fleet. This growth also occurred in a year with substantial disruptions due to the preparations for timely and efficient compliance with IMO 2020. Already competitive operating costs have been further streamlined while maintaining high levels of service quality. Our financial sustainability is solid as we continue having one of the strongest cash positions among dry bulk peers.

We remain firmly committed to make Star Bulk a leader in sustainable dry bulk shipping. In addition to our strong economic performance this requires continuous efforts to ensure good governance, a broadening and deepening of our social impact and the protection of the natural environment upon which present and future generations depend. In formulating our targets and measuring our efforts we draw inspiration and guidance from the United Nations' Sustainable Development Goals (SDGs). This Report provides a transparent account of our Sustainability performance, targets and strategy, and applies rigorous global standards for comparability and comprehensiveness.

Our efforts on the environmental front are already paying off. We have had a significant reduction in our Sulphur and Nitrous oxide emissions in 2019. Additionally, our carbon dioxide emissions have also declined significantly partly as a result of our improved fuel efficiency. Climate change is the biggest challenge confronting humanity and the

shipping industry has a critical role to play in the transition to a low carbon economy. We fully appreciate our responsibility and we intend to lead in the effort. We have developed a decarbonization strategy and we have formed new partnerships with global organizations to seek practical solutions.

We have strengthened our social performance and governance frameworks and policies. Safety for our employees is always our top priority and it has measurably improved, as have the opportunities we offer for training and advancement to ensure meaningful and high-quality experiences. We also continue to have strong links with the broader community and provide support for numerous important humanitarian, educational and other social welfare activities. We have engaged with financial institutions for the promotion of the Poseidon Principles which provide a framework for linking lending decisions to climate considerations.

The COVID-19 outbreak has shattered our world and has had a major impact on the shipping industry. Though it's too early to comprehend the fuller implications for our industry and our own activity we have ensured the well-being of our people while continuing our operations undisturbed. Our achievements to date and our resilience in the face of present and future threats are the result of our amazing team of committed and professional seafarers and shore employees. These challenging times have vindicated our principled approach in the arena of global trade and have strengthened our resolve to stay the course.



Petros Pappas, Star Bulk CEO

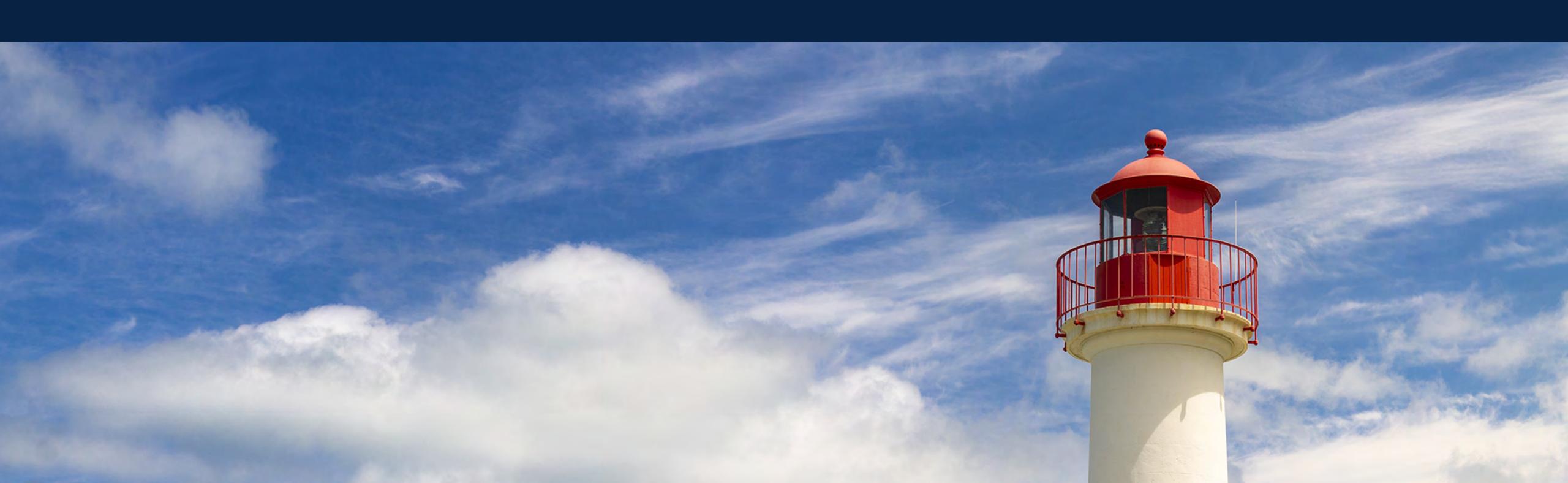
"Acting with informed awareness of the impacts we have on society and nature defines us."



### Contents

1	About this report	4	6	Environment	29
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## About this report





## **About this report**

This is our second Sustainability Report and refers to the period 01.01.2019 – 31.12.2019. It conveys our approach to sustainability as captured by Environmental, Social and Governance ("ESG") issues, our performance compared to previous years and industry benchmarks, and the targets we have set for our future sustainability performance.

The Report has been prepared in accordance with the **GRI Standards Core option**. Reporting based on the GRI
Standards ensures that the content and issues discussed are relevant, consistent and comparable.

In addition to the GRI Standards, we also considered the following standards and guidelines in compiling the report content:

## Sustainability Accounting Standards Board (SASB) for Marine transportation

The report discloses information for the SASB's maritime industry specific metrics, as these are depicted through the relevant standards.

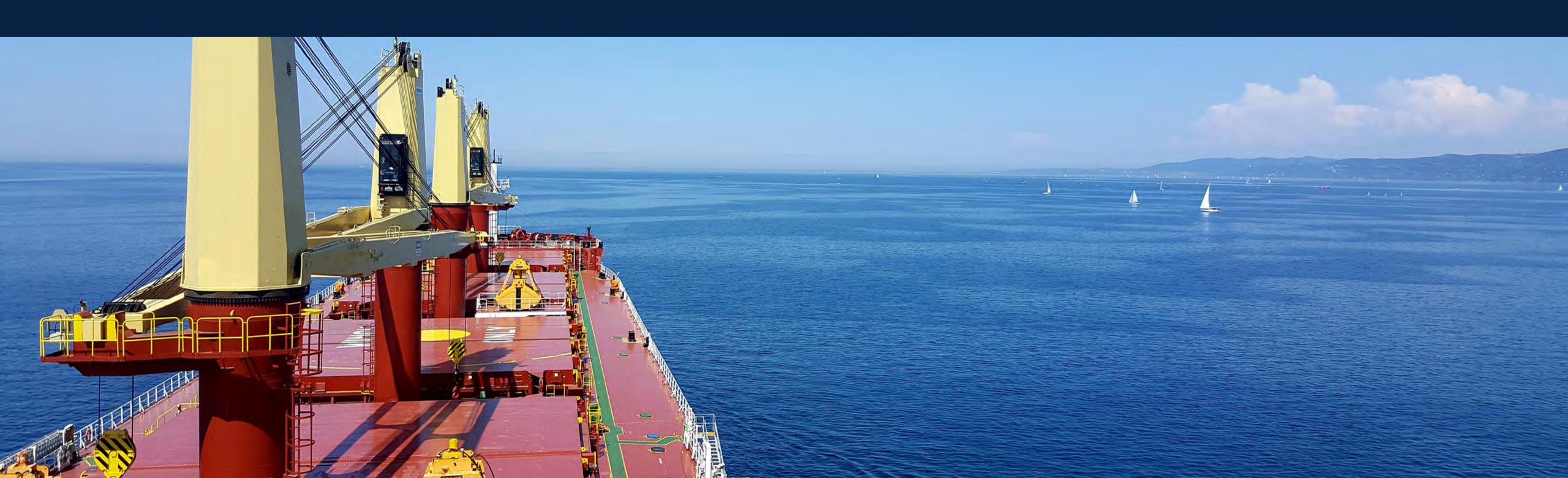
#### **NASDAQ ESG Reporting guidelines**

We disclose metrics, indicated through the new global ESG reporting guide issued by Nasdaq in May 2019.

This is Star Bulk Carriers Corp.'s second Sustainability Report, disclosing performance for the year 2019. This Report has been prepared in accordance with the **GRI Standards "Core option"** and with the guidance of **PwC Greece**.

# 2

## About Star Bulk Carriers Corp.





### Star Bulk at a glance

We are a global shipping company providing worldwide seaborne transportation solutions in the dry bulk sector. Our vessels transport major bulks, which include iron ore, minerals and grain and minor bulks which include bauxite, fertilizers and steel products.

We were incorporated in the Marshall Islands on December 13, 2006 and maintain offices\* in Athens, Limassol, New York, Oslo, Singapore and Hamburg. Our common shares trade on the Nasdaq Global Select Market under the symbol "SBLK"\*\*.

As of 31 December 2019 our existing fleet of 116 vessels had an aggregate capacity of approximately 12.9 million dwt.

### Our Largest Shareholder: Oaktree Capital Management, L.P.

Oaktree, together with its affiliates ("Oaktree"), is a leader among global investment managers specializing in alternative investments, with approximately \$122 billion in assets under management as of June 30, 2020. Headquartered in Los Angeles, the firm has over 950 employees and offices in 18 cities worldwide. Both Oaktree and Star Bulk recognize that environmental, social and governance ("ESG") issues are essential to responsible investment and aim to enhance the relevant disclosure and performance.

\*During 2019 Star Bulk maintained an office also in Geneva, through its subsidiary Star Logistics, whose operations were ceased on 31/12/2019

\*\*Publicly listed in Oslo Børs stock exchange until 31/07/2020



\$821

mil. total revenue in 2019



**SBLK** 

Publicly listed in NASDAQ stock exchange



**6** offices

Around the world



116

Vessels as of Dec 2019



> **70** mil.

Metric tonnes of cargo carried in 2019



#1

Largest US listed dry bulk carriers company



> 4,300

Seagoing personnel



320

Office employees



14

Years of presence in the shipping market



# We own & manage a modern & diversified fleet

As of December 31, 2019 our company owned a fleet consisting of 116 vessels with carrying capacity between 52,425 dwt and 209,537 dwt.

We have sustainably grown our fleet through timely and selective acquisitions of secondhand and newbuilding vessels.

Our fleet comprises modern, fuel-efficient and high-quality vessels, with an emphasis on the largest Eco-type Newcastlemax and Capesize vessels. In total, we own 38 Newcastlemax / Capesize vessels.

	17 Newcastlemax
<u></u>	21 Capesize
<u> كسسك</u>	7 Post Panamax
<b>d</b>	35 Kamsarmax
,december 1	2 Panamax
ннн	17 Ultramax
	17 Supramax



116

High quality bulk carriers



> 12.9

Million Deadweight tonnage



> 8%

Increase in fleet size since 2018



**8.1** years

Average age of our fleet

#### Technical Management of our own fleet

During 2019 our in house team technically managed 63% of our fleet (73 vessels). More specifically, our in house managed fleet consists of 14 Newcastlemax, 14 Capesize, 4 Post Panamax, 20 Kamsarmax, 2 Panamax, 15 Ultramax, and 4 Supramax vessels.

As part of our technical management services, we are responsible for the day-to-day operations of our vessels, including technical maintenance, manning, operational performance, health, safety and environmental performance.

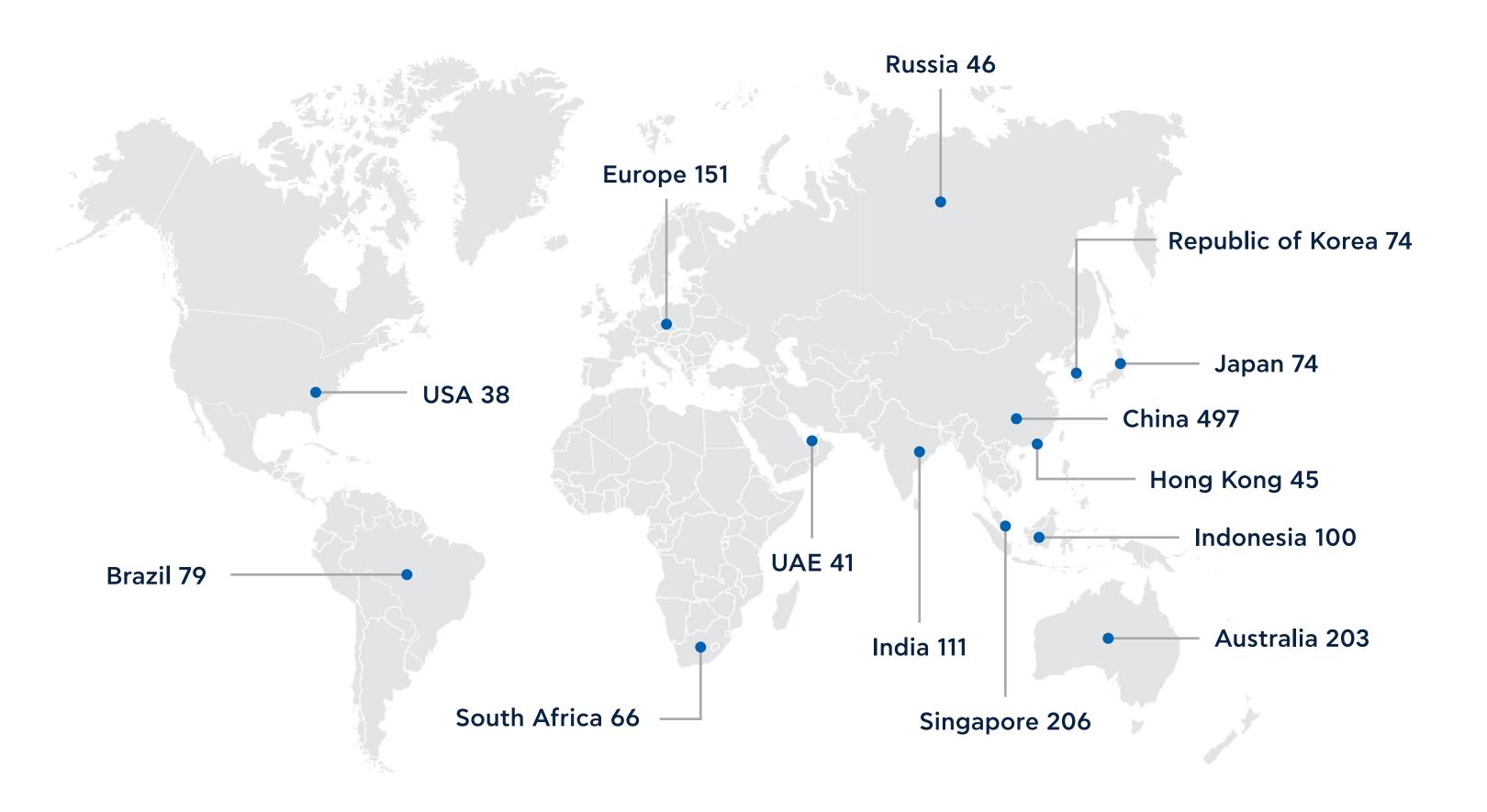
The remaining 43 vessels are technically managed by third party managers with long standing experience and track records.

8



# More than 70 million metric tonnes traded across the globe

Number of port calls in our most visited countries in 2019





40,915

Ownership days in 2019



**6.1** mil.

Nautical miles travelled in 2019



> 70 mil.

Metric tonnes of cargo carried in 2019



91

Countries visited in 2019



2,161

Port calls in 2019



## ESG Highlights: Our decarbonization strategy



"We aspire to being front runners in the industry's efforts to reduce GHG emissions and lead by example by applying new technologies and forming alliances that aim to decarbonize the industry"

The 5 pillars of our decarbonization strategy:



## Monitoring and transparent reporting

We established an emissions monitoring mechanism that ensures accuracy and reliability of relevant data and enables us to report our carbon footprint in a transparent way.



## Improving the efficiency of our fleet

We test and apply technologies and tools that help us improve the operational and technical efficiency of our vessels, including route and speed optimization, hull cleaning and anti-fouling paints.



# Participating in R&D for new technologies & alternative fuels

We participate in research and development projects for the development of new technologies and alternative fuels, either through own funds or through European and other funding.



# Developing partnerships and participating in alliances

We form partnerships with other leading companies and stakeholders to jointly address decarbonization in the industry.



# Improving our carbon footprint through carbon offsets and GHG reduction targets

We mitigate GHG emissions from our fleets and we seek investment opportunities to further combat climate change through carbon offsets.



## ESG Highlights: We apply measures that mitigate our Environmental impact

We apply measures that ensure compliance with all applicable environmental regulations, reduce our carbon footprint, improve our environmental performance and protect the marine environment.



We retrofitted our fleet with EGCSs\* in order to comply with IMO's sulphur caps (IMO 2020)

Of our fleet equipped with EGCSs as of 2019

We have scheduled the installation of BWTSs\*\* to our fleet by 2023

Of our fleet equipped with BWTSs as of 2019

We dedicate significant funds for the environmental compliance of our fleet

\*EGCSs: Exhaust Gas Cleaning Systems \*\*BWTSs: Ballast Water Treatment Systems



#### Improved environmental performance compared to previous years

We apply operational performance measures that increase the energy efficiency of our fleet

Of our fleet underwent dry docking in 2019

1 2.3% In average EEOI laden for our fleet\* in 2019

The decreased EEOI in combination with the decreased available days (due to planned maintenance and retrofits) resulted in reduced gas emissions

In total CO<sub>2</sub> emitted by our fleet\* in 2019

In NOx emissions of our fleet\* in 2019

6.2% In SOx emissions of our fleet\* in 2019



#### We actively engage in R&D and partner with stakeholders for the promotion of green shipping

We are active members in initiatives/alliances for the promotion of green shipping



Getting to Zero Coalition









We participate in R&D programs on the application of new green technologies and alternative fuels

R&D programs participation as of 2019

<sup>\*</sup>Excluding the vessels managed by our third party managers



# ESG Highlights: We focus on continuously improving our Social performance, including operational excellence, health and safety, wellbeing and community support

#### **Health and Safety**

We go beyond compliance to ensure a safe working environment for our crew:

- All injury related incidents were reduced during 2019.
- We increased our on board inspections, internal audits and superintendent attendances.
- We reduced the deficiency ratio in Port State Controls (PSC).

#### People

- We increased our seafarers pool and the number of office employees.
- We offered skills and career development opportunities by increasing the number of trainings and promotions to seafarers.
- We promote diversity and equal opportunities in the workplace and foster an inclusive work environment.
- We maintain a high retention rate, both on board our vessels and at the office.

#### **Supply chain**

- Our efforts aim to continuously increase our forwarding consolidation ratio.
- We placed more than 14,000 purchase orders and sent shipments to all 6 continents.

#### **Community investments**

• We contribute to social prosperity through socially responsible actions, including donations and sponsorships.



In LTIF\* for the crew of our fleet\*\* in 2019



In PSC deficiency ratio for our fleet\*\* in 2019



In crew training expenses

**16**%

In crew promotions

21% %

Women in management and senior management positions



In crew salaries, bonuses and social security in 2019

**29%** 

Of our shore operational employees has seagoing experience

8%

Increase in the number of seafarers pool

678

On board inspections by Technical and Marine, Safety and Quality personnel

92.7%

Crew retention rate

9

Community investment initiatives supported in 2019

<sup>\*</sup>LTIF: Lost time Injury frequency

<sup>\*\*</sup> Excluding the vessels managed by our third party managers



# ESG Highlights: We established strong Governance frameworks and policies

We apply corporate governance best practices, adhere to high ethical principles and ensure the high commercial performance of our fleet



We apply corporate governance best practices and make sure that we maintain a diverse and capable BoD

We maintain a Board of Directors with diverse backgrounds, including finance and shipping expertise and female representation

3

Female members serve on our Board of Directors

We established our new Social Responsibility policy



We recently introduced our Social Responsibility policy that applies to all employees and contractors

We engage with financial institutions for the promotion of the Poseidon Principles

5

Financial institutions were provided with environmental data as part of their commitment to the Poseidon Principles



We operate ethically and transparently and promote an open reporting culture

We monitor and control our potential exposure to corruption

8%

Of 2019 port calls in countries in the bottom 20 of CPI\*

We foster an open reporting culture and ensure compliance to our Code of Ethics



Whistleblowing incidents in 2019

We transparently and publicly report information on all aspects of our operations



Greece-based, dry bulk shipping company to publish a Sustainability Report in 2018

# As a member of the international shipping community, we have aligned our strategy to the SDGs and we are dedicated to aid in their achievement





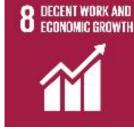












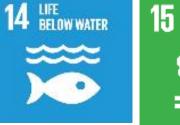




















<sup>\*</sup>Transparency International's Corruption Perception Index

# 3

## **Materiality Analysis**



#### **ENGAGING WITH OUR STAKEHOLDERS**

## **Materiality Analysis**

Our ultimate goal is to embed sustainability into our business strategy and processes. To achieve this, we need to understand the most relevant and important sustainability issues for our business and our stakeholders. The ways in which we engage with our key stakeholders, the key issues and our response is described in appendix A.

#### **Materiality analysis process**

The materiality analysis and the resulting materiality matrix was created by undertaking three processes:

#### 1. Issue identification

- Review issues raised by the leading sustainability standards and initiatives as well as industry SDGs, GRI, SASB, DJSI, etc.
- Explore business and industry landscape on sustainability Benchmarking of peers.
- Introduce our company-specific issues.
- This process led to the initial pool of potentially material sustainability issues which were grouped into focus areas.

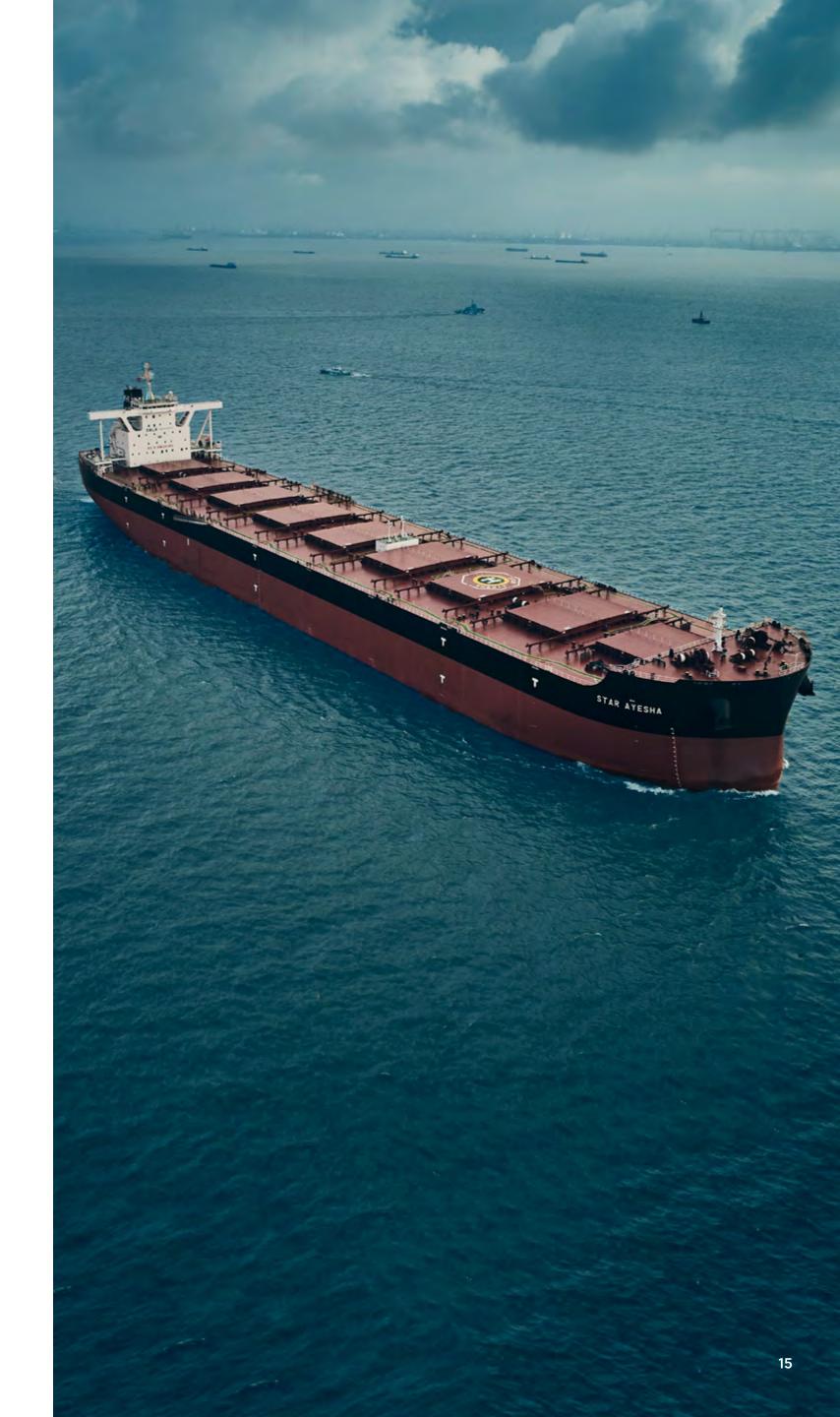
#### 2. Assessment and prioritization

• The issues were assessed and ranked from a business perspective considering their impact to the business, their associated risks and opportunities and the degree of influence over them.

• Utilizing our stakeholder communication channels and feedback, the issues were evaluated and ranked from the perspective of different stakeholders. We obtained input from key stakeholder groups on what they perceive to be the most important issues in relation to our performance. Their input was then evaluated and compared to our own prioritization.

#### 3. Validation and alignment

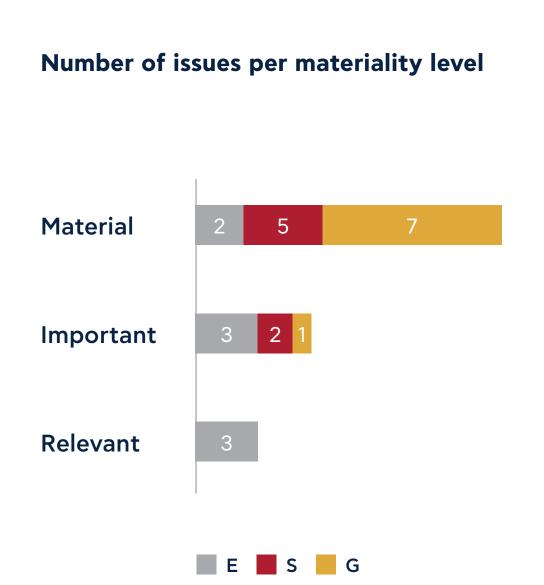
- Review of the assessment results and validation that they are aligned with objectives reflecting Star Bulk's sustainability viewpoint.
- Produce the "Materiality matrix", focus efforts and allocate resources accordingly.

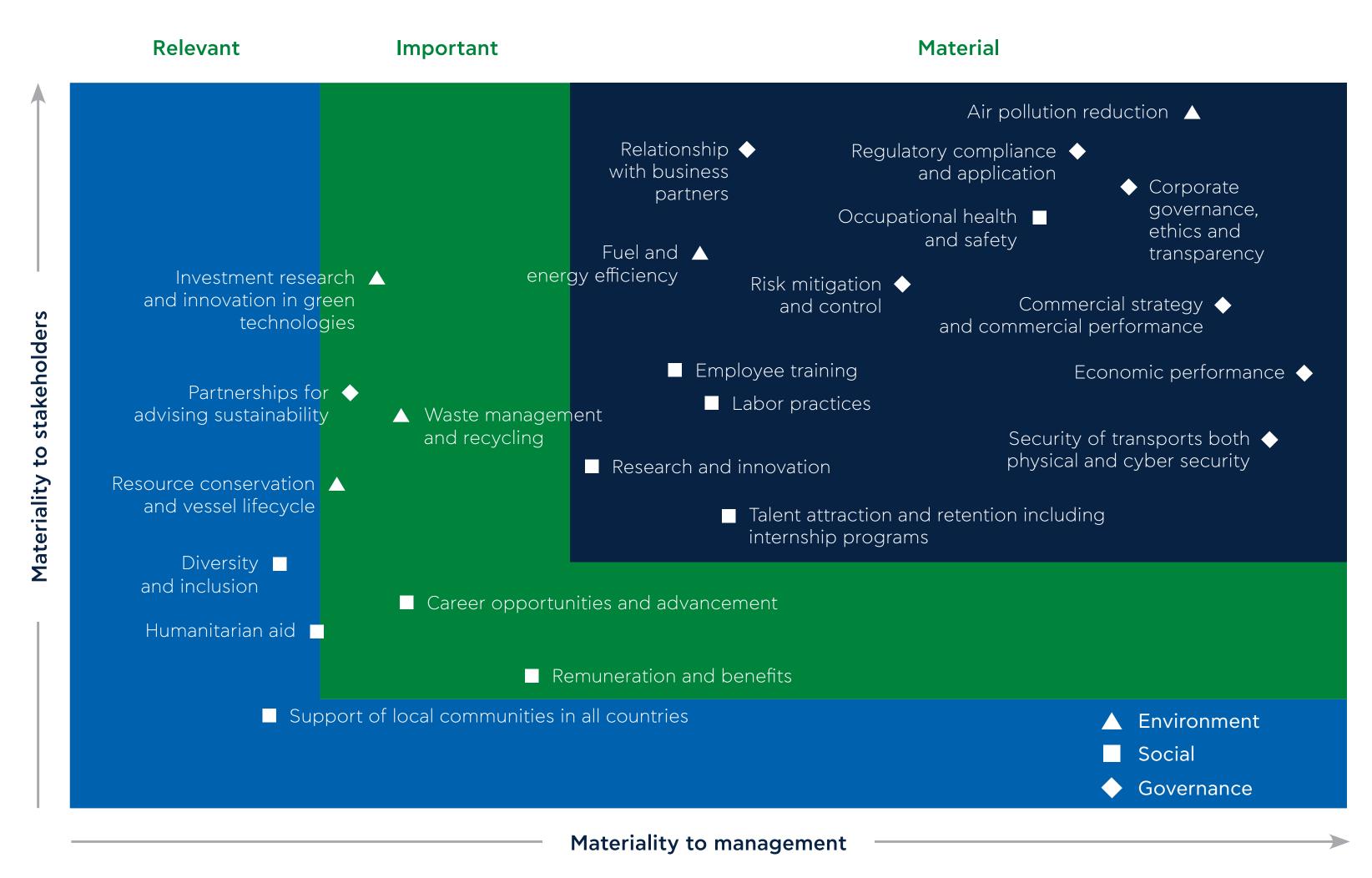




#### **ENGAGING WITH OUR STAKEHOLDERS**

## Our materiality matrix





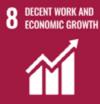
#### Material issues

- Ethics and transparency
- Risk mitigation and control
- Regulatory Compliance
- Partnerships for advancing Sustainability



#### Related SDGs









## **Corporate Governance**



# **Board of Directors**and Board Committees\*

#### **Our Board of Directors**

The foundations for structuring a strong corporate code are set by the BoD through the Senior Management. Based on the Company's dynamic organization chart and detailed job descriptions, specific roles are established for each employee. The Senior Management is involved in the daily operation of the company and committed to the implementation of the code and policies from all company staff.

The BoD is additionally supported by several committees which are assigned specific responsibilities.

#### **Nomination and Corporate Governance Committee**

Star Bulk's Nomination and Corporate Governance Committee is comprised of three independent directors. The Committee is mainly responsible for (i) recommending to the Board of Directors nominees for Director and Directors for appointment to Committees of the Board of Directors, (ii) advising the Board of Directors about corporate governance practices.

#### **Audit Committee**

Star Bulk's Audit Committee is comprised of two independent directors. The Audit Committee is mainly responsible for (i) reviewing the Company's controls over financial reporting, (ii) making recommendations to the Board of Directors with respect to the engagement of the Company's outside auditor, (iii) reviewing all related party transactions for potential conflicts of interest.

#### **Compensation Committee**

The Compensation Committee, is comprised of two independent directors. The Compensation Committee is mainly responsible for recommending to the Board of Directors, the Company's senior executive officers' compensation and benefits.



### **BoD Members and Executives**

Our Board of Directors and executive officers, as of the release date of this report, are the following:

<b>BoD</b> composition*	Role	Committees
Spyros Capralos	Chairman of the BoD, Director	Compensation Committee, Nomination and Corporate Governance Committee
Petros Pappas	CEO, Director	
Mahesh Balakrishnan	Director	Compensation Committee
Koert Erhardt	Director	Nomination and Corporate Governance Committee, Audit Committee
Nikolaos Karellis	Director	Audit Committee
Arne Blystad	Director	
Raffaele Zagari	Director	
Brian Laibow**	Director	Nomination and Corporate Governance Committee
Dawna Men**	Director	
Katherine Ralph***	Director	
Eleni Vrettou***	Director	
Executive officers	Capacity	
Petros Pappas	CEO	
Hamish Norton	President	
Nicos Rescos	Chief Operating Officer	
Christos Begleris	Co-Chief Financial Officer	
Simos Spyrou	Co-Chief Financial Officer	
Charis Plakantonaki	Chief Strategy Officer	

<sup>\*</sup>Ms. Emily Stephens served on the BoD until 23 Jan 2020 and Mr. Tom Søfteland until 11 May 2020. \*\*Mr. Brian Laidow and Ms. Dawna Men were appointed on the BoD on 23 Jan 2020.



<sup>\*\*\*</sup> Ms. Katherine Ralf and Ms. Eleni Vrettou were appointed on the BOD on 12 May 2020.



## We adhere to high ethical principles

#### **Our Code of Ethics**

We have adopted and communicated our Code of Ethics to all of our employees (shore based & on board personnel) including all of our subsidiaries, which governs our business activities and cover the following key areas:

- Conflicts of Interest
- Corporate Opportunities
- Related Party Transactions
- Confidentiality and Privacy
- Honest and Fair Dealing
- Protection and Proper Use of Company Assets
- Compliance with Laws, Rules and Regulations
- Securities Trading
- Disclosure
- Procedures Regarding Waivers
- Reporting

All of our employees (permanent and temporary) are obliged to follow our Code of Ethics. Any non compliance with the Code's principles is treated as a serious violation and may lead to termination of contracts or even legal sanctions.

#### **Reporting Violations of the Code**

Employees shall take all appropriate action to stop any known misconduct by fellow Employees or other

Company personnel that violate this Code. Employees shall report any known or suspected misconduct to the Chairman of the Audit Committee or the Company's General Counsel. The Company encourages and enables Employees and third parties, to raise, in their reasonable belief, issues regarding inter alia questionable accounting matters, audit practices, internal controls, conflicts of interest, fraud and insider trading within the Company. Company's employees and external parties shall forward complaints on a confidential and/or anonymous basis to the Company's Audit Committee through the Company's "P.O. Box 61323 15104 Maroussi" and through the whistleblower hotline on +306976862707. The Company will not retaliate or allow retaliation for reports made in good faith.

#### **Our Anti-Corruption Policy**

Compliant with the requirements of the U.S Foreign Corrupt Practices Act (FCPA), we have set forth guidelines through our Anti – Corruption Policy (complementary to the Code of Ethics) to ensure that all employees are prohibited from promising, paying or providing, or authorizing the promising, paying or providing of any amount of money or anything of value to a Public official or Private Sector Counterparty Representative for the purpose of improperly obtaining, directing or retaining business or securing an improper advantage for the Company.



0

Bribery and fraud incidents



0

Whistleblowing incidents



0

Violations of our Ethical principles & Anti Corruption Policy



# Our strong internal controls ensure robust risk management

We have an independent Internal Audit in house department which reviews the Company's processes and internal controls and provides appropriate recommendations.

Our Internal Audit department also assists the Management to achieve compliance with the Sarbanes - Oxley requirements (SOX) regarding the internal control environment for material business cycles related to the financial statements. Additionally, during 2019, our Internal Audit team conducted several internal audits in order to assess and monitor the performance of the respective activities.

The Internal Audit department reports directly to the Audit Committee regarding its findings and provides recommendations, monitoring their implementation.

The number of internal audits (including SOX related audits) performed by our Internal Audit team increased by 10% compared to 2018. Moreover, no material weaknesses or significant deficiencies were identified during our audits.





Of internal audits in 2019



0

Material weaknesses or significant deficiencies identified in 2019 internal audits or external financial audits

#### Risk management

Within the scope of our Risk Management procedures, we continuously monitor, assess and evaluate the risks that can affect our business operations and adopt all the necessary measures for the continuity of our business activities:

#### Our top risks

- Health and safety of our people on board and ashore due to the COVID-19 pandemic.
- General dry bulk shipping market conditions (Supply & Demand).
- Bunker prices and availability.
- Changes in governmental rules and regulations or actions taken by regulatory authorities.
- General domestic and international political conditions.
- 6 The availability of financing and refinancing.
- 7 Counterparty risk.
- 3 Weather related events.
- 9 Cyber crime.
- Disruption in exports of materials due to physical accidents.

#### Material issues

- Economic performance
- Commercial strategy
- Research and innovation
- Security of transportations
- Business partner relationships

5

#### Related SDGs







## **Operational Excellence**



## We sustain strong economic growth

- Voyage revenues for the year ended December 31, 2019 increased to \$821.4 million from \$651.6 million for the year ended December 31, 2018. Voyage revenues were positively impacted by an increase in the average number of vessels in our fleet.
- The available days, however, for the respective periods did not increase proportionally, due to the installation of Exhaust Gas Cleaning Systems (EGCSs) and increased dry docking activity during the year.
- The TCE rate for the year ended December 31, 2019 was \$13,027 compared to \$13,796 for the previous year.

In 2019, we increased our revenues from voyage charter by 76% compared to 2018. The key reasons for this increase are the following:

#### Trade of large size vessels through CCL pool

• Our majority of large size vessels (Capesize and Newcastlemax) are made available through the Capesize Chartering Ltd (CCL) pool. The pool was formed in January 2016 by Star Bulk, Bocimar, C Transport Maritime and Golden Ocean.

• In CCL all vessels are traded on the spot market.

The vessels earnings are distributed to each Member according to the Pool Points of the vessel and through a quarterly netting amongst the Pool Members.

#### Implementation of EGCSs

- In order to comply with IMO 2020, we decided to install EGCSs on 114 out of our 116 vessels, which we are financing, in part, with the proceeds of new indebtedness.
- Since the charter market remains at current levels, we operated our vessels in the spot market in order to benefit from any future increases in charter rates and the increased attractiveness of our EGCS equipped vessels as sulphur emissions standards went into effect on January 1, 2020.

**76%** 

Voyage charter revenue

**1 26%** 

In revenue in 2019

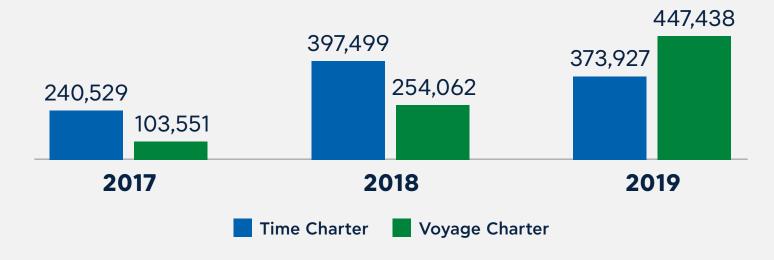
**1** 2%

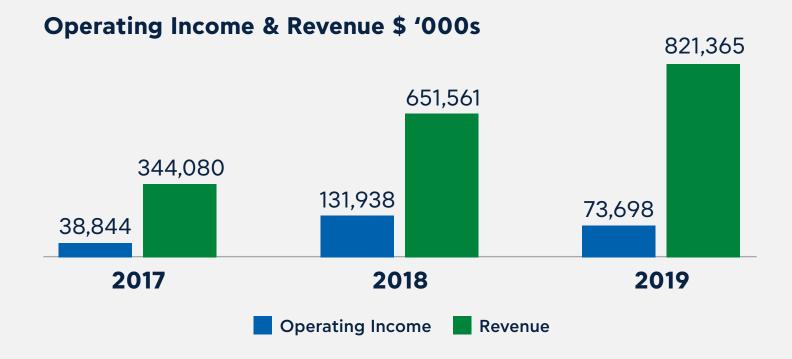
Shareholder's equity in 2019

\$ 13,027

TCE rate in 2019

#### Time Charter vs Voyage Charter Revenues \$ '000s





#### **Economic value generated and distributed:**

\$ '000s	2018	2019
Economic value generated	651,561	821,365
Revenue	651,561	821,365
Economic value distributed	406,817	471,578
OPEX	128,872	160,062
Employee wages	15,453	15,773
Payments to providers of capital	260,925	293,547
Payments to governments	1,567	2,196
Economic value retained	244,744	349,787

# We continue to be one of the most efficient ship operators in the industry

#### **Operating Expenses**

- We managed to reduce operating expenses, without compromising service quality. Our daily OPEX are consistently below industry average despite the increase of our average vessel size.
- During 2019 we managed to further reduce by 3% our average daily operating expenses.

We calculate the fleet utilization by dividing available days (including charter-in days) by ownership days plus any charter-in days for the relevant period. In 2019, we achieved a 91% utilization rate, which is reduced compared to previous years due to our EGCS installation program, which required increased off hire days to install relevant equipment.

**√** 3%

In daily OPEX in 2019

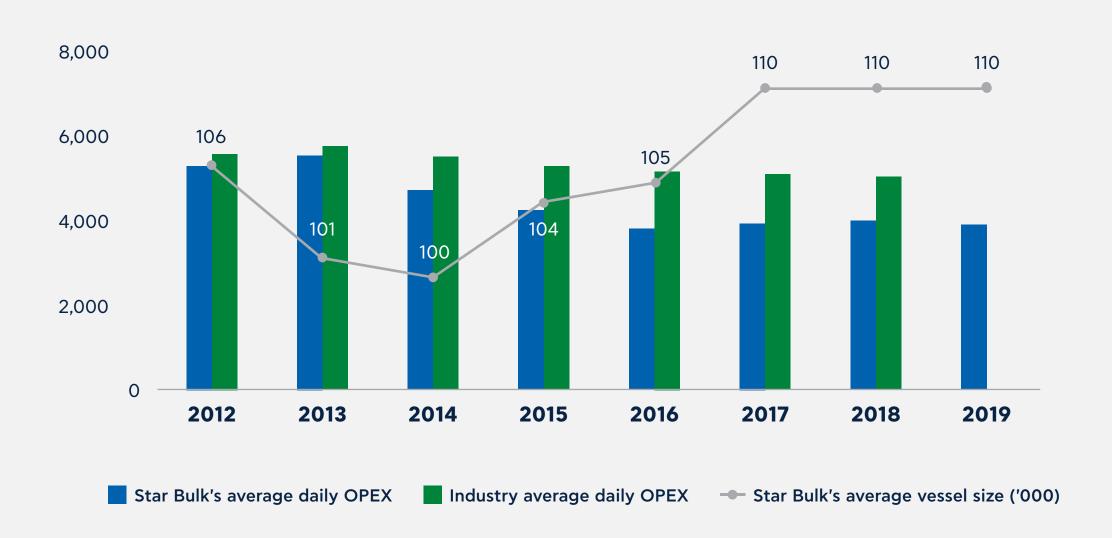
20%

Below average industry daily OPEX\*

91%

Fleet utilisation in 2019

#### Daily OPEX against industry average (\$)



#### **CAPEX** on green infrastructure

\$ '000s	2018	2019
Total CAPEX on green infrastructure	33,225	143,419
Scrubbers CAPEX	32,920	131,792
Ballast Water Treatment System CAPEX	305	11,627

#### Solvency

	2018	2019
Debt / total capitalization	48%	49%

# Health and Safety is our priority, which is evident through our improved records

#### On Board Inspections, Audits and Port State Controls

- Internal and external audits take place in order to ensure that we comply with all international and legal requirements related to the safety and integrity of our operations.
- We aim to physically inspect each vessel 4 times every year, twice by a Technical superintendent and twice by a Marine Safety and Quality superintendent.
- MSQ on board inspections and attendances increased by 15% compared to 2018.
- Port State Controls (PSC) deficiency ratio was reduced by 12% compared to 2018.

#### **Quality Certifications**

We continuously improve our operational capabilities hence we are accredited with the following ISO standards:

ISO 9001 ISO 14001 ISO 45001 ISO 50001









#### **Our Near Miss Reporting Policy**

All related incidents and near misses are documented and taken into consideration when reassessing our safety management system. In 2019, 924 near misses were reported within our fleet, an increase of 16% in relation to 2018.

**↓ 12%** 

In PSC deficiency ratio in 2019

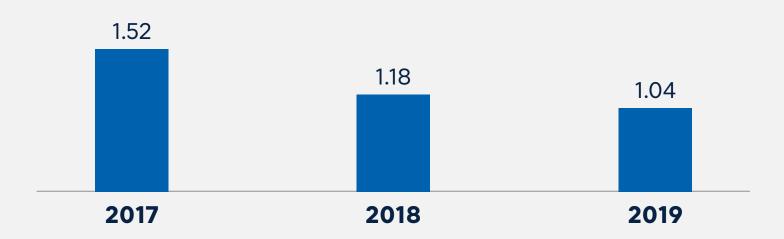
**16%** 

In reported near misses in 2019

**15%** 

In on board attendances in 2019

#### **Average Port State Control Deficiency Ratio**

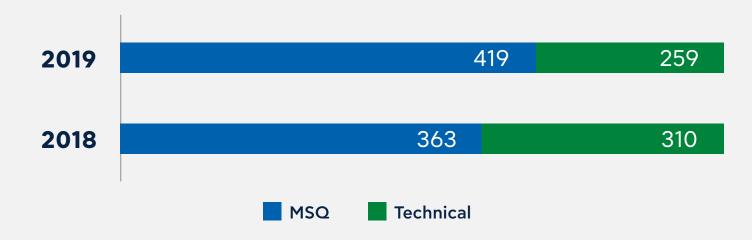


PSC deficiency ratio is calculated by diving the number of reported deficiencies by the number of Port State Control Inspections.

#### **Near Misses**



#### **On Board Inspections**



# Leveraging telemetry and advanced systems to monitor our vessels' performance

We have a dedicated in-house team responsible for monitoring and reporting on our vessels' performance. Our team has developed and deployed a sophisticated Vessel Performance Reporting (VPR) software, which is customized to our vessels' specifications and enables the collection of accurate vessel performance data. We have also deployed telemetry on the majority of our managed vessels through our in-house built automated equipment which collects vessel data in real time. Through our VPR software and our automated measurements, our Vessel Performance Monitoring (VPM) team is able to collect and analyze data from the vessels in order to support our technical, operational and commercial activities and optimize the performance of our fleet. The data which is captured daily, such as speed, consumption, position, engine temperature, etc., is used to generate automated reports for the Technical and Operations departments so as to flag performance-related issues and support them in their decision-making when it comes to maintaining the condition of the vessel and optimizing vessel planning and execution. This data is also visualized through business intelligence reports which illustrate dynamic real-time information and help keep track of vessels' Key Performance Indicators.





# We further optimized our procurement processes and strengthened our standards in our supply chain

During 2019, we established a new **suppliers evaluation process**, in order to monitor our business partners and ensure that they conduct their business in accordance with our quality, ethical, environmental and social standards.

Our new **Social Responsibility Policy** is shared and applied by our suppliers, ensuring that they conduct their business in a socially responsible manner.

We **centralized our procurement process** through an online e-procurement platform, that enables us to automate our procurement processes, access a broad and qualified suppliers base, achieve competitive prices and therefore reduce our OPEX levels.

We also place great emphasis in **consolidating our** shipment and forwarding activities in order to achieve efficiencies. In 2019, the total number of purchase orders was 14,429, the majority of which were from Asia. There were an average of 4 purchase orders per shipment irrespective of vessel.

Due to the EGCS installation program and the planned dry dockings in 2019, we arranged to forward the equipment to China in advance. 729 containers were delivered to the shipyards before the commencement of the projects. As a result, we avoided the airfreight delivery and associated carbon emissions, while also reducing transportation costs. The **CO<sub>2</sub> savings** resulting from transporting spare parts and equipment via sea is estimated to be **4,400 tonnes**.



14,429

Purchase orders within 2019

### Purchase orders per region:

Africa: 546 Asia: 8,906 Europe: 4,416

North America: 282

Oceania 78

South America: 201



146

Suppliers evaluated within 2019



100%

Of our suppliers past our quality evaluation benchmark



4,400

Tonnes of CO<sub>2</sub> saved by delivering spare parts & equipment via sea instead of air in 2019



~ 4

Purchase orders / shipment consolidation rate

# Health and Safety of our people was our top priority during the COVID-19 outbreak

The rapid spread of Coronavirus has had a major impact in the shipping industry. In order to address this critical threat we designed effective response strategies, that helped us continue our operations undisrupted throughout the world, while also ensuring the safety of our employees.

As part of our COVID-19 response we\*:

- Implemented a remote work program for our shore employees and introduced Covid-19 prevention policies within our offices as per the guidance of the World Health Organization.
- Postponed crew changes to the extent possible and introduced enhanced safety policies and measures to perform the necessary crew changes.
- Developed and implemented on board all our vessels Covid-19 prevention protocols and continuously alerted and educated our crews on board on our safety and health instructions.
- Suspended all business travelling of our employees.

- Provided timely supplies of safety equipment and disinfectants to all ships and offices.
- Supplied our vessels in a timely way with the required provisions, stores and spares in order to ensure continuity of their operations.
- Employed local surveyors to perform external vessel audits and rolled-out processes and systems to carry out internal audits remotely.





\*As of the release date of this report

#### Material issues

- Fuel and energy efficiency
- Marine environment protection
- Greenhouse gas emissions and air pollution reduction
- Investments in green technologies and alternative fuels
- Resource conservation and vessel lifecycle
- Environmental regulation compliance

6

## Environment

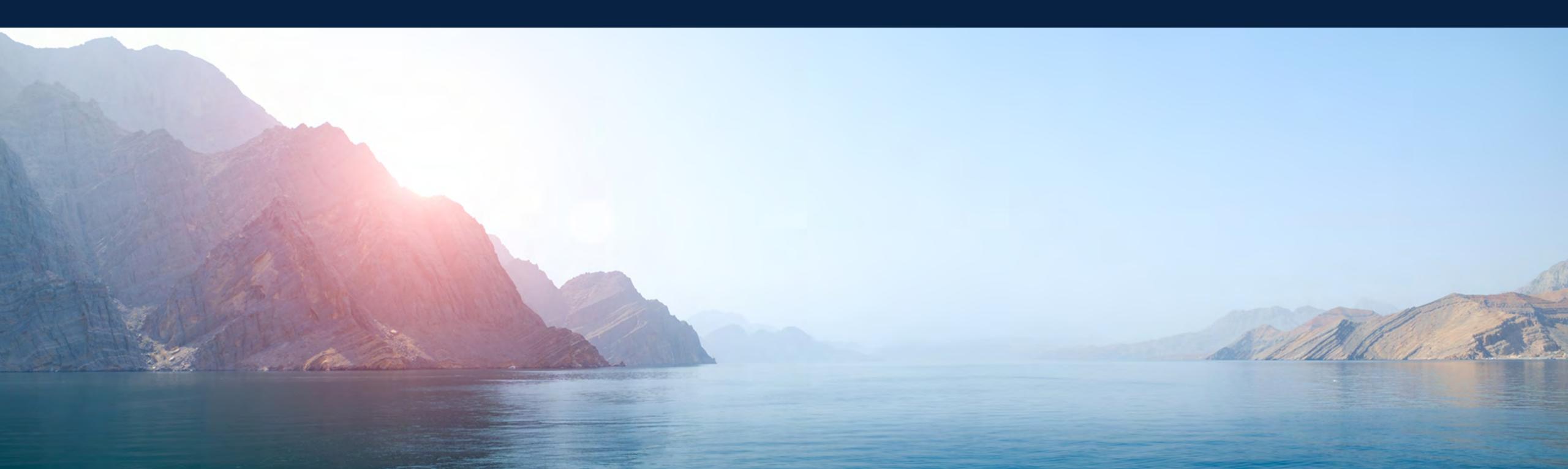
#### Related SDGs











# Our ISO-certified management systems guide our efforts to reduce environmental impacts and improve energy efficiency

#### **Environmental Management System**

We have established and implemented an Environmental Management System in accordance with ISO 14001, which is guided by the following principles:

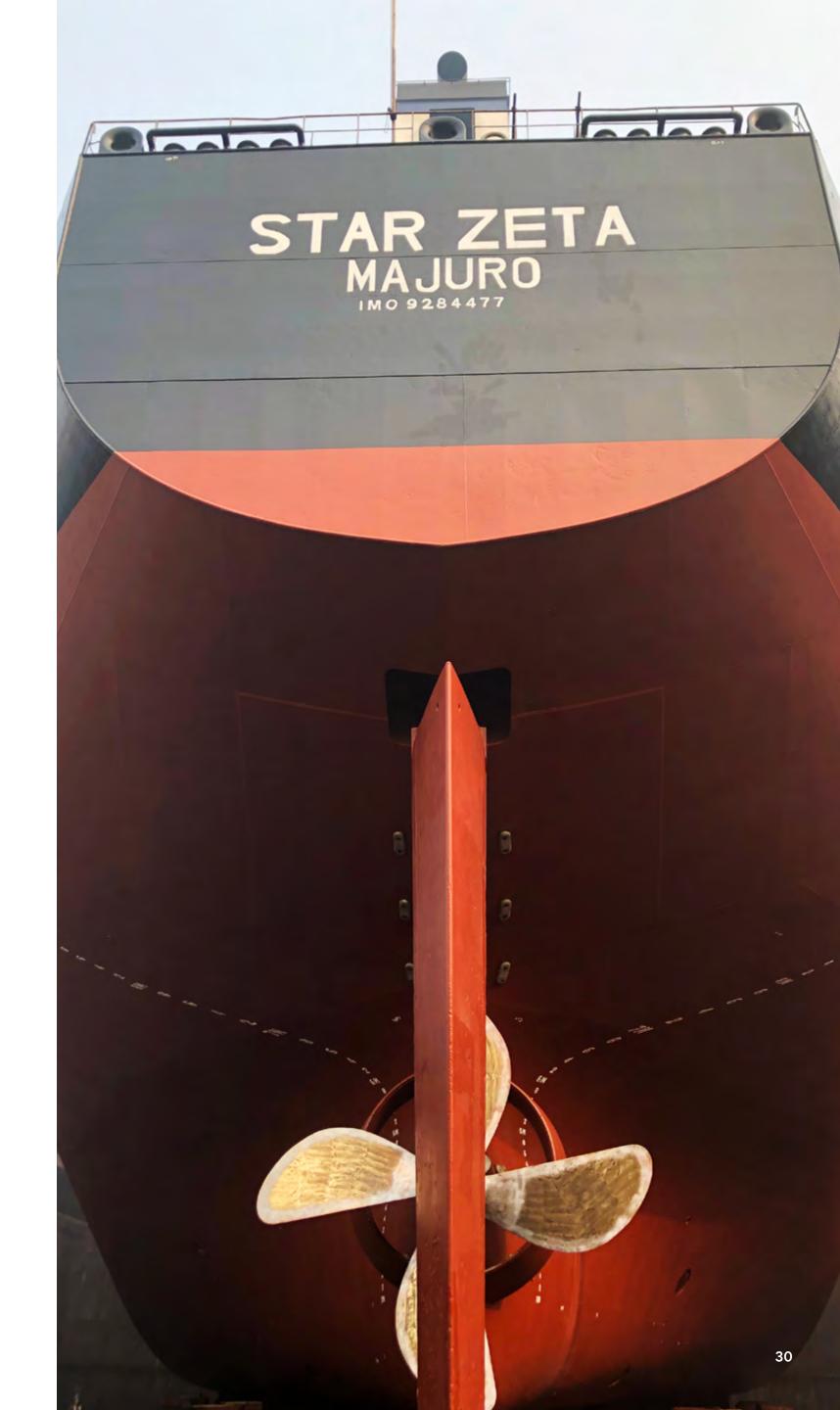
- Compliance with all applicable environmental laws.
- Quick and effective response to environmental incidents.
- Emphasis on employee's responsibility in environmental performance.
- Work with local businesses, partners or suppliers to encourage commitment and improvement in our local environment.
- Manage business with the goal of preventing environmental incidents and controlling emissions and wastes to below harmful levels.
- Use of energy, water, materials and other natural resources as efficiently as possible.
- Minimization of waste to landfill by reducing our waste generation.

#### **Energy Management System**

Our energy efficiency and conservation management system goes beyond compliance and entails the following principles:

- Establish, document, implement and maintain an Energy Management System in accordance with the requirements of ISO 50001:2011, with the objective of continually increasing energy efficiency and minimizing energy waste.
- Establish and maintain a Ship Energy Efficiency Management Plan (SEEMP).
- Ensure the availability of information and of necessary resources to achieve our objectives and targets on energy efficiency performance.
- Promote energy efficiency awareness through training of the shore and sea-going personnel and implement energy related campaigns and other relevant personnel incentive/ motivating programs.
- Support the purchase of energy-efficient products and services.
- Invest in green technologies, such as our investment in LED technology in our fleet, in order to increase efficiency while preserving the environment and reducing our ecological footprint.

Our environmental and energy management policies are also available on the Star Bulk website.



# We proactively and effectively complied with all maritime environmental regulations

#### **EGCS Fitted Fleet**

Star Bulk complied with IMO's sulphur cap regulation through the installation of Exhaust Gas Cleaning Systems (EGCSs). In 2018 we announced our plan to retrofit the majority of our fleet with EGCSs, or "scrubbers", before 2020. For the implementation of this project, Star Bulk secured installation contracts with 1st class shipyards, securing berth space and competitive installation cost. Moreover, we established an in-house dedicated team to oversee the project and on site representatives to ensure the successful and timely installation of the EGCSs from reputable suppliers.

As of December 2019, 89% of our fleet was equipped with EGCSs. By May 2020, 100% of our installation program was completed.

#### **Ballast Water Treatment**

Ballast water may be taken on board by ships for stability and can contain thousands of aquatic or marine microbes, plants and animals. Untreated ballast water could potentially harm the marine environment. The IMO BWM Convention (entered into force on 8 September 2017) requires all ships in international traffic to manage their ballast water. In response to the IMO Ballast Water Management Convention, we have fitted 52% of our fleet with Ballast Water Treatment Systems (BWTSs) and have scheduled to have 100% of the fleet fitted by 2023.

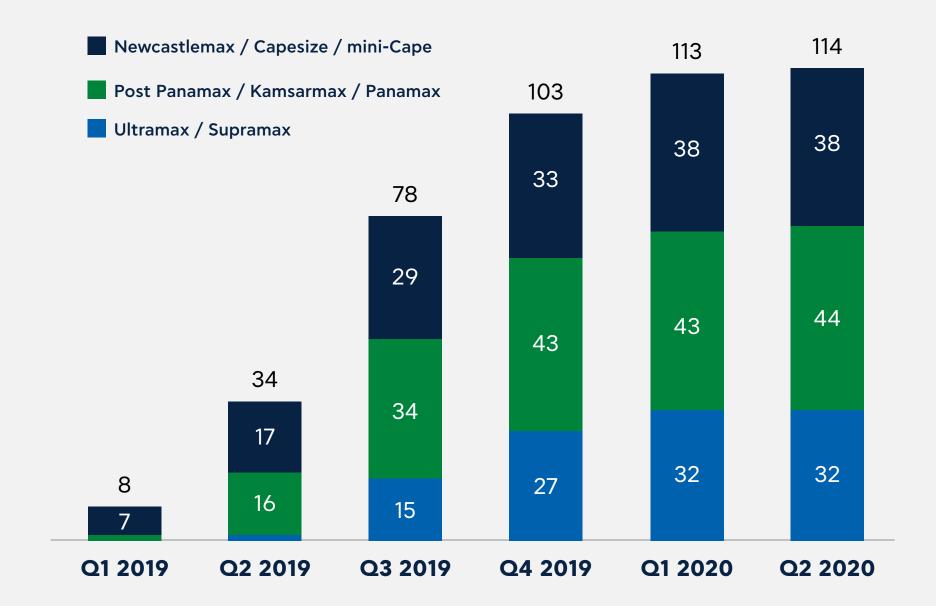
89%

Of fleet installed with EGCSs as of 31 December 2019

**52%** 

Of fleet installed with BWTSs as of 31 December 2019

#### **Exhaust Gas Cleaning Systems Installation Schedule**



#### **Ballast Water Treatment Installation Schedule**





# We proactively and effectively complied with all maritime environmental regulations (cont'd)

#### **Safe Ship Recycling**

We took early action within 2019 to be fully compliant with EU regulation (1257/2013 on Ship Recycling) that will be in force on 31 December 2020. The regulation refers to vessel recycling activities and the identification and monitoring of hazardous materials, including:

- Asbestos
- PCBs
- Ozone depleting substances
- PFOS
- Anti-fouling systems containing organotin compounds as a biocide

We are also in the process of extending compliance with Hazardous Material regulation to all of our fleet.

#### Refrigerants and Biodegradable Lubricants

We have banned all types of refrigerants that significantly affect the ozone layer such as R22 and in order to reduce the Global Warming Potential (GWP). Additionally, during maintenance activities both in offices and in vessels, eco friendly refrigerants that do not affect the ozone layer are used, such as R407 and R404.

We use biodegradable lubricants in the fleet and eco friendly stern tube systems (air, seal) regardless of their destination. Biodegradable lubricants and/or eco friendly stern tube systems are mandatory for vessels that transport cargo or have as a destination, ports in the United States.

#### **EU MRV and IMO DCS**

We are fully compliant with the EU MRV and IMO DCS regulations. We have established a standardized and structured process to ensure completeness, consistency and accuracy in our emissions monitoring and reporting process.

As part of the data collection and KPIs calculation process we use our in-house developed Vessel Performance Monitoring (VPM) system, which provides accurate and real time information regarding the performance of our vessels. Additionally, as per the regulatory requirements the GHG emissions of our vessels travelling to and from EU ports are also subjected to third party verification by an independent accredited verifier.



### 72 vessels

Are already in compliance with the IHM\* regulation





**56%** 

Of our fleet uses biodegradable lubricants 44%

Of our fleet uses eco friendly stern tube system

<sup>\*</sup>Inventory of Hazardous Materials (IHM)

# We improved the energy efficiency of our fleet by 2.3%

We measure transport energy efficiency of our vessels using the Energy Efficiency Operating Index (EEOI), which can be calculated using 2 different methods:

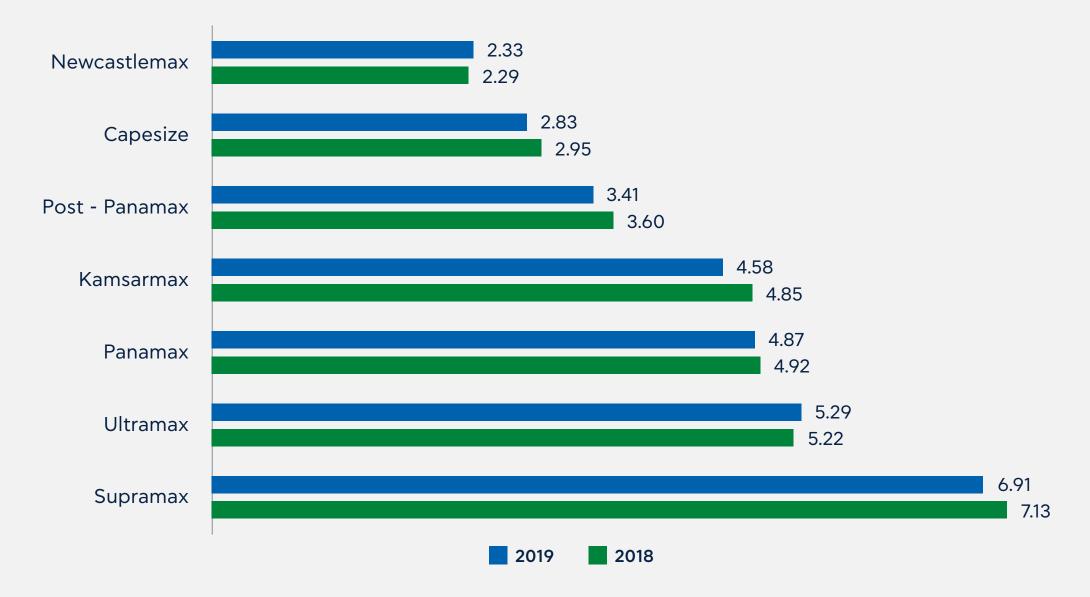
- **EU MRV method:** Calculated by dividing the daily CO<sub>2</sub> emissions with the transport work (amount of cargo transported times the sailed distance). Average EEOI Laden is calculated based only on the laden voyages to and/or from EU ports.
- IMO DCS method: Calculated by dividing the annual total  $CO_2$  emissions with the transport work using vessel's DWT for all voyages worldwide. The DCS is in effect as of 2019, so no data for previous years exist.

In 2019, we decreased the EEOI (EU MRV calculation method) of our fleet\*. The key parameters that contributed to this decrease are the following:

- In 2019, 52 of our vessels underwent dry docking during which their hulls were treated hence improving fuel consumption.
- Operational measures, including the application of weather routing systems and speed management practices for achieving in-time arrival at port and minimum time spent at anchorage. These measures, combined with an overall energy saving culture on board and effective maintenance practices resulted in energy savings.

The average EEOI in laden conditions was reduced by 2.3% compared to 2018.

### Average EEOI per vessel size - EU MRV method (gr CO<sub>2</sub> / Transport Tonne - mile) of our fleet\*



#### Average EEOI per vessel size - IMO DCS method (gr CO<sub>2</sub> / max DWT - mile) of our fleet

Newcastlemax	2.1
Cape size	2.73
Post-Panamax	3.94
Kamsarmax	3.93
Panamax	4.43
Ultramax	4.64
Supramax	5.84



<sup>\*</sup>Excluding the vessels managed by our third party managers

# We achieved a 6% reduction in our fleet's carbon footprint

In 2019, the average total fuel consumption for our fleet\* was 27 tonnes per day, reduced by 1.4% in relation to 2018.

Our fleet emitted 1,982,000 tonnes of  $CO_2$  in 2019. Our emissions from our fleet\* being reduced by 6% in relation to 2018.

The total decline in CO<sub>2</sub> emissions can be attributed to

measures taken that decreased the EEOI as well as to the decrease in vessels' available days due to the D/Ds and EGCS installations.

Finally, the total energy consumption for our fleet\* was reduced to 35,220 GJ in 2019 and the total energy consumption of our fleet in 2019 was 46,339 GJ.

1,982,000 tonnes

Of CO<sub>2</sub> emitted in 2019 by our fleet

**46,339** GJ

Energy consumption in 2019 of our fleet

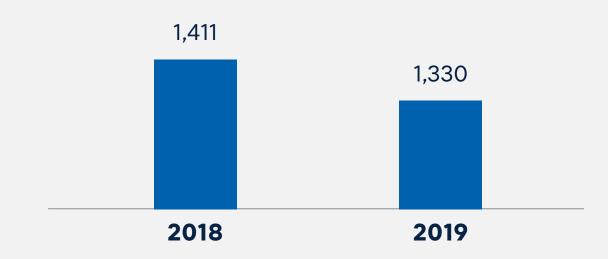
**√ 6%** 

In total CO<sub>2</sub> emissions of our fleet\* in 2019

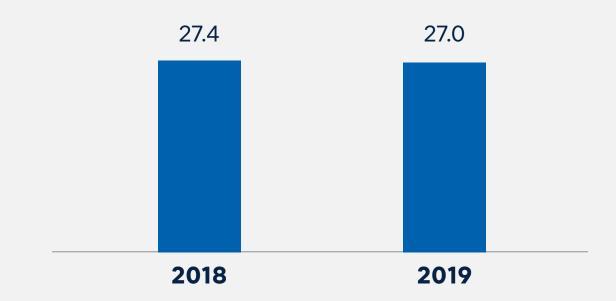
**↓ 1.4%** 

In fuel consumption per day of our fleet\* in 2019

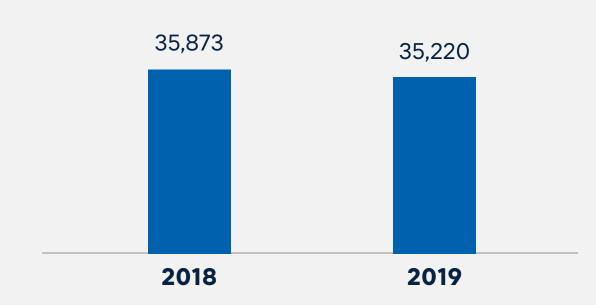
#### CO<sub>2</sub> emissions ('000 tonnes) - Our fleet\*



#### Average fuel consumption per day (tonnes) - Our fleet\*



#### Total energy consumption (GJ) - Our fleet\*



\*Excluding the vessels managed by our third party managers

# We reduced our SOx and NOx emissions by more than 6%

#### **Sulphur Emissions**

- The amount of sulphur oxides emitted to the atmosphere is almost directly proportional to the amount of sulphur in the fuel (% m/m) burnt and the total amount of fuel used in vessel engines.
- In 2019, total SOx emissions of our fleet\* were 22,383 tonnes, reduced by 6.2% in relation to 2018.

#### **Nitroxide Emissions**

- Regarding NOx emissions, we have in place controls on equipment replacement, calibration and sailing phases in order to avoid excessive emissions.
- In 2019 our fleet\* emitted 35,823 tonnes of NOx, reduced by 6.1% in relation to 2018.

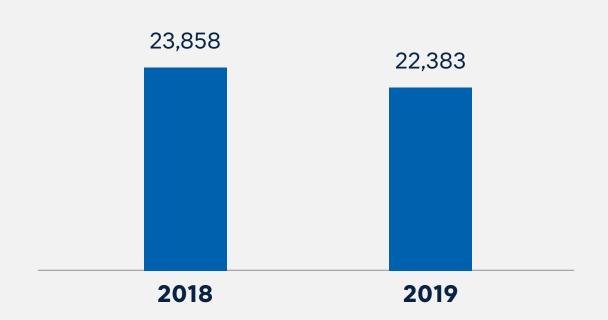
**↓ 6.2%** 

In SOx emissions of our fleet\*

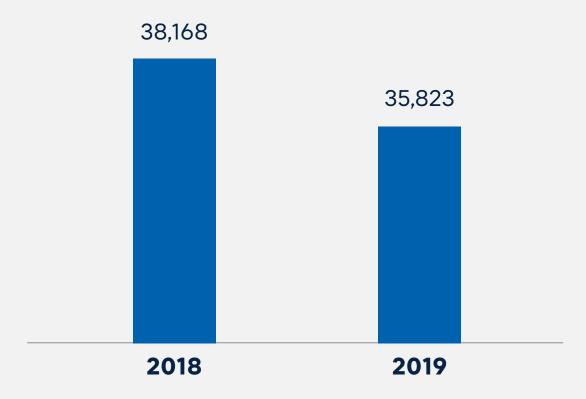
**↓ 6.1%** 

In NOx emissions of our fleet\*

#### SOx emissions (Tonnes) - Our fleet\*



#### NOx emissions (Tonnes) - Our fleet\*



<sup>\*</sup>Excluding the vessels managed by our third party managers

# We embedded circularity in our waste management and water usage practices, enabling us to reduce our environmental impact

#### **Waste Management**

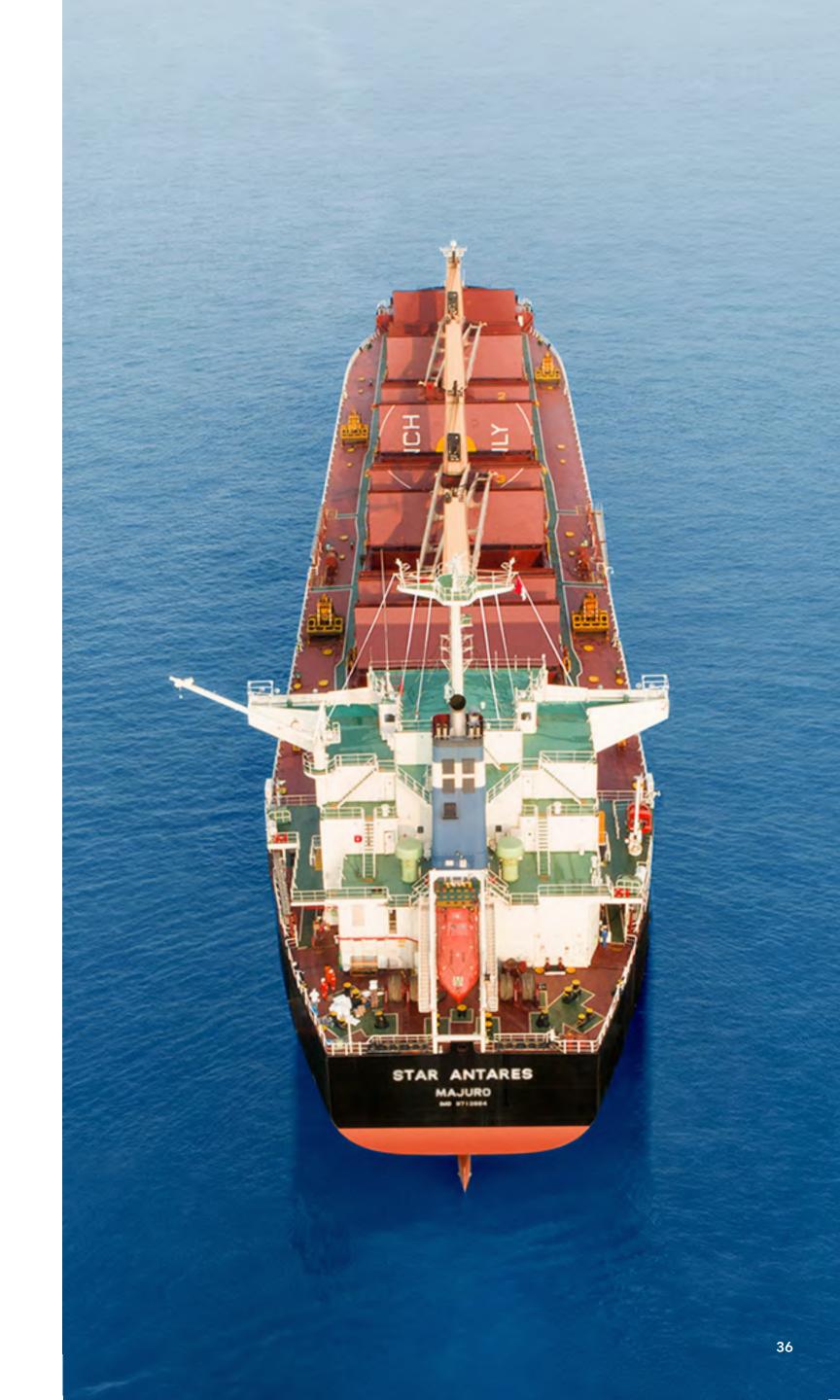
All our vessels comply with MARPOL Annex V, which seeks to eliminate and reduce the amount of garbage being discharged into the sea from ships.

- MARPOL Annex V generally prohibits the discharge of all garbage into the sea.
- Being fully conscious of the impact of improper waste disposal, we have developed and implemented a waste management system that stipulates the ways in which all types of waste are handled and disposed.
- Waste on board is collected, separated and deposited in ports for proper disposal, in line with all respective regulations.

#### Water Management

Fresh water consumed on board is either produced on board by the fresh water generator (through sea water) or supplied from the shore. Being a precious resource for our on board operations, we are committed to using it efficiently through continuous monitoring and consumption control. In 2019, fresh water consumption for our fleet was 1,862,960 bottles.

We have started using Drinking Water Filtration Systems since the beginning of 2019 on three of our vessels. Based on the feedback received from these vessels we plan to proceed with installation on the whole fleet. So far, water analysis results have been satisfactory and fresh water cost has been reduced by 50% as has the usage of plastic bottles. Our aim is to reach a cost reduction of up to 90% while ensuring a safe stock on board to cover possible equipment failure.





#### **ENVIRONMENT**

# We support the Poseidon Principles, an initiative of financial market participants that promotes green financing

The Poseidon Principles establish a framework for assessing and disclosing the climate alignment of ship finance portfolios. They set a benchmark for what it means to be a responsible bank in the maritime sector and provide actionable guidance on how to achieve this.

#### At a glance



Launched on 18 June 2019.



Signed by 18 leading international banks.



>1/3 (\$150 billion) of the global ship finance portfolio.



Framework for assessing and disclosing the climate alignment of vessels.



Consistent with **IMO 2050** strategy for **50%** reduction of GHG.



### **Key elements**

- Climate alignment: Collection of environmental data per vessel.
- **Accountability:** Rely on classification societies or other IMO-recognized organizations, to assess and report data.
- **Enforcement:** Introduce standard covenant clauses to ensure access to data.
- **Transparency:** Disclosure of portfolio scoring annually.

#### **Our contribution**

As of the date of issuance of this report, we have already provided or we are in the process of providing data to 6 financial institutions as part of their alignment with the Poseidon Principles:

Financial Institution	Date submitted
BNP Paribas	June-20
Credit Agricole CIB	July-20
Danish Ship Finance	July-20
DNB	July-20
ING	July-20
Citibank	Aug-20
<del></del>	

### Leading signatory banks



























Nordea









### **ENVIRONMENT**

# Active participation in R&D programs, green technology and alternative fuels initiatives

Program title	Brief description
BUGWRIGHT2	Autonomous Robotic Inspection and Maintenance on Ship Hulls and Storage Tanks: The objective of BUGWRIGHT2 will be to bridge the gap between the current and desired capabilities of ship inspection and service robots by developing and demonstrating an adaptable autonomous robotic solution for servicing ship outer hulls. By combining the survey capabilities of autonomous Micro Air Vehicles (MAV) and small Autonomous Underwater Vehicles (AUV) with teams of magnetic-wheeled crawlers operating directly on the surface of the structure, the project inspection and cleaning system will be able to seamlessly merge the acquisition of a global overview of the structure with performing a detailed multi-robot visual and acoustic inspection of the structure, detecting corrosion patches or cleaning the surface as necessary – all of this with minimal user intervention.
GATERS	GATE Rudder System as a Retrofit for the Next Generation Propulsion and Steering of Ships: GATERS proposes the first retrofit application of a novel propulsion and maneuvering device for ships, called "Gate Rudder System". It specifically addresses the demands of the call to develop and demonstrate to TRL6 and higher an innovative, cost-effective retrofit solution for marine shipping to provide substantial improvements regarding environmental impacts and life cycle cost. By taking advantage of the remarkable fuel saving (a max of 14% in trials and 30% in-service) and excellent maneuverability of the gate rudder system, GATERS will demonstrate significantly reduced emissions from ships particularly within coastal and port areas to challenge and even exceed the current and future legislative requirements of the IMO for emissions.
ShipFC	Piloting Multi MW Ammonia Ship Fuel Cells: ShipFC's main mission is to prove and demonstrate the case for large-scale zero-emission shipping. We do this through developing, piloting and replicating a modular 2MW fuel cell technology using ammonia as fuel. The project will first adapt and scale-up existing fuel cell solutions to a 2MW system, develop ship and land fuel systems for ammonia and integrate the full system on board a large offshore construction vessel. Then the solution will be validated through commercial operation for at least 3,000 hours during a one-year period.
i-MARINE	The purpose of this system is to develop intelligent adaptive-controllable alignment in marine propulsion systems for performance optimization and failure prevention.
Other initiatives	Brief Description
Alternative fuel	Striving to innovate, Star Bulk is currently exploring several alternative fuels including hydrogen and ammonia. In this vein, Star Bulk has participated in a Joint Development Project and HAZID workshop (HAZard Identification) with different partners including Engine Builders, Shipbuilder, Classification Societies, Shipping companies, Vendors to work together on Ammonia as an alternative fuel for the marine industry. The deliverable of the workshop relates to the introduction of Rule/Regulation, Safety aspects, Design requirement, and operational procedures.



### **ENVIRONMENT**

# We formed strong partnerships that help us promote green shipping and implement our decarbonization strategy

Recognizing the serious social and economic challenges of climate change, and significant value of transitioning shipping to a decarbonized future, Star Bulk is an active member of a number of partnerships committed to addressing these challenges and to protecting the environment more generally.

RIGHTSHIP	RightShip is the world's leading maritime risk management and environmental assessment organisation with a mission to improve the safety and environmental sustainability of the maritime industry, by helping their customers manage their maritime risk developing a safer and cleaner maritime industry.
United Nations Global Compact	The United Nations Global Compact is a voluntary initiative with over 12,000 signatories in over 160 countries, that encourages businesses worldwide to adopt sustainable and socially responsible policies, to align strategies with universal principles on human rights, labour, environment and anti-corruption and take actions that advance societal goals.
GLOBAL MARITIME FORUM	The Global Maritime Forum is an international not-for-profit organization committed to shaping the future of global seaborne trade to increase sustainable long-term economic development and human wellbeing. The Forum brings together leaders from across the international maritime industry with policy-makers, NGOs, experts, and other influential decision-makers and opinion shapers in a community to work together on developing new solutions and recommendations for action. Star Bulk supports the Global Maritime Forum as a partner.
Getting to Zero Coalition	The "Getting to Zero Coalition" is an alliance of companies across the maritime, energy, infrastructure and finance sectors, supported by key governments and IGOs. "Getting to Zero" is committed to getting commercially viable, deep-sea, zero-emission vessels, powered by zero-emission fuels, into operation by 2030: maritime shipping's moon-shot ambition. The Coalition is defined by this ambition and a set of core principles that all members share.
CLEANSHIPPING ALLIANCEZOZU	The Clean Shipping Alliance 2020 (CSA 2020) represents a group of 38 global leading companies from the commercial shipping and cruise industries that have been leaders in emission control efforts and have made significant investments in research and analysis, funding and committing resources to comply with 2020 fuel requirements through the installation of Exhaust Gas Cleaning Systems (EGCSs) on their fleets.
·HELMEPA•	Hellenic Marine Protection Association (HELMEPA) is the pioneering voluntary commitment of Greek seafarers and ship owners to safeguard the seas from ship-generated pollution by spreading a pollution prevention and safety spirit throughout the industry. HELMEPA encourages a high level of environmental consciousness by informing, updating, educating and motivating all, from ship owner to the last seafarer.
Australian Marine Environment Procection Association	The Australian Marine Environment Protection Association (AUSMEPA) was launched on 13 July 2000 as a voluntary commitment 'to save the seas' signed by a number of individuals representing a wide range of shipping industry, government and non government organisations who were committed to protecting Australia's precious marine environment. Its goal is to increase marine environmental consciousness and awareness in Australians by means of education, information and publicity.

### Material issues

- Occupational health and safety
- Labor practices
- Career opportunities and advancement
- Employee training / competency development
- Remuneration and benefits
- Talent attraction and retention
- Diversity and inclusion



### **Employment**

### Related SDGs



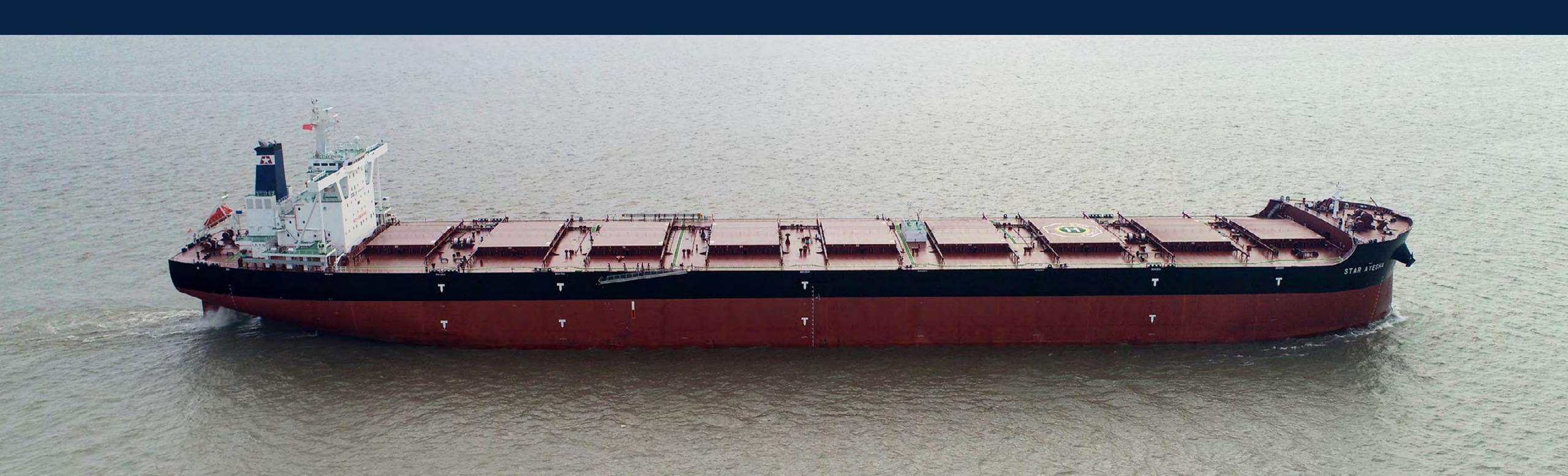














### Our Crew



### **EMPLOYMENT | OUR CREW**

# We further increased our pool of skilled and experienced seafarers

#### Our pool of seafarers:

- We have a pool of 4,300 seafarers out of which 2,600 are on board our vessels at any given time.
- We maintain an exclusive cooperation with a manning agent in Philippines that provides us crew management services and supply our vessels with high-skilled crew. The agency is dedicated to recruiting, selecting, training and developing seafarers, and fostering positive crew relations.
- Approximately 63% of our seafarers are manned by our Philippines exclusive agent, while the remaining are sourced by our third party managers.

### **Crew demographics\*:**

Some of the key characteristics of our seafarer pool are the following:

- We employee seafarers from six (6) different countries.
- The majority of our seafarers are from the Philippines (94%).
- The average age of our seafarers is 41 years old, which is reduced by 2 years compared to 2018.

 $\checkmark$  **2** years

Reduction in average crew age in 2019

**41** years old

Average age of our crew in 2019

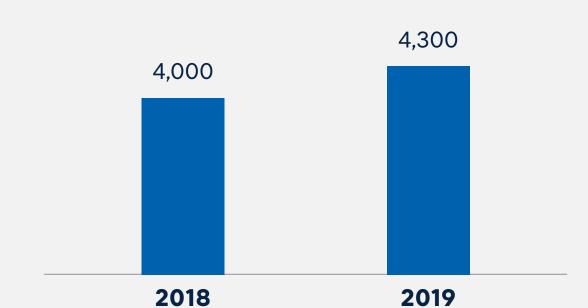
4,300

Pool of seafarers

2,600

Seafarers on board

### Number of seafarers in our available seafarers pool



#### **Crew average age**



#### **Crew country of origin**



<sup>\*</sup> Excluding the vessels managed by our third party managers

#### **EMPLOYMENT | OUR CREW**

## Crew safety and welfare is among our top priorities

Health and safety of our people is of prime importance and essential for the efficient operation of our undertakings. In 2019 we:

- Reduced the Lost Time Injury Frequency (LTIF) by 17% and maintained a constant Total Recordable Case Frequency (TRCF) compared to 2018.
- Decreased the number of accidents classified as serious by 28%.

In 2019, we were certified with ISO 45001 that helped us strengthen our health and safety performance.

Seafarers remuneration is essential to the welfare of our crew:

- We remunerate and provide benefits to our crew fairly, based on the competency requirements of each position.
- In 2019 we paid \$83.9 million in wages, remittances, bonuses, social security payments and cash advances to our seafarers.
- The average salary of our crew is 9.3 times higher than the local GDP per capita (considering the Philippines which is where the majority of our crew is from).
- Specifically for cash advances we are open to relevant requests for the coverage of medical emergencies, personal needs, relief from natural disasters, etc.
- Other crew benefits include private insurance to officers and their immediate family members and additional benefit schemes to crew members that demonstrate excellent performance and remain in the company for a long period of time.

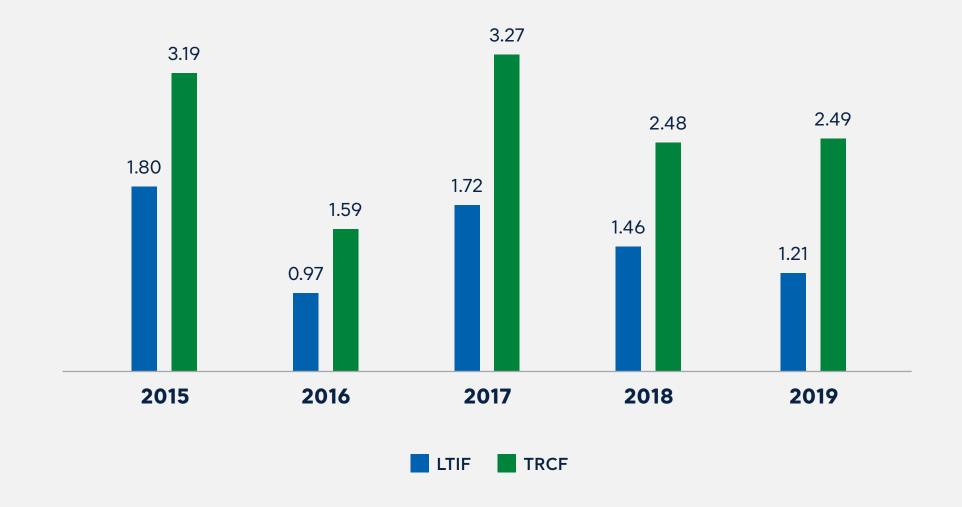
**4 28%** 

**↓ 17%** 

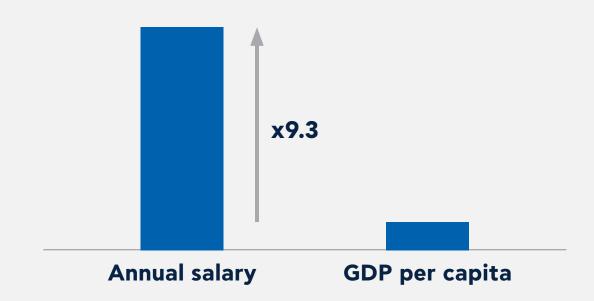
In serious accidents in 2019

In LTIF in 2019

#### Lost Time Injury Frequency (LTIF) and Total Recordable Case Frequency (TRCF)\*



### Proportion of seafarer salary in relation to local (Philippines) GDP per capital





In crew salaries, bonuses and social security contributions in 2019

<sup>\*</sup>The reported data refer to our managed vessels as of December 31, 2019.

### **EMPLOYMENT | OUR CREW**

# We maintained high retention rates and increased career and skills development opportunities

#### **Retention and Career Development**

Our efforts in providing a safe, motivating and rewarding work environment of the highest industry standards are paying off:

- In 2019 we maintained high retention rates which average 92.7%.
- We provide long-term career development prospects to our crew. We have in place internal promotion programs through which position demands are covered internally by our crew members. In 2019 we increased promotions by 16%.

#### **Crew Familiarization and Training**

We appreciate the significance of investing in the development of the skills of our people and we maintain an ongoing development program:

- Prior to embarkation seafarers acquire detailed familiarization through in-house training sessions and CBT training.
- Our seafarers periodically participate in seminars and forums, where a wide range of issues are presented.
- On board training sessions are organized through the collaboration of our technical and MSQ teams.
- We collaborate with external training centers to conduct our trainings.
- The amount spent on trainings was increased by 77% in 2019 compared to 2018.

**16%** 

In crew promotions within 2019

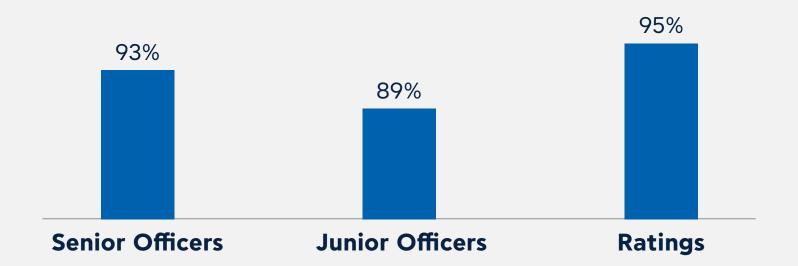
92.7%

Average crew retention rate

**77%** 

Increase in training spending in 2019

#### **2019 Crew Retention Rates**









### Our On Shore Employees



### **EMPLOYMENT | OUR ON SHORE EMPLOYEES**

# A diverse on shore team of talented and motivated professionals

Apart from our crew, a team of high-skilled employees work ashore to support our vessels' operations. We strive to offer our employees a workplace in which they are able to perform to the best of their abilities, promoting equal opportunities and diversity among our people. More specifically:

- More than 320 employees work for the management of Star Bulk vessels, a 13% increase in relation to 2018.
- Our on shore team comes from a diverse educational and professional background.
- We maintain a 2.5 employee / vessel ratio to better support operations from ashore.
- We promote equal opportunities between men and women employees Around 40% of our employees are women and 21% of our management and senior management positions are held by women.
- We offer equal career advancement opportunities, tangible benefits and bonus schemes that motivate and reward high performance.

13%

Increase of shore employees in 2019

**29**%

Of our operational employees have seagoing experience

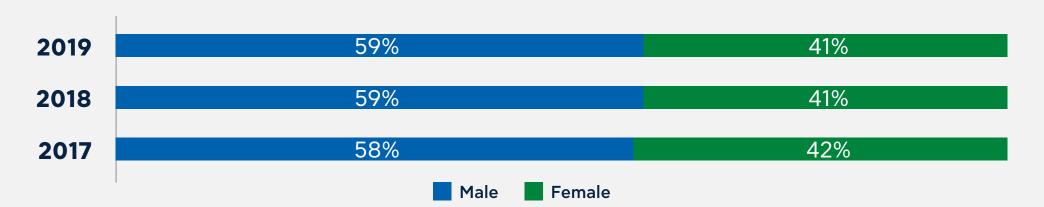
**21%** 

Women in management and senior management positions

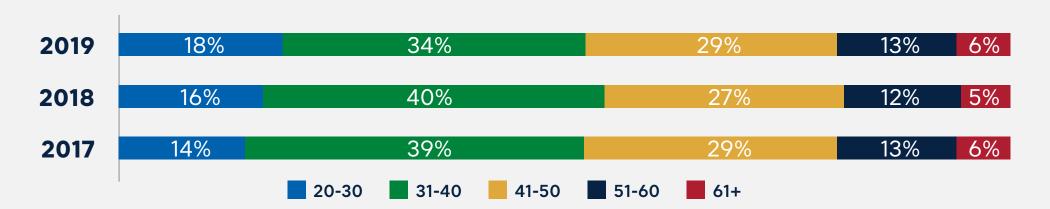
#### On Shore Employees



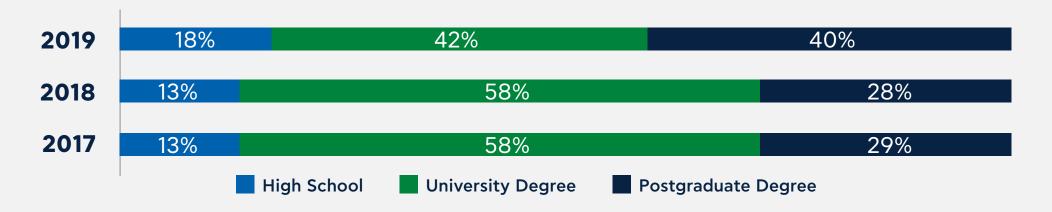
#### On Shore Employee Gender Composition



#### On Shore Employee Age Composition



### On Shore Employee Educational Background Composition



### **EMPLOYMENT | OUR ON SHORE EMPLOYEES**

### We have high retention rates for our on shore employees and focus on their continuous development

As part of the ongoing process of promoting a culture of high performance, all employees on shore are appraised for their annual performance by their supervisor and improvement objectives are set. The performance appraisal for each employee is based both on a company-wide competency model and on individual targets set for each employee. The annual evaluations start as a self-assessment process and ultimately are linked to the compensation and benefits of each employee.

The work environment, career prospects and benefits we offer to our employees result in high employee satisfaction, which translates into high retention rates.

Our employee retention rate has been consistently above 90%.

Through our long term collaboration and engagement with academic institutions, we have been consistently offering internship opportunities to students, providing them with valuable experience and tools for their future, many of which have resulted in permanent hires. Throughout the years, we have been consistently increasing our intern intakes and maintaining a steady intern hiring rate.

100%

Of our shore employees receive annual performance feedback 91.6%

Retention rate of shore employees

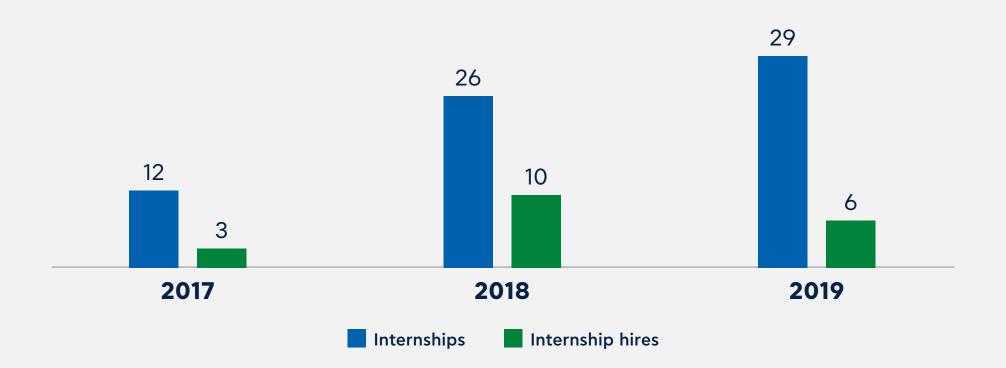
29

Internships in 2019

#### **New Hires, Promotions and Internal Job Transfers**



#### **Internships and Internship Hires**



#### Supporting the Empowerment of Women in Shipping



Star Bulk supports the empowerment of women in the shipping industry.

A member of our senior team, served as President of WISTA Hellas from 2014 till 2020.

### Material issues

- Community investments
- Community engagement



### Society

### Related SDGs



17 PARTNERSHIPS FOR THE GOALS

8













### **SOCIETY**

# Our community investment activities focus on supporting vulnerable groups and youth education among others



Members of the union of Greek Shipowners have established in 2016 the Greek Shipowners' social welfare company SYN-ENOSIS. The mission of the company is to support the Greek society via social welfare programs and activities for vulnerable social groups and for projects of public interest, through the provision of humanitarian and charitable aid.

Star Bulk has been providing annual financial contribution to SYN-ENOSIS for the past years thus supporting initiatives in the areas of food aid, health and social care, education, projects of public interest as well as crisis management relief actions.





The Stavros Niarchos Foundation Endowed Scholarship Fund represents an endowed fund at Anatolia College through the generosity of the Stavros Niarchos Foundation in support of the Center for Talented Youth ("CTY"). The fund seeks to support the access of deserving underprivileged students to the CTY Summer Program.

We at Star Bulk are committed to a community investment to support scholarships of CTY students through the Stavros Niarchos Foundation Endowed Scholarship Fund for a period of five years (2018 - 2022).



The ELIZA Society for the Prevention of Cruelty to Children, a highly specialized charitable organization, was established in Greece in 2008 with the purpose of protecting children who have suffered or are in danger of suffering abuse and neglect, with emphasis to preschool age children.

Star Bulk has provided funds to support the Institution's purpose to protect children from cruelty.



Trafigura Foundation's purpose is to help achieve positive socioeconomic change for people and communities. Their role is to provide financial resources, managerial support and guidance to organizations. We fund projects on a multi-year basis to maximize their potential for sustainability and success.

Star Bulk has provided long term funding and expertise to improve socioeconomic conditions of vulnerable communities around the world.



### **SOCIETY**

# Our community investment activities focus on supporting vulnerable groups and youth education among others (cont'd)





Project Connect is a Non-Profit Organization of professionals from the Shipping and HR industries who have been exploring the gaps in, and offering practical solutions to the problem of youth employability during the crisis in Greece. The scope of the "Adopt a Ship" program is to introduce Greek elementary students to shipping by having them come in contact with the Master of a vessel. The students contact the Master via emails and ask questions in order to explore life at sea, exchange photos, paintings and other relevant information.

During 2019 Star Bulk engaged its vessel M/V Gargantua and her Master with the students of the 15th Elementary School of Nikaias.



The Sloan Kettering Institute (SKI) in New York has the vision of harnessing the latest research techniques in order to conquer cancer. As the experimental research arm of Memorial Sloan Kettering Cancer Center, SKI is focused on the pursuit of fundamental scientific discoveries.

Star Bulk has provided funds to support the Institute's research and treatment of cancer.



The Association's purpose is the maintenance and management of a floating boat exhibit named HELLAS LIBERTY, which is one of the three remaining ships in its category and which was given to the Greek Republic by the United States Government.

Star Bulk has provided funds to support the Association's effort to maintain the floating boat exhibit HELLAS LIBERTY.

### Hydra Shipping Conference

The "Hydra Maritime Conference" is supported by leading Greek shipowners, senior executives in the shipping industry, company representatives, consultants, academics and members of the historic Hydra Maritime families. The Conference is an educational and entertaining two-day event with many high-level networking opportunities.

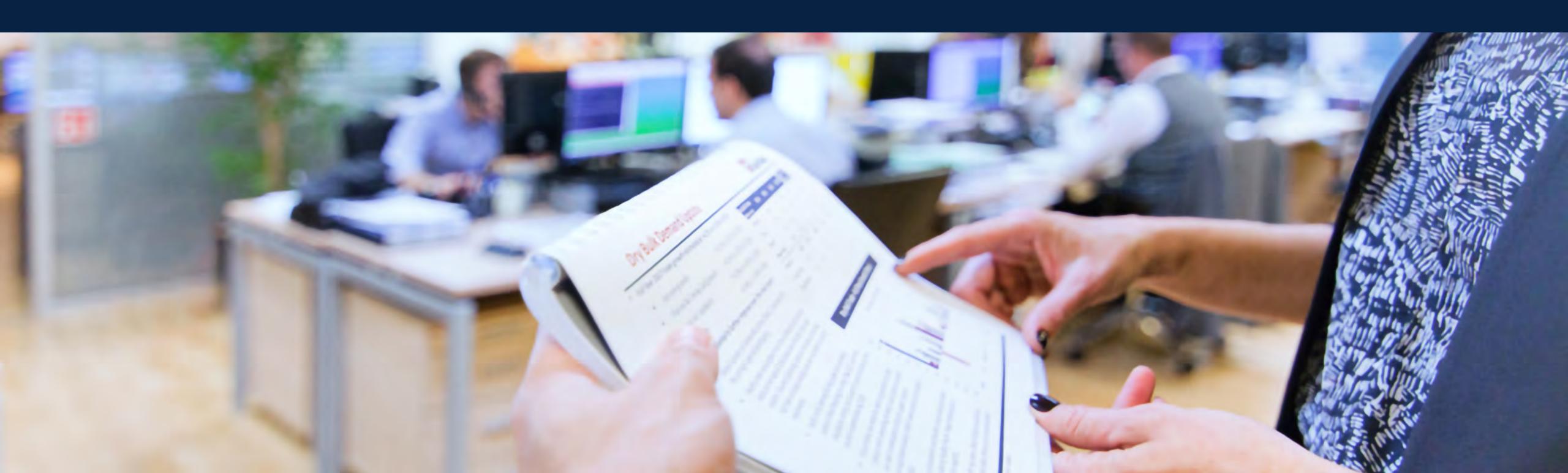
Star Bulk has provided funds to support the Conference's purpose to educate on maritime activities.

ANDROS INTERNATIONAL YACHT RACE The Yacht Club of Andros has become a hub and central point for water sports in Andros. Hundreds of children learn to sail and many have won top places in national and European events. The club emphasizes on water sports and social integration.

Star Bulk has provided funds to support the Club's endeavors on water sports and social integration.



### Appendix A | Stakeholder Engagement





### Appendix A

### **Our stakeholders**

At Star Bulk we appreciate the role and significance of our stakeholders when it comes to defining our sustainability strategy. Their insight enriches our understanding of their needs which assists our decision making process and ensures that our sustainability actions and reporting is relevant and responsive to their expectations and concerns.

Stakeholder	r group	Stakeholder type	Stakeholder g	group	Stakeholder type
	Customers	<ul><li>Vessel owners</li><li>Charterers</li><li>Cargo owners</li></ul>		Authorities	<ul> <li>Governments</li> <li>IMO</li> <li>Flag administration</li> <li>Port authorities / coast guards</li> </ul>
00	Seafarers & office employees	<ul><li>Crew on board</li><li>Office employees</li><li>Manning agents</li></ul>		Suppliers	<ul> <li>Manufacturers</li> <li>Ship yards</li> <li>Brokers</li> <li>General suppliers</li> <li>Port agents</li> </ul>
	Shareholders / Investors	<ul><li>Natural persons</li><li>Institutional shareholders</li><li>Funds/Private Equities</li></ul>	AR	Community & society	<ul><li>Academic institutions</li><li>Local communities</li><li>NGOs</li><li>Media</li></ul>
	Financial Institutions	<ul> <li>Banks</li> <li>Leasing financial institutions</li> <li>Underwriter</li> <li>Insurance companies</li> </ul>		Industry organisations	<ul> <li>Classification societies</li> <li>Recognized organizations</li> <li>P&amp;I clubs</li> <li>Insurers</li> <li>Vetting companies</li> </ul>

For more details regarding the engagement process followed for each stakeholder group, please refer to "Appendix A - Stakeholders engagement"



### Appendix A

### Stakeholders engagement process

Stakeholder group	Basis for engagement	Engagement methods	Frequency	Key areas of interest	Our response
<ul><li>Clients</li><li>Vessel owners</li><li>Charterers</li><li>Cargo Owners</li></ul>	Customers, including charterers, cargo owners etc. are vital to the organisation's success and have a direct interest in our market impact and sustainability performance.	<ul><li>Charter Parties</li><li>Service feedbacks</li></ul>	<ul><li>Ad hoc</li><li>Strategic</li></ul>	<ul><li>Service quality</li><li>Business ethics</li><li>Financial performance</li><li>Vessel condition</li></ul>	We constantly strive to increase our service quality in order to deliver sustainable and value adding services to all our clients.
Seafarers & office employees  • Crew on board • Employees ashore • (Affiliated) Manning agents	Our people are critical to our business, strategy and decision making. We therefore aim to maintain a safe and rewarding work environment whilst engaging and collaborating with them to achieve our goals.	<ul> <li>Performance feedback</li> <li>Open communication channels</li> </ul>	• Daily • Annually	<ul> <li>Financial performance</li> <li>Work conditions</li> <li>Health and safety</li> <li>Remuneration and benefits</li> <li>Career development</li> </ul>	We put health and safety first and foster an open and inclusive work environment both on board and ashore. We fairly reward and offer career advancement opportunities to our people.
<ul> <li>Shareholders / Investors</li> <li>Natural persons</li> <li>Institutional investors</li> <li>Funds/ Private Equities</li> </ul>	Shareholders are essential to the company's operations and growth and have a direct interest in the company's performance.	<ul> <li>Annual General Meetings</li> <li>Quarterly / Annual financial results</li> <li>Investor briefings and roadshows</li> <li>Web site / Press releases</li> </ul>	<ul><li>Annually</li><li>Quarterly</li><li>Ad hoc</li></ul>	<ul><li>Financial performance</li><li>Business strategy</li><li>Governance</li><li>Regulatory compliance</li></ul>	We regularly inform our shareholders on the company's development and strategy. We conduct our business and take actions with the ultimate goal of increasing the company's value.
<ul> <li>Financial institutions</li> <li>Banks</li> <li>Leasing financial institutions</li> <li>Underwriting agents</li> <li>Insurance companies</li> </ul>	Financial institutions require information on the company's performance with a rising interest in sustainability.	<ul> <li>Quarterly / Annual financial results</li> </ul>	<ul><li>Annually</li><li>Quarterly</li><li>Ad hoc</li></ul>	<ul><li>Financial performance</li><li>Business strategy</li><li>Governance</li><li>Regulatory compliance</li></ul>	We provide transparent information about the performance, strategy and outlook of the company.



### Appendix A

### Stakeholders engagement process (cont'd)

Stakeholder group	Basis for engagement	Engagement methods	Frequency	Key areas of interest	Our response
Suppliers	We aim to understand our				
<ul><li>Manufacturers</li><li>Shipyards</li><li>Brokers</li><li>Port Agents</li><li>Ship chandlers</li></ul>	suppliers' concerns and develop channels of mutual support that enhance the quality of our supply chain and foster long term collaboration and opportunities.	<ul><li>Supplier evaluations</li><li>Contracts</li></ul>	• Ad hoc	<ul> <li>Financial performance</li> <li>Business ethics</li> <li>Evaluation criteria</li> <li>Environmental performance</li> </ul>	We evaluate the performance of our suppliers and integrate sustainability related issues within the evaluation process.
Industry organisations					
<ul> <li>Classification societies</li> <li>Recognized organizations</li> <li>P&amp;I clubs</li> <li>Insurers</li> <li>Vetting companies</li> </ul>	Industry standards and regulations set by maritime organisations play a major role in the manner we conduct our business.	<ul><li>Partnerships</li><li>Formal meetings</li></ul>	• Strategic	<ul><li>Business ethics</li><li>Environmental performance</li><li>Health and safety</li></ul>	We participate and engage with all industry organizations regarding the various business issues that may arise.
Community & society				<ul> <li>Support of People</li> </ul>	We support the local society
<ul><li>Academic institutions</li><li>Local communities</li><li>Media</li><li>NGOs</li></ul>	We aim to have a positive impact on society by creating strong partnerships with the communities in which we operate.	<ul><li>Conferences</li><li>Community engagement initiatives</li></ul>	• Ad hoc	<ul> <li>Community support</li> <li>Responsible business practices</li> <li>Environmental Performance</li> </ul>	with community-focused initiatives and take their needs into consideration to maximise shared value.
Authorities	A				We follow and comply with
<ul> <li>Governments / Local / Port authorities</li> <li>IMO</li> <li>Flag administration</li> </ul>	Active engagement with state and regulatory authorities ensures compliance with all applicable standards and regulation.	<ul><li>Audits</li><li>Public forums</li></ul>	• Ad hoc	<ul> <li>Regulatory compliance</li> <li>Business ethics</li> <li>Environmental performance</li> <li>Health and safety</li> </ul>	State and regulatory authorities rules and regulations. We follow and implement all instructions and we aim for zero non-conformities.



### Appendix B | GRI content index





### Appendix B

### **GRI** content index

	Disclosure	Section	Page
GRI 102	<b>102-1</b> Name of the organization	About Star Bulk	7 - 9
General disclosures	<b>102-2</b> Activities, brands, products, and services		
	102-3 Location of headquarters		
	<b>102-4</b> Location of operations		
	102-5 Ownership and legal form		
	102-6 Markets served		
	<b>102-7</b> Scale of the organisation		
	102-8 Information on employees and other workers		
	102-9 Supply chain		
	<b>102-10</b> Significant changes to the organization		
	102-11 Precautionary Principle or approach	Corporate Governance	21
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aisciosui <del>c</del>	102-42 Identifying and selecting stakeholders	Appendix A	52 - 54
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	<b>102-49</b> Changes in reporting	_	-
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	102-52 Reporting cycle	About this Report	5
	<b>102-53</b> Contact point for questions regarding the report	Contact information	61
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### GRI content index

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	103-3 Evaluation of the management approach		
GRI 201 Economic performance	201-1 Direct economic value generated and distributed		
Market presence			
GRI 103	103-1 Explanation of the material topic and its Boundary	Our crew	42 - 43
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	103-3 Evaluation of the management approach		
GRI 202 Market	<b>202-1</b> Ratios of standard entry level wage by gender compared to local minimum wage		
presence	<b>202-2</b> Proportion of senior management hired from the local community		
Anti-corruption			
GRI 103	103-1 Explanation of the material topic and its Boundary	Corporate Governance	20
Management approach	103-2 The management approach and its components	Jovernance	
	103-3 Evaluation of the management approach		
GRI 205 Anti-corruption	205-3 Confirmed incidents of corruption and actions taken		

GRI Standard	Disclosure	Section	Page
Energy			
GRI 103 Management approach	103-1 Explanation of the material topic and its Boundary	Environment	4
	<b>103-2</b> The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 303 Energy	<b>302-1</b> Energy consumption within the organisation		
Biodiversity			
GRI 103	103-1 Explanation of the material topic and its Boundary	Environment	31 - 32
Management approach	<b>103-2</b> The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 304 Biodiversity	<b>304-2</b> Significant impacts of activities, products, and services on biodiversity		
Emissions		·	
GRI 103	103-1 Explanation of the material topic and its Boundary	Environment	33 - 35
Management approach	<b>103-2</b> The management approach and its components		
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GRI 305	<b>305-1</b> Direct (Scope 1) GHG emissions		
Emissions	<b>305-4</b> GHG emission intensity		
	<b>305-7</b> Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		



### Appendix B

### GRI content index

<b>GRI Standard</b>	Disclosure	Section	Page
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Employment			
GRI 103	103-1 Explanation of the material topic and its Boundary	Our crew	44
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GRI Standard	Disclosure	Section	Page
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Management approach	<b>103-2</b> The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 403 Occupational health and safety	<b>403-2</b> Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities		
Training and Educ	ation	<u>'</u>	
GRI 103	103-1 Explanation of the material topic and its Boundary	Our Crew	44
Management approach	103-2 The management approach and its components		
	103-3 Evaluation of the management approach		
GRI 404 Training and education	<b>404-1</b> Average hours of training per year per employee		
Diversity and equa	al opportunities		
GRI 103	<b>103-1</b> Explanation of the material topic and its Boundary	Environment	33 - 35
Management approach	<b>103-2</b> The management approach and its components Employment		
	103-3 Evaluation of the management approach		
GRI 405 Diversity and equal opportunities	<b>405-1</b> Diversity of governance bodies and employees		



### Appendix C | SASB marine transportation content index





### Appendix C

### SASB marine transportation material issues

Disclosure topic	Code	Page reference
Gross global Scope 1 emissions	TR0301-01	34
Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets  Total energy consumed, percentage from heavy fuel oil, percentage from renewables  Energy Efficiency Design Index (EEDI) for new ships	TR0301-02	10
	TR0301-03	34
	TR0301-05	N/A
Air emissions for the following pollutants: NOx, SOx, and particulate matter (PM)	TR0301-04	35
Shipping duration in marine protected areas and areas of protected conservation status	TR0301-06	N/A
Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment	TR0301-07	31
Number and aggregate volume of spills and releases to the environment	TR0301-08	N/A
Lost time injury rate (LTIR)	TR0301-12	43
Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	TR0301-09	13
Amount of legal and regulatory fines and settlements associated with bribery or corruption	TR0301-10	20
Number of serious marine incidents	TR0301-11	25
Number of Conditions of Class or Recommendations	TR0301-13	25
Number of port state control (1) deficiencies and (2) detentions	TR0301-14	25
	Gross global Scope 1 emissions  Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets  Total energy consumed, percentage from heavy fuel oil, percentage from renewables  Energy Efficiency Design Index (EEDI) for new ships  Air emissions for the following pollutants: NOx, SOx, and particulate matter (PM)  Shipping duration in marine protected areas and areas of protected conservation status  Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment  Number and aggregate volume of spills and releases to the environment  Lost time injury rate (LTIR)  Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index  Amount of legal and regulatory fines and settlements associated with bribery or corruption  Number of Serious marine incidents  Number of Conditions of Class or Recommendations	Gross global Scope 1 emissions  Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets  Total energy consumed, percentage from heavy fuel oil, percentage from renewables  Energy Efficiency Design Index (EEDI) for new ships  TR0301-05  Air emissions for the following pollutants: NOx, SOx, and particulate matter (PM)  TR0301-04  Shipping duration in marine protected areas and areas of protected conservation status  TR0301-06  Percentage of fleet implementing (I) ballast water exchange and (2) ballast water treatment  TR0301-07  Number and aggregate volume of spills and releases to the environment  TR0301-12  Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's  Corruption Perception Index  Amount of legal and regulatory fines and settlements associated with bribery or corruption  TR0301-10  Number of Conditions of Class or Recommendations  TR0301-13



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Matters discussed in this report may constitute forward looking statements. The Private Securities Litigation Reform Act of 1995 provides safe harbor protections for forward-looking statements in order to encourage companies to provide prospective information about their business. Forward-looking statements concerning plans, objectives, goals, strategies, future events or performance, and underlying assumptions and other statements, which are other than statements of historical facts.

The Company desires to take advantage of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and is including this cautionary statement in connection with this safe harbor legislation. The words "believe," "anticipate," "intends," "estimate," "forecast," "project," "plan," "potential," "may," "should," "expect," "pending" and similar expressions identify forward-looking statements.

The forward-looking statements in this report are based upon various assumptions, many of which are based, in turn, upon further assumptions, including without limitation, examination by the Company's management of historical operating trends, data contained in its records and other data available from third parties. Although the Company believes that these assumptions were reasonable when made, because these assumptions are inherently subject to significant uncertainties and contingencies which are difficult or impossible to predict and are beyond the Company's control, the Company cannot assure you that it will achieve or accomplish these expectations, beliefs or projections.

In addition to these important factors, other important factors that, in the Company's view, could cause actual results to differ materially from those discussed in the forward-looking statements include general dry bulk shipping market conditions, including fluctuations in charter rates and vessel values; the strength of world economies; the stability of Europe and the Euro; fluctuations in interest rates and foreign exchange rates; changes in demand in the dry bulk shipping industry, including the market for our vessels; changes in our operating expenses, including bunker prices, dry docking and insurance costs; changes in governmental rules and regulations or actions taken by regulatory authorities; potential liability from pending or future litigation; general domestic and international political conditions; potential disruption of shipping routes due to accidents or political events; the availability of financing and refinancing; our ability to meet requirements for additional capital and financing to complete our newbuilding program and grow our business; the impact of the level of our indebtedness and the restrictions in our debt agreements; vessel breakdowns and instances of off hire; risks associated with vessel construction; potential exposure or loss from investment in derivative instruments; potential conflicts of interest involving our Chief Executive Officer, his family and other members of our senior management and our ability to complete acquisition transactions as planned. Please see our filings with the Securities and Exchange Commission for a more complete discussion of these and other risks and uncertainties. The information set forth herein speaks only as of the date hereof, and the Company disclaims any intention or obligation to update any forward looking statements as a result of developments occurring after the date of this communication.

### Thank you



