



DORIAN LPG

2023 ESG Report

This report outlines our commitment to a sustainable future. It is produced by Dorian LPG in accordance with the requirements of the Sustainability Accounting Standards Board.



Content

We are proud to present the **5th edition** of our **sustainability report**, which highlights our ongoing efforts to improve our environmental, social, and governance performance and transparency.

03	Introduction
04	Letter from our Chairman and CEO
05	About Dorian LPG
06	About LPG as an Energy Source
07	ESG Performance Highlights
08	Environment
21	Safety
24	Social
36	Governance
40	Performance Metrics
43	Appendix

Introduction



The report's framework is prepared in accordance with the Sustainability Accounting Standards Board (SASB) for Marine Transportation and NYSE Best Practice Guidelines, which ensures that the content and issues discussed are relevant, consistent, and comparable across companies operating in the shipping industry.



The scope of this report covers consolidated company-wide environmental, social, and governance (ESG) performance from January 1 to December 31, 2023, encompassing all assets and operations for which Dorian LPG holds majority ownership or operates.



Our chartered-in vessels are excluded from this report's scope. Additionally, the report does not encompass our financial performance. Our data collection methodologies are in alignment with industry best practices, applicable regulations, and standards. It is important to note, however, that the content of this report did not undergo external assurance.



With reference to SASB, we have developed a list of material topics that were validated and prioritized. This exercise informed the selection of material subjects included in this report and facilitated the collection of performance data.



The Company's Greenhouse Gas (GHG) emission data for its owned vessels have been independently verified by DNV GL, a third party, as part of the annual International Maritime Organization (IMO) Data Collection System (DCS), the Carbon Intensity Index (CII) and the European Union (EU) Monitoring, Reporting, and Verification (MRV) regulation for emission verification. We intend to review these elements annually to ensure their continued relevance and the accuracy of our reporting.

Letter From Our Chairman & CEO



It is my duty and pleasure to welcome you to our 2023 ESG Report marking five years of ESG reporting at Dorian LPG. The values which direct our approach to ESG are those we have inherited and adopted from our inception:

- **RESPECT FOR THE CUSTOMER**
- **CONTRIBUTION TO COMMUNITY AND ENVIRONMENTAL SENSITIVITY**
- **COMMITMENT TO QUALITY**
- **TRADITION OF HARD WORK AND MODESTY**
- **APPRECIATION OF EACH AND EVERY WORKER**

Purpose & Profit Complement Each Other in Shipping

2023 proved to be another profitable year for the VLGC Market. The logistical difficulties around crew changes and supplies spurred by covid diminished and global economies recovered, spurring demand for LPG. Nevertheless, geopolitical events and extraordinary weather affecting canals and routing patterns created difficult operating conditions for our crew and new challenges for our shoreside to address. We also achieved considerable cost savings from our emission reduction initiatives.

In 2023 we added four dual fuel VLGCs to our fleet, the CAPTAIN MARKOS from Kawasaki in Japan and three chartered-in Panamaxes built by Hyundai in Korea. In the fourth quarter, we placed an order with Hanwha Ocean in Korea for a new dual fuel VLGC/VLAC for delivery in the second half of 2026.

Expanding and Progressing our Decarbonization Efforts

On the decarbonization front: We are implementing energy saving initiatives, with excellent ship shore cooperation, and making measurable headway with operations based decarbonization measures while constantly evaluating retrofit opportunities and new technologies for fuel optimization.

This year, we are including more comprehensive emissions reporting on environmental emissions such as methane, nitrous oxide, black carbon and carbon monoxide.

We have revamped our calculations based on the new IMO Green House Gas (4) four Methodologies for all emission parameters.

We complied with the EEXI requirements that came into force in 2023 and have managed the CII of our fleet with an average CII rating of B and no ships under a C rating.

Investing in Diversity

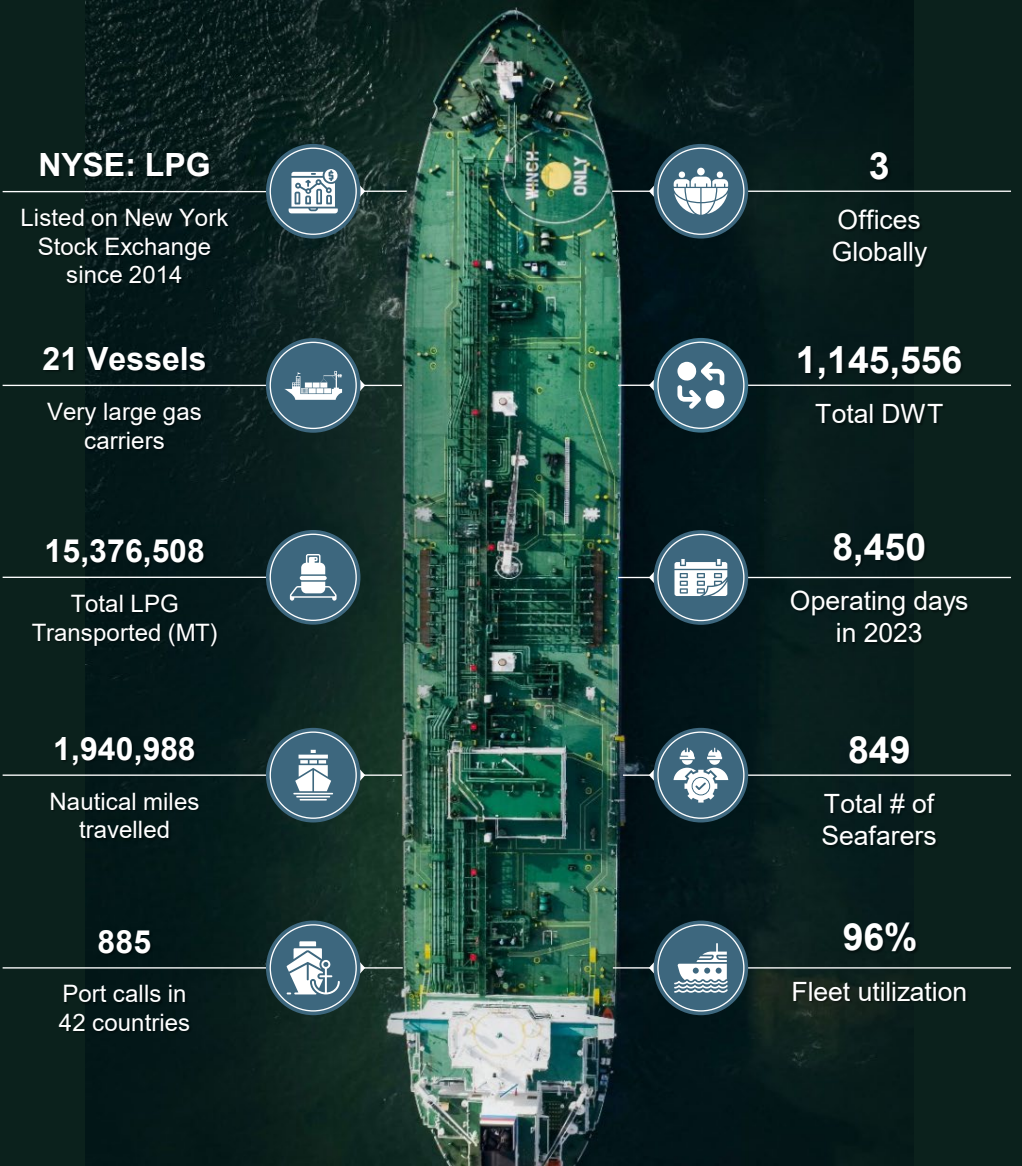
On the Social side of our business: We are addressing the substance of diversity, equity and inclusion through our participation in the Global Maritime Forum's All-Aboard Alliance initiative and by increasing the number of females on board our ships.

Our mission statement to provide Safe, Reliable, Clean and Trouble-Free Transportation guides our efforts and has stood the test of time. We are committed to reliable and accurate measurements and transparency in pursuit of the industry's shared goals.

I hope that this report will provide you with a useful update.

Sincerely,
John Hadjipateras

About Dorian LPG



Committed to ensure the safety of our seafarers and the environment first and foremost, Dorian LPG's mission has always been to arrange safe, reliable, clean, and trouble-free transportation. With our management's long history in shipping, we respect the significant responsibility our crew and customers place in us to provide a high-quality service that ensures the safety of our seafarers and the environment first and foremost.



Our owned fleet currently consists of twenty-one Very Large Gas Carriers ("VLGC"s), including our nineteen fuel-efficient **84,000 cbm** Eco-design VLGCs, one **82,000 cbm** VLGC, and one **86,000 cbm** dual-fuel VLGC.



In addition, in the 1H of **2023** we entered into an agreement to take delivery of **3** newbuilding dual-fuel VLGCs on long term time charters. Thirteen of our technically managed ECO VLGCs are fitted with exhaust gas cleaning systems (commonly referred to as "scrubbers") to reduce Sulphur emissions.



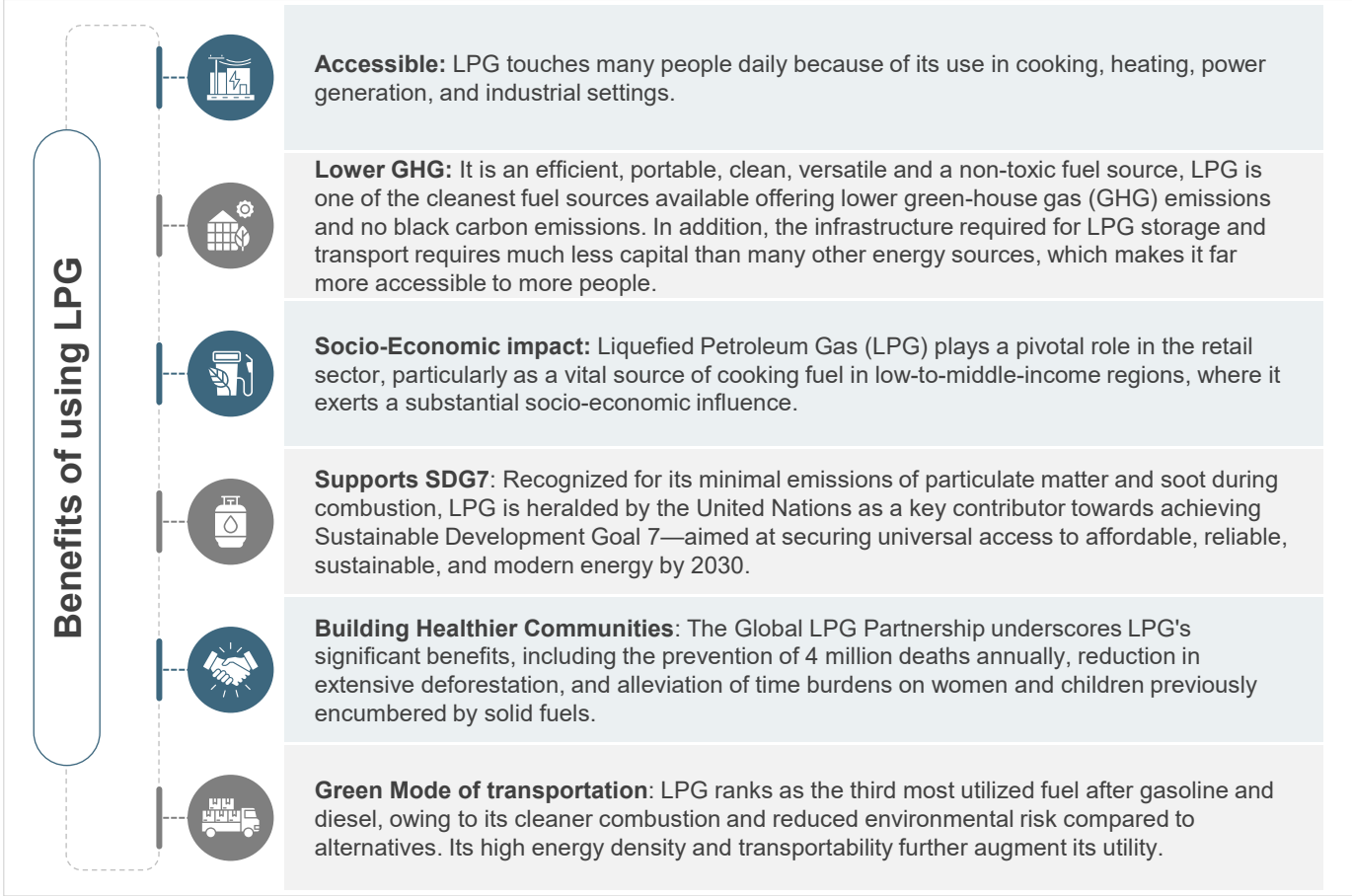
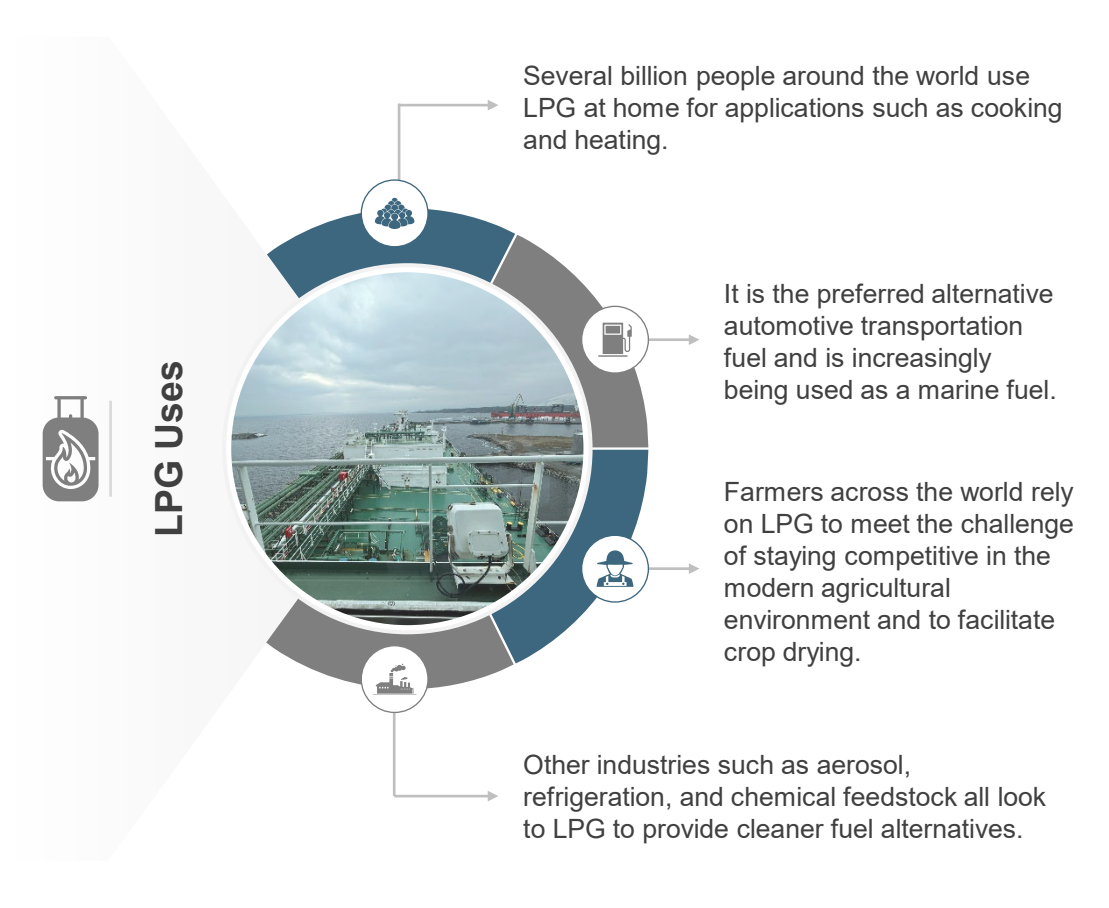
We also provide in-house commercial and technical management services for our vessels.

About LPG as an Energy Source



What is LPG

Liquid Petroleum Gas or “LPG” is the term used to describe the mixture of two specific natural gas liquids or “NGLs” -- propane and butane, which are mixed for ideal energy yields and properties. LPG is recovered during the extraction of oil and natural gas and is also produced in the refining of crude oil.



Moreover, in instances of accidental spills or vehicular release, LPG poses no risk to soil, surface water, or groundwater, underscoring its environmental compatibility.

ESG Performance Highlights for 2023



Environmental



Zero ↓

Spills release to Marine environment



2.34 % ↓

Reduction in PM10 emissions



7.8 % ↓

Reduction in EEOI emissions



1.24 % ↓

Reduction in Sox emissions



1.18 ↓

Reduction in NOx; emissions



Social



Gender Representative Ashore

- › **38.6%** Women
- › **61.4%** Men



Gender Representative Onboard

- › **476** Seafarers Onboard
- › **9** Women Onboard
- › **Zero** Casualties or severe marine accidents



Governance

Zero



Violations of our Conduct & Ethics Policy



Incidents of Whistleblowing policy



Cyber Attack incidents & Data breaches

Environment



Our Commitment to the Environment



Working with our lending partners, we have put in place a sustainability-linked financing transaction, which represents the main bank loan facility in our capital structure. The facility links the verified reduction in fleet carbon emissions - as measured by the Poseidon Principles through the AER score - with a commensurate reduction in our interest margin.



We believe that the involvement of financial institutions in such 'win-win' solutions can play a key role in the global decarbonization of shipping.



Since early 2021, we have increased the use of technology by equipping all our vessels with advanced fleet monitoring software. Our aim was to benefit from a state-of-the-art system that measures and optimizes fleet performance using real-time and historical operational data.



Responsible consumption and production



Climate action



Life below water



We have successfully implemented the IMO 2023 short-term regulations, and we will be in a better position to adapt for the upcoming IMO mid-/long-term GHG measures when those are established.



Our Fleet Performance Group monitors our vessels' performance in real time and considers the long-term trends, thus producing a valuable tool in our decision-making process.



We implement existing marine technologies with a proven track record, while at the same time examining innovative solutions and novel technologies that may become commercially available in the near-future.



We have set up an in-house, dedicated "New Tech" group tasked with researching and applying novel technical solutions and potential alternative fuels for fleet decarbonization , as well as keeping an eye on upcoming environmental regulations.



A fleet-wide program has been undertaken to investigate and install various Energy Saving Devices (ESDs), such as hull appendages (e.g. Mewis Duct, Propeller Boss Cap Fin, Fins), New propeller designs, and in future; Air Lubrication Systems, wind propulsion etc., which can reduce vessel emissions.



We have implemented a fleet-wide program for proactive hull cleaning using ROVs (wherever the service is available), capturing and sustainably disposing of fouling waste, significantly reducing fuel consumption, emissions, and protecting marine ecosystems from harmful biofouling.

Energy Efficiency and GHG Emissions



Carbon Intensity Indicator (CII Rating)



In line with its ambition set in 2018, the IMO introduced the Carbon Intensity Indicator (CII), effective January 1, 2023. The CII assigns each vessel an annual rating from A to E based on its Attained Energy Efficiency (AER) value, with tightening thresholds each year. This requires vessels to progressively reduce their carbon emissions to maintain an acceptable CII score (A, B, or C).

However, in 2023, the IMO updated its ambition to align with more stringent decarbonization goals, aiming for a 40% reduction in GHG emissions per transport work by 2030 and striving for net-zero GHG emissions by or around 2050, compared to 2008 levels.



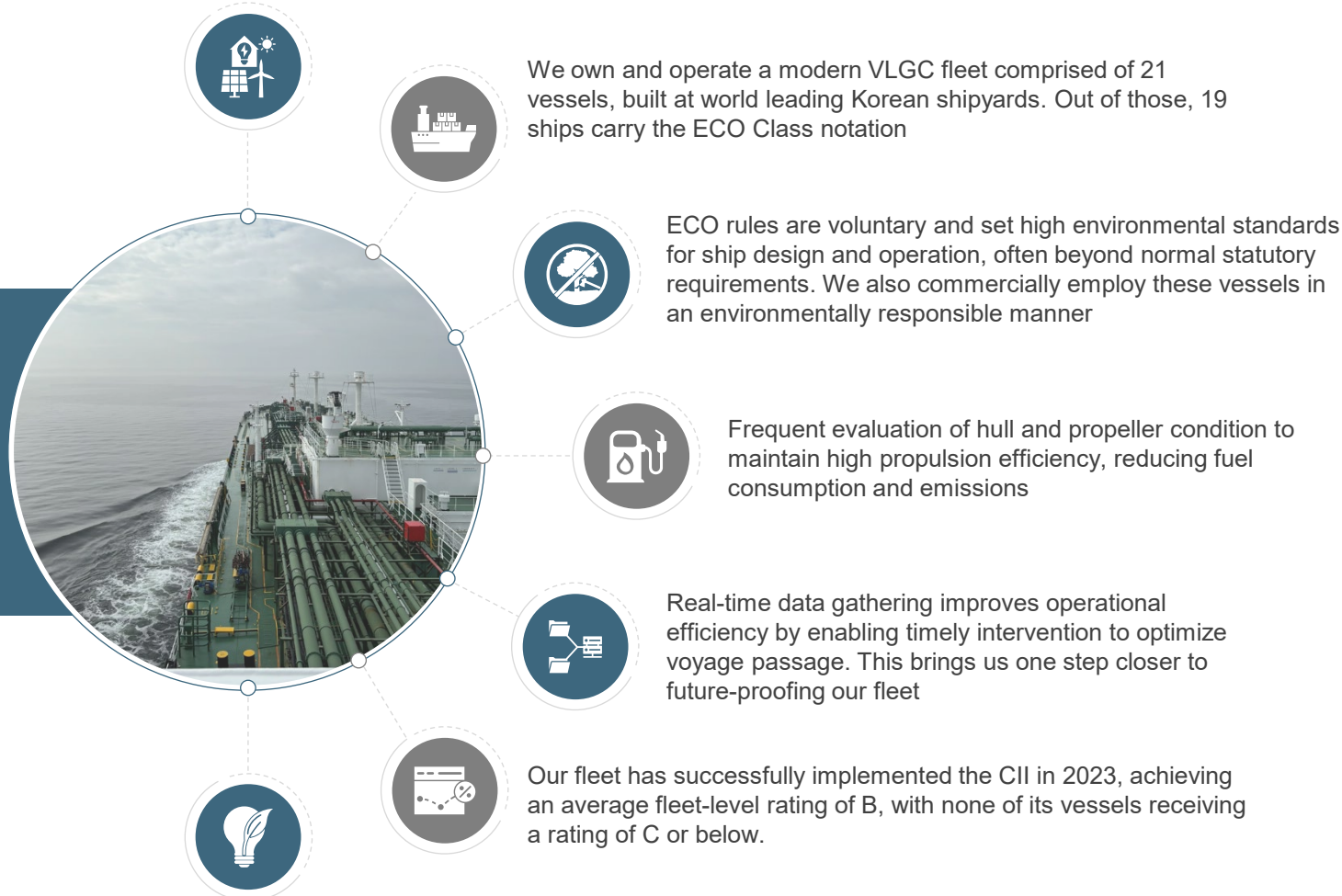
EEXI

To further improve the Technical energy efficiency across the global fleet, the IMO introduced the Energy Efficiency Existing Ship Index (EEXI), which came into effect on January 1, 2023. The EEXI measures the technical efficiency of existing vessels in terms of grams of CO₂ emitted per deadweight ton-mile (gCO₂/DWT ton-mile), building on the framework of the Energy Efficiency Design Index (EEDI), which applies to new ships.

The EEXI sets minimum energy efficiency standards for existing ships, requiring them to meet specific thresholds to comply with the IMO's decarbonization targets.

Energy Efficiency and GHG Emissions

While our vessels comply with IMO efficiency requirements, we always strive to perform better



We monitor our fleet's CO2 footprint per ton-mile through IMO's Energy Efficiency Operational Indicator (EEOI) and through the Poseidon Principles' AER (AER)

EEXI Implementation



Non-compliant vessels can limit their Main Engine MCR via Engine Power Limitation (EPL) or undergo retrofits with Energy Saving Devices



To comply, a vessel's attained EEXI must be at or below a required benchmark



Dorian LPG implemented permanent power limitation (PPL) on most vessels in 2023 to comply with EEXI regulations.

CII Implementation



Vessels that receive a D rating for three (3) consecutive years, or a single E rating, will have to take comprehensive corrective action as outlined in the SEEMP Part III document



Dorian LPG implemented variety of operational means to improve the carbon intensity of the fleet:

- › Ship speed optimization,
- › Weather routing
- › Just-in-time arrival
- › Trim, draft, and ballast optimization

Global Regulatory Developments



IMO MEPC 80 Update

In **July 2023**, the Marine Environment Protection Committee (MEPC) held its 80th session, focusing on significant advancements in maritime environmental sustainability.

A key highlight was the **adoption of the 2023 IMO Strategy on Reduction of GHG Emissions from Ships**, targeting net-zero emissions by 2050, with interim goals of 20% (30% striving) and 70% (80% striving) reductions by 2030 and 2040, respectively.

MEPC 80 revised biofouling management guidelines to minimize the transfer of invasive species and improve fuel efficiency.



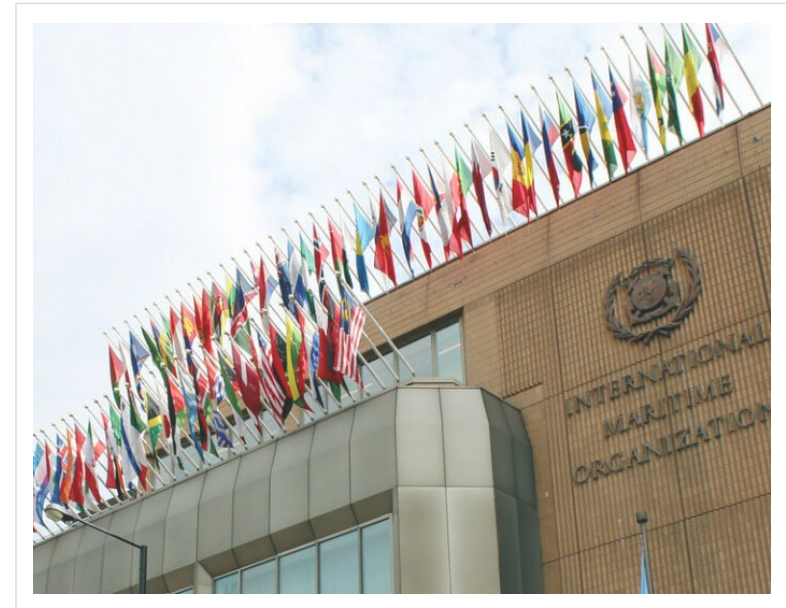
Additionally, well-to-wake emission factors for marine fuels are being developed for adoption in the near future.



At IMO MEPC 83 in 2025, potential updates to the Greenhouse Gas (GHG) Strategy could include more stringent emissions reduction targets, enhanced enforcement mechanisms, and pathways to accelerate progress toward the 2050 net-zero goal.



There is a clear trajectory towards increasing decarbonization efforts in shipping, among other industries.

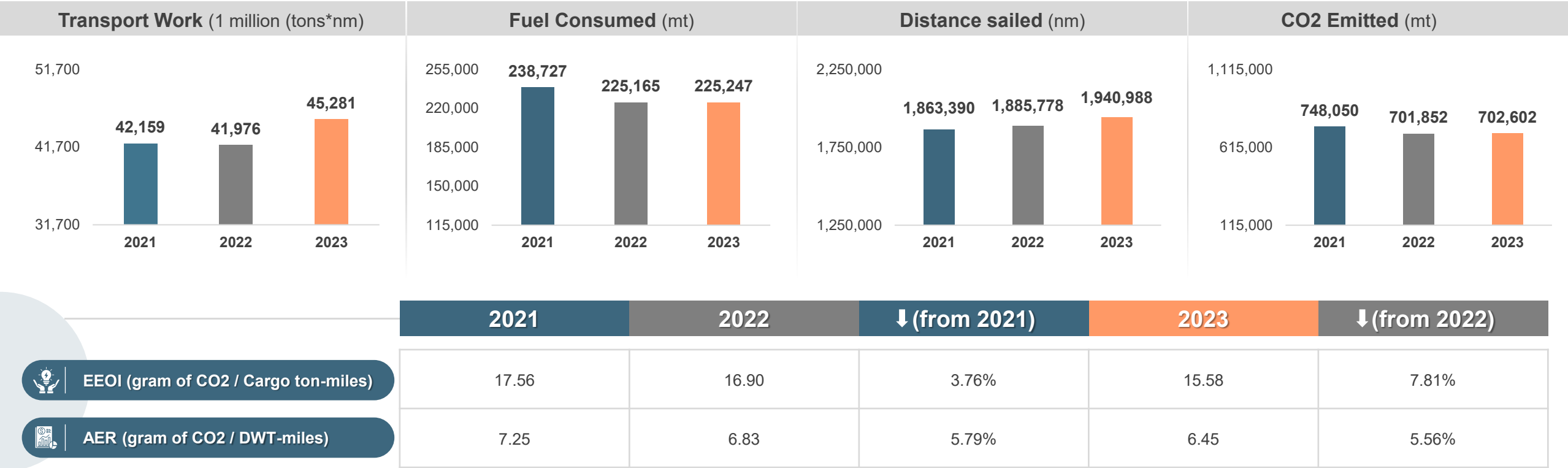


Energy Efficiency and GHG Emissions - 2023

The Energy Efficiency Operational Indicator (EEOI) is a self-monitoring tool, quantifying a vessel's fuel efficiency from operation (in grams of CO2 per cargo ton-mile carried). While the EEDI reflects a ship's design efficiency, the EEOI captures real-world performance. Actions like route optimization and regular hull/propeller maintenance contribute to enhanced scores.



The Annual Efficiency Ratio (AER) measures the grams of CO2 per DWT ton-miles transport work performed by a ship during a calendar year. It is recognized that AER is less accurate at estimating a vessel's carbon intensity than some other metrics, such as the EEOI, because the actual cargo carried by a ship is often less than its maximum capacity DWT and many ships operate with ballast voyages for a significant part of the year.



Dorian LPG Decarbonization Toolkit

				
Category	Technical Efficiency	Operational Efficiency	Future Propulsion	Commercial Optimization
Potential Gain	5-15%	10-15%	20-80%	5-10%
Focus Areas	Hydrodynamic (Hull & Propeller) ● Hull Coating ▤ Propeller retrofit ▤ Mew's duct ▤ PBCF's Main Engine ● PMI ● ECO Torque ▤ MAN Prime Serve Assist Aux Power ● LED Lights ● VFDs ● AE Economizers	Under water services ● Hull Cleanings ● Propeller Polishing ● Niche Areas cleaning Voyage Optimization ● Weather routing ● Trim Optimization ● Speed Optimization ● Slow Steaming Crew Training ● Engine Tuning ● Part Load Optimization	Alternative Fuel ▤ Dual Fuel LPG (only for Newbuilds) ★ Biofuel ★ Ammonia Wind Propulsion ★ Rigid Wings ★ Suction Wings ★ Sails/Rotor Sails ★ Kites Carbon Capture ★ Onboard carbon capture	Commercial Contract ● CP/TC Clause ● Optimization ● Promote slow Steaming ● Virtual Arrival clause (Just-in-Time arrival)
	● Fleet wide implemented ▤ Ongoing/Partial implementation ▤ Pilot stage ★ Future projects			

Energy Saving Solutions



Mewis Duct / Pre-Swirl Stator/ Fins

Appendages that are installed on the hull, in front of the propeller (stem boss) and consist of a system of fins and/or ducts. These devices optimize the profile of the wake inflow, which increases the propulsive efficiency, generating power savings of about 3 - 6%. The fuel savings are in both ballast and laden conditions, throughout the vessel's speed range.



Premium silicone coatings

Silicone-based coatings provide a smooth, slippery surface with a very low friction coefficient, which makes it hard for fouling to attach to the hull of the vessel. To achieve the fuel-saving potential of silicone coatings, full blasting of the hull is required to provide a smooth substrate with reduced drag. The estimated savings of silicone coatings-compared with a newly applied premium anti-fouling- are about 5-7% over the life of the system.



Propeller Boss cap fin

A device attached to the propeller boss cap improves propulsion efficiency by recovering the energy lost from the hub vortex generated by the rotating propeller. The expected power savings are about 1.0-1.5%. The PBCF can be installed while the vessel is afloat, without any modifications to the hull and propeller, and without welding work, which greatly reduces downtime and installation costs. Moreover, it requires little to no maintenance throughout its lifetime.



New Propeller

The new propeller design utilizes advanced hydrodynamic principles to significantly reduce water resistance and enhance propulsion efficiency. The blades are engineered to minimize drag and maximize thrust, leading to smoother and more efficient vessel movement. By optimizing the blade area and increasing the propeller's diameter, we have achieved notable improvements in overall performance and fuel efficiency. Additionally, this design carefully controls cavitation and pressure pulses, keeping them at minimal levels to ensure both operational stability and durability.



Power meters

Power meters are critical instruments for boosting energy efficiency and cutting operational costs. These devices continuously measure and monitor electrical power consumption across equipment and systems in real-time. By delivering comprehensive insights into energy usage patterns, power meters allow us to detect inefficiencies with precision and implement strategies to optimize energy consumption effectively. This real-time visibility not only helps in identifying and addressing areas of energy waste but also supports data-driven decisions that enhance overall operational performance and contribute to significant cost savings.

Other Air Emissions



We adhered to IMO's Sulfur Cap regulation either using scrubbers and burning low Sulphur fuels



Our measures led to a reduction in NOx emissions to 14,562 metric tons, marking a 1.18% decrease from the 2022 level of 14,827 metric tons.



In 2023, our company achieved reduction in nitrogen oxides (NOx) and Sulphur oxides (Sox) emissions from our fleet.

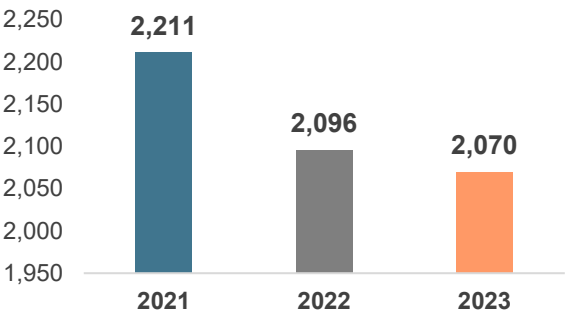


Scrubber (EGCS) systems are installed on 14 of our vessels. Meanwhile, vessels without scrubbers utilize very low-sulfur fuel (0.5%) to comply with environmental standards.

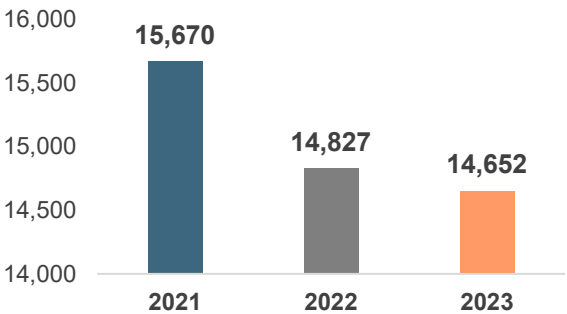


Similarly, our average EEOI (gram of CO2 / Cargo ton-miles) was lowered to 15.58 gram of CO2 / Cargo ton-miles in 2023, which is approximately 7.81% less than the 16.90 gram of CO2 / Cargo ton-miles recorded in 2022.

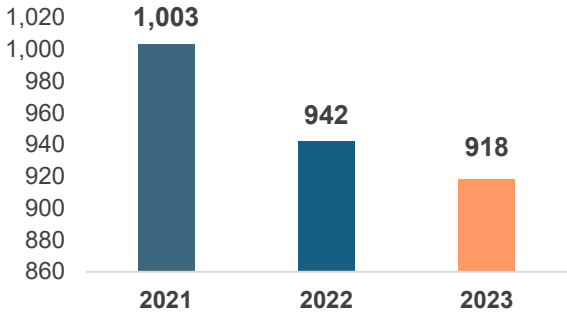
Sulphur Oxides (SOx) (mt)



Nitrogen Oxides (NOx) (mt)



Particulate Matter (PM10) (mt)



**The calculation methodology follows the Fourth IMO GHG Study 2020. It is important to note that Dorian LPG operated 21 vessels in 2023, compared to mostly 20 vessels in 2022.

Other Air Emissions Continued.



Carbon Monoxide (CO)

CO is caused from incomplete combustion of the fuel due to local areas with shortage of air supply. It can react with radicals in the air and in some circumstances react to form ground level ozone.

Nitrous Oxide (N₂O)

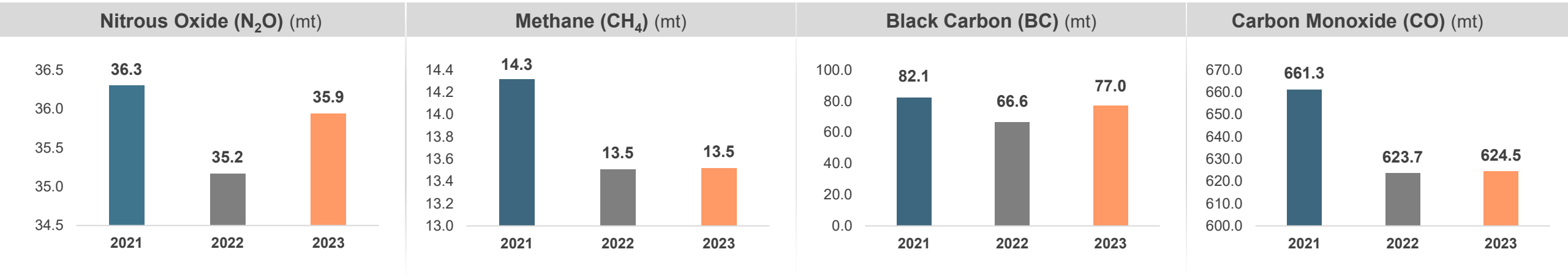
N₂O is produced during fossil fuel combustion when nitrogen in the air or fuel is oxidized in the high temperature environment of the engine.

Methane (CH₄)

CH₄ is produced when the hydrocarbons in fuels are not completely combusted. The methane content of the fuel, the engine type, the amount of non-combusted hydrocarbons passing through the engine, and post-combustion emission controls influence methane emissions.

Black Carbon (BC)

BC is a climate forcing agent formed through incomplete combustion of fuels. strongly absorbs sunlight, directly heating the atmosphere. When it falls on snow and ice, it accelerates melt, revealing darker land or water beneath, including in remote regions of the world, like the Arctic. The Black Carbon is calculated for main and auxiliary engines.



***The calculation methodology follows the Fourth IMO GHG Study 2020. It is important to note that Dorian LPG operated 21 vessels in 2023, compared to mostly 20 vessels in 2022.*

Protecting Marine Biodiversity: Reducing Adverse Effects of URN

Underwater Radiated Noise (URN)

Adopted URN Reduction measures

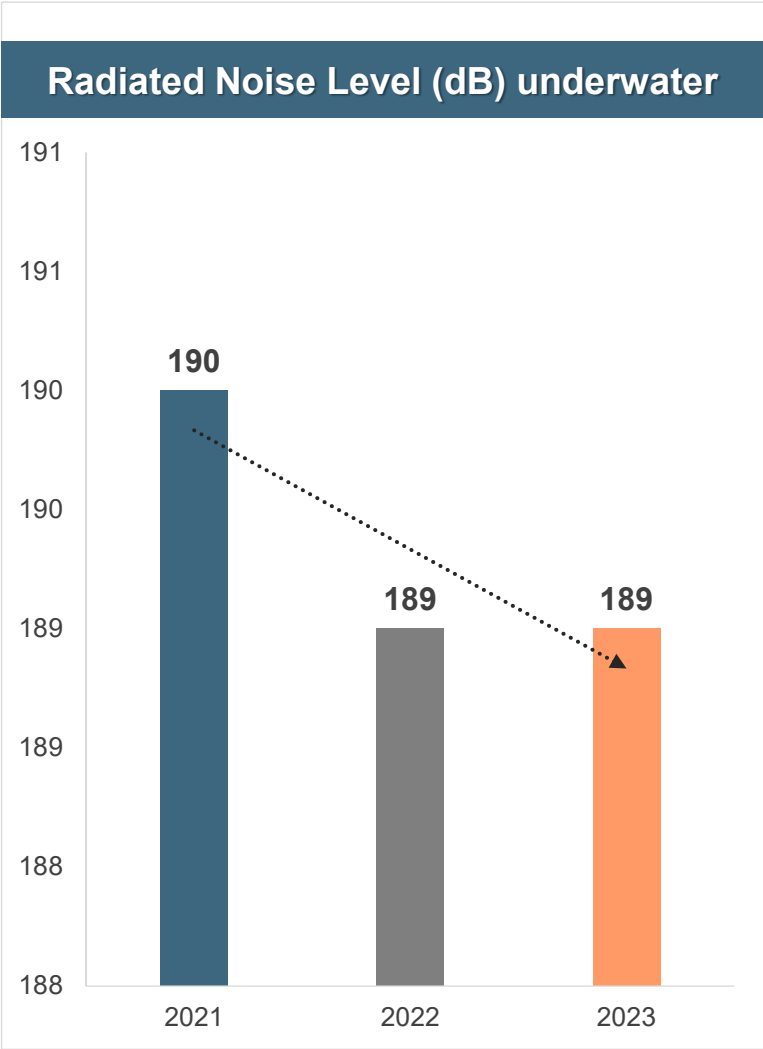
- › Wake flow improvement .
- › Optimizing the ship's trim to reduce the required power and therefore propeller cavitation noise
- › Improving voyage planning (e.g. optimum route, coordinated across fleets, national and international designated protected areas/sea-ice covered region, including well-known habitats or migratory pathways)
- › Hull maintenance (coating and in-water hull maintenance and cleaning, except acoustic anti-fouling systems where possible in national and international designated protected areas)

As a first step, we have used an empirical class method, based on the analysis of full-scale measurements that were made by Holden et al. (1980), to estimate our underwater radiated noise. This method employs a regression-based formula to estimate both non-cavitating and cavitating pressures from the propeller.

Even though the IMO MEPC.1/Circ.906 guidelines are voluntary, Dorian LPG has proactively calculated the propeller underwater radiated noise to gain a better understanding of its impact on marine environments. This initiative reflects the company's commitment to environmental stewardship and sustainable maritime practices.

The Marine Environment Protection Committee (MEPC) of the International Maritime Organization (IMO) passed the revised guidelines, MEPC.1/Circ.906, on 1 October 2023 to address the adverse impacts of underwater radiated noise from shipping on marine life. These guidelines are crucial for mitigating noise pollution in marine environments, promoting the protection and preservation of marine ecosystems, and ensuring sustainable maritime operations.

Our proactive measures led to a reduction in Radiated Noise Level, stabilizing it for the years 2022 and 2023. This achievement underscores our commitment to minimizing environmental impact while ensuring consistent and sustainable vessel operations.

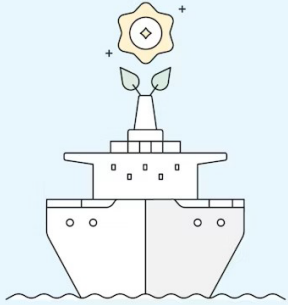


Protecting Marine Biodiversity

Partnerships and Collaborations



Partnership with Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping



Dorian LPG is pleased to initiate a strategic alliance with the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping, Copenhagen as a Mission Ambassador from January 2023, aligning with the industry's collective stride towards the 2050 net-zero ambition.



John Hadjipateras

Chairman and CEO of Dorian LPG announcing the collaboration commented:

“ To meet and exceed the industry' decarbonization targets there is an essential need for research and development collaboration amongst shipping and logistics organizations. We believe that the Center is performing a very important service to the industry and are happy to contribute Dorian expertise from Copenhagen, Athens, and the U.S. to help facilitate some of their important work. ”



Partnership with the Clean Hull Initiative



Clean Hull Initiative

In 2022, Dorian LPG became a proud participant in the Clean Hull Initiative (CHI), led by Bellona Foundation Norway, a collaborative project aimed at creating and implementing a universally recognized standard for proactive hull cleaning within the maritime industry. This initiative addresses the critical environmental issue of biofouling, which significantly contributes to global GHG emissions and facilitates the spread of invasive aquatic species.

By endorsing proactive cleaning measures, Dorian LPG is taking a stance against the negative impacts of biofouling, thereby enhancing energy efficiency and reducing the shipping industry's carbon footprint. Through CHI, Dorian LPG joins forces with key industry, public, and civil society stakeholders to forge a consensus on sustainable hull maintenance practices, help develop an ISO standard, underpinning our commitment to environmental stewardship and operational excellence in our journey towards a greener maritime future.

Waste Management



Water and Waste Management



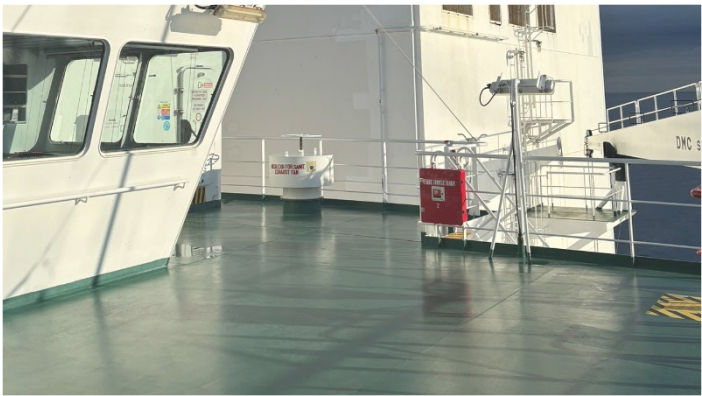
During 2023, our fleet generated a total of 11,443 cubic meters of waste, with the increase over last year primarily resulting from the addition of one extra vessel.



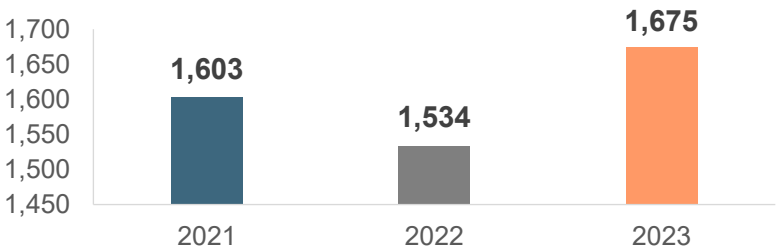
By the end of 2022, 100% of our fleet was equipped with Ballast Water Treatment Systems (BWTS).



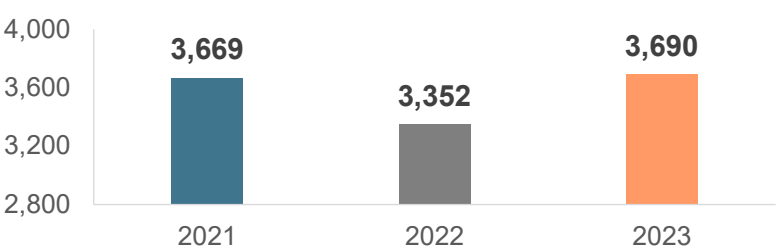
Fresh water management: We have installed water filtration units across our fleet in order to significantly decrease the use of plastic bottles on board our vessels to avoid pollution and reduce overall plastics consumption and to increase overall operational sustainability.



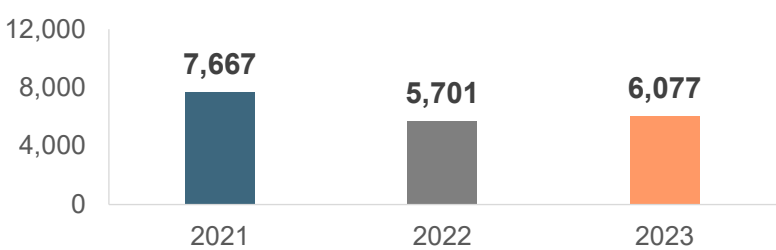
Garbage (m3)



Sludge (m3)



Bilge (m3)



Protection of Marine Ecosystem

Protect Marine Environment.



Adhere to the International Maritime Organization's Ballast Water Management (BWM) Convention

Prevent the transport of non-native and potentially harmful biological organisms such as zooplankton, algae, and bacteria.



By the end of 2022, we had 100% of our fleet, with Ballast Water Treatment Systems (BWTS).

Our commitment to this cause remains steadfast and we abide by BWT standards globally.



Fleet with Ballast Water Treatment Systems (BWTS), %

	2021	2022	2023
	95.2%	100%	100%
	20 vessels	20 vessels	21 vessels

Safety



Health and Safety Standards

Uncompromising Health and Safety Standards



In our pursuit of exceptional health and safety standards, our goal remains steadfast: zero safety incidents and the wellbeing of everyone on board and ashore.



Our approach is anchored in proactively promoting occupational safety and rigorously adhering to safety protocols. We are also simplifying our communication messaging material on board and continuously engaging with our crew from an executive level down on the paramount importance of safety.



Our Lost Time Injury Frequency (LTIF) increased to 0.45 in 2023 compared to 0.23 in 2022, while our Total Recordable Case Frequency (TRCF) reduced from 0.68 in 2022 to 0.45 in 2023.



Our proactive approach is further evidenced by our Port State Control (PSC) inspection results: **35 inspections** in **2023** compared to **29 inspections** in **2022**, with no vessel detentions in either year.



In **2023**, we observed seven deficiencies with an **85.7% clean rate**, compared to seven deficiencies and **89.6% clean rate in 2022**.



In 2023, our commitment to high health and safety standards resulted in two Lost Time Injuries (LTI), with no Restricted Work or Medical Treatment Cases.



Our safety risk assessment is an ongoing process, diligently carried out through a comprehensive monitoring program. This program encompasses both internal and external inspections and audits, ensuring that activities onboard our ships are constantly overseen and evaluated.



This vigilant approach to safety underscores our commitment to maintaining the highest standards in our maritime operations, as part of our Environmental, Social, and Governance (ESG) responsibilities.

Health and Safety Standards Continued.



Our aim is to keep everyone safe and work towards zero safety related incidents. We strive to prevent injuries by promoting and enhancing occupational safety, while employing strict safety protocols.



Robust internal control mechanisms and policies along with a culture of continuous improvement help ensure we achieve our goal of zero environmental incidents and spills.



Our proactive approach is further evidenced by our Port State Control (PSC) inspection results: 35 inspections in 2023 compared to 29 inspections in 2022, with no vessel detentions in either year.



Back in 2021, Dorian LPG was one of the initial signatories to the Global Maritime Forum's Neptune declaration on Seafarer Wellbeing and Crew Change

4 Key Steps of the Neptune Declaration



Calling for seafarers to be recognized as keyworkers and given priority access to coronavirus vaccines.



Implementing health protocols for safe crew changes.



Increasing collaboration between ship operators and charterers to minimize the risk of **COVID-19** spread on vessels.



Ensuring that air transport continues to operate between major maritime hubs.

Social



Equal Opportunities

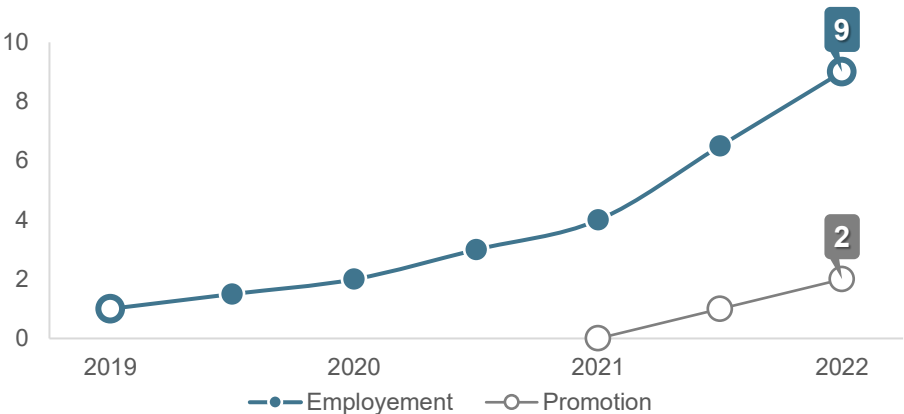


The Alliance for a Diverse, Equitable, and Inclusive Maritime Industry

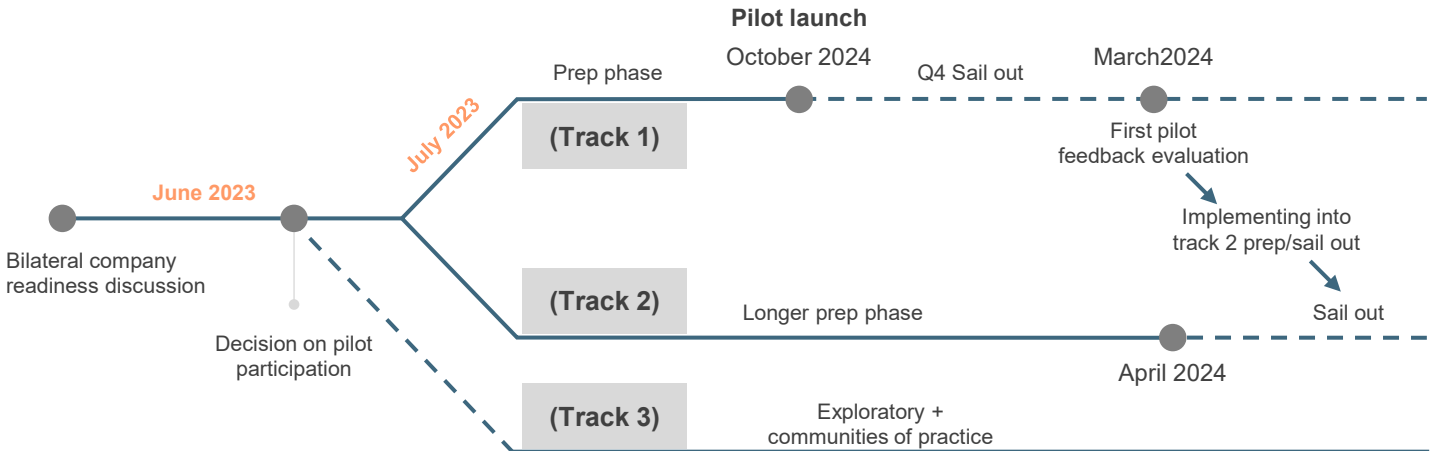
All-Aboard Alliance

In **October 2023**, the All-Aboard Alliance launched the **Diversity@Sea** pilot project, in which we, along with 10 other companies, are participating with selected vessels. Through data collection, targeted measures, and proposed solutions, this initiative aims to enhance inclusivity and improve the overall attractiveness of life at sea for all seafarers.

Dorian LPG has kicked off the **Diversity@Sea** with a pilot project on one of our vessels in “Track 2”, which was launched in April of **2024**.



Parallel Tracks of Action Focused on Female Seafarers



Diversity at Sea

Number of Seafarers

Nationality

Number of Active Seafarers

(31.12.2023)

Total 849

- 3 Estonian
- 26 Latvian
- 5 Polish
- 86 Ukrainian
- 2 Moldovan
- 102 Croatian
- 2 Bosnian



- 40 Russian
- 5 Lithuanian
- 542 Filipino
- 1 Belarusian
- 2 Turkish
- 4 Serbian
- 29 Montenegrin

Our Onboard Personnel



Our seafarers constitute an integral and fundamental part of our business success. Their development and welfare are vital for our operations



As of December 31, 2023, we had 849 seafarers in our active pool



Crew diversity: We employ crew of 14 nationalities worldwide with leading majorities from the Philippines, Croatia, Ukraine, and Russia



The average age of our seafarers as of December 31, 2023 was 38 years old



In 2019 we commenced the employment of female seafarers



We encourage the employment of women onboard our vessels and offer equal opportunities for recruitment and development



During 2023, 2 female Cadets joined the Company's pool. We also worked with the All-Aboard Alliance on ways to improve the conveniences provided of female seafarers on board.

Diversity Ashore



Employee Retention rate

for DLPG GR personnel, the retention rate is using Intertanko’s Benchmarking monitoring tool (Retention Rate, is counting the number of terminations in the last **1 year** in function to the number of Staff who working for the company)

95%



In-house maritime operational workforce with seagoing experience

15 Employees

with seagoing experience
2 Women & **13 Men**



2.8%

High School



97.2%

University & Postgraduate Degree

Employee Educational Background Composition (high school, university / postgraduate degree)

Enterprise headcount held by

men

54

Women

34

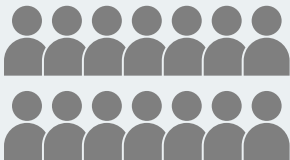
men & women per level



Number of Employees

88

employees in total



Meet one of our Seafarers



Our Onboard Personnel - Interview

Ms. Klydel Heinz Lagasca D/C



Why have you chosen a shipping career?

Growing up, I have witnessed my brothers as they succeeded in their maritime careers, so I got inspired and I had always imagined myself wearing that white uniform with yellow stripes.

It didn't matter if I am the only woman in a family of male seafarers.

Undeniably, this career may be difficult as it entails being away from your family. But as far as I know, this is one of the most rewarding jobs in the world. And there's nothing more to ask when you get paid well while doing what you love to do.



What are five things that you enjoy on board?

1. Having a good social circle on board
2. Getting the work done before it is due.
3. Having 'me' time or when I video call my family back home-- resets my exhaustion and gets me ready for the challenges of tomorrow.
4. We have a complete band set here on board where we got to bond and play songs. This is the best way to wrap up a tiring week.
5. To be able to get acquainted with other nationalities is also a plus. A diverse workplace empowers people to develop their talents and skills.



How important is socially interacting with other members?

I think that it is the most important factor in keeping our sanity while on board. Apart from missing your family back home for months, you get physically exhausted from your duties on board. Having a harmonious relationship with everyone is a plus.

We don't just have a professional relationship here, but a good friendship as well, which I think makes the vibe lighter.

Meet one of our Seafarers Continued.



What skills do you need to have for a successful career at sea?

Working at sea takes a lot of courage especially for a woman like me. Skills that make you a good seafarer are: first, you need to have a strong foundation of the theoretical aspects of the profession, then the skills come after as you practice your career on board and with the assistance and supervision of senior officers and fellow crew because most of them are highly experienced and skilled in this field.

Situational awareness is an important key in order to keep up with daily work and activity and to be able to perform these skills in a safe and efficient manner.

Lastly, the ability to work with grace under pressure, that is to think clearly and focused when things get rough.



Career Path

Before joining this ship, I had experience on board a domestic passenger ferry. An unforgettable experience where I did the same heavy labor as the men. The equipment was also far from what we have now. This experience molded me and gave me a strong determination to improve my skills and knowledge to level up my career. It took me a lot of hard work and time to finally have a good opportunity to be at a company like Dorian, so I promised myself to become a better version of me personally and professionally. Everyday on board is a learning day. Each day comes with a new hope, a new beginning, a new lesson and a new bunch of challenges.

To all my fellow women seafarers don't ever give up and think you are less competent to anyone. With persistent and diligent efforts, we can make the impossible possible.



Meet our Team Ashore



Our Onboard Personnel - Interview

Dionysios Konstantinos Neofytos
Vessel Performance Analyst
1 year with Dorian



How does your academic background in Engineering, together with your diverse professional experience uniquely equip you to excel in this role?

My academic foundation in Mechanical, Marine, and Mechatronics Engineering has endowed me with a rigorous understanding of fundamental engineering disciplines, including fluid mechanics, hydrodynamics, thermodynamics, naval architecture, and automation. This solid theoretical base, combined with hands-on experience in complex system modeling and optimization, empowers me to address technical challenges with precision and effectiveness. In my professional journey, my tenure at a leading main engine design company has been instrumental in honing my expertise in propulsion systems design, advanced hydrodynamic studies, and the implementation of emission reduction and green technologies. These experiences have cultivated a systems-level approach to problem-solving, allowing me to consider the interplay of various factors influencing vessel performance. By leveraging this multidisciplinary expertise, I am well-equipped to deliver innovative, data-driven solutions that not only enhance operational performance but also drive sustainable success in my current role.



How does your current position as a Vessel Performance Analyst diverge from your prior engineering roles?

My earlier roles focused primarily on technical aspects such as propulsion systems design and hydrodynamic analysis, my current position encompasses a broader mandate that includes conducting research to enhance vessel efficiency and monitoring critical performance metrics like vessel speed management and hull degradation, weather routing and new technologies. In this role, I engage in daily collaboration with Operations and Chartering teams to facilitate speed optimization and ensure data integrity from various sources. I also propose and evaluate innovative emission-reducing technologies and oversee regulatory reporting, ensuring compliance with charter party agreements and emissions regulations. Moreover, my responsibilities require me to translate complex data into actionable insights, educate teams on best practices, and train crew members in utilizing performance systems. This shift from a project-focused mindset to a more integrative approach highlights the evolution of my career, where I leverage engineering expertise to drive operational excellence and sustainability within the maritime industry.



How does the Vessel Performance Analyst role contribute to the overall strategic goals of the organization, particularly regarding sustainability and operational efficiency?

The Vessel Performance Analyst role is crucial to achieving the organization's strategic goals, particularly in light of the new regulatory frameworks such as FuelEU Maritime and the EU Emissions Trading System (EU ETS). By monitoring vessel performance metrics and analyzing fuel consumption, insights that ensure compliance with these stringent regulations could be provided. My contributions also extend to evaluating and integrating innovative technologies like wind propulsion and air lubrication systems. Wind propulsion allows vessels to harness renewable energy, reducing fuel reliance and emissions. I conduct performance analyses to quantify these technologies' benefits, ensuring they align with our operational efficiency goals. In summary, as a Vessel Performance Analyst, I leverage data-driven insights to drive compliance and promote sustainable practices, positioning the organization as a leader in efficient maritime operations while meeting regulatory requirements..

Meet our Team Ashore Continued.



What motivated your decision to transition from your engineering role at a major main engine designer company to a Vessel Performance Analyst at Dorian LPG?

My decision to transition from the major main engine designer company with multiple engineering roles to a Vessel Performance Analyst at Dorian LPG was driven by a strong desire to focus on the operational aspects of maritime vessels. I was particularly attracted to Dorian LPG's commitment to sustainability and innovation in the LPG sector. The opportunity to analyze and optimize vessel performance in real-time, contributing directly to efficiency and environmental goals, was a compelling factor in my decision.



How do you anticipate your role as a Vessel Performance Analyst at Dorian LPG will address the challenges of decarbonization and performance improvement?

As a Vessel Performance Analyst at Dorian LPG, I anticipate my role will be pivotal in addressing the challenges of decarbonization in the maritime industry. By leveraging data analytics and performance monitoring, I can identify key areas where energy efficiency can be improved, leading to reduced fuel consumption and lower emissions. Through continuous performance evaluation and strategic operational adjustments, I aim to support Dorian LPG's commitment to achieving decarbonization goals and contributing to a more sustainable maritime sector.



How does the working culture and ethics at Dorian LPG align with your professional values and goals?

The working culture and ethics at Dorian LPG strongly align with my professional values and goals, particularly in terms of commitment to sustainability, innovation, and integrity. Dorian LPG fosters an environment that encourages continuous improvement and responsible practices, which resonates with my dedication to reducing environmental impact and enhancing operational efficiency. Additionally, the collaborative and supportive atmosphere at Dorian LPG makes it a enjoyable and engaging place to work. The company values teamwork, transparency, and ethical behavior, ensuring that all initiatives are pursued with a sense of accountability and mutual respect. This alignment allows me to fully commit to my role as a Vessel Performance Analyst, knowing that my contributions support both the company's mission and positive impact in the maritime industry.

Sustainable Procurement Practices

Ensuring that our supplied goods to the fleet meet required standards for the safe operation of vessels; the health, safety, and wellbeing of the crew; and the protection of the environment.



We collaborate and build long-lasting relations with equipment manufacturers, strictly purchasing genuine spare parts for the fleet. At the same time, we cooperate with reliable and qualified suppliers that trade under the International Ship Supplier Association (ISSA) and/or International Marine Purchasers Association (IMPA) and are also certified with an International Organization for Standardization (ISO) standard.



Crew health considerations are always marked as one of our top priorities in the supply of all goods and materials with a view to eliminating or mitigating any hazards.



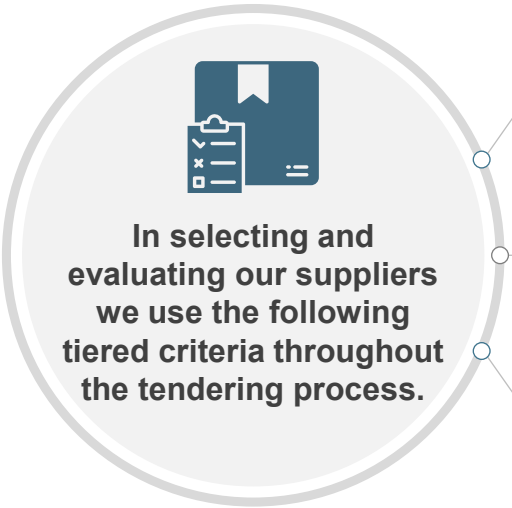
Our health, safety and protection of the environment policies and commitments are communicated to our suppliers and subcontractors.



Supplier Selection Process and Criteria

To improve our efficiency, we place great emphasis in consolidating our spare parts shipment and forwarding activities.

During the reporting period, purchasing achieved a consolidation ratio of **4.48 orders and 380 kg per shipment**.



A supplier must have the ability to **meet specification** or other applicable standards.



All applicable **Health, Safety and Environment (HSE)** standards are to be met.



The **cost and payment** terms and **availability** of requested items within the time frame are then evaluated.

In 2023, 428 Suppliers were successfully evaluated based on our internal procedures.

Caring For Our Community

Dorian and or our Chairman's family supported the following charities:



[Arkas Earthquake Relief Program](#) is a program backed by Arkas Logistics and other companies to help earthquake victims in the hardest hit regions of Turkey.



[Audubon](#) group works to promote environmental awareness and restore natural ecosystems, focusing on birds and their habitats.



[Aurora Humanitarian Initiative](#) is a foundation that seeks to address on-the-ground humanitarian challenges around the world with the focus of helping the most destitute.



[Estia Agios Nikolaos](#) is a life-sharing community where adults with intellectual and developmental disabilities and their caregivers live, create and grow together.



[Global Lyme Alliance](#) supports the research and awareness of tick-borne diseases.



[The Hellenic -American Cultural Foundation](#) shares the Greek heritage with all who are interested through cultural events.



Social Responsibility

Social responsibility is integral to our history and ethos. Our aim is to help improve communities and the environment in which we operate and each year we undertake select community-investing initiatives which we believe can make an impact.

Caring For Our Community Continued

List of Charities Supported Continued:



[Kidscape](#) is a charity based in the UK which provides support to children, families, and professionals to challenge bullying and protect young lives



[Lyreion](#) an institution caring for underprivileged children founded fifty years ago with help from the maternal grandparents of our Chairman.



[Ormylia Center](#) & [The Hadjipatereion Children's Rehabilitation Center](#) both founded in memory of our Chairman's paternal grandfather and providing preventative cancer screening, diagnostic and support services.



[Union of Greek Shipowners Scholarship Program](#) which focuses on higher education, provided 100+ scholarships for postgraduate studies in Greece and abroad in 2023.



[Walkabout Foundation](#) which provides wheelchairs and rehabilitation in the developing world.



[The Zalala Foundation](#) was founded by Angela Hadjipateras, our chairman's sister, and supports education and health in Mozambique



In addition to the formal charities supported, Dorian encourages and sponsors employees to compete together in charitable races.

Educational Opportunities

Education



We are committed to the next generation of maritime professionals and sponsor scholarships awarded by Connecticut Maritime Association (CMA) Education Foundation (cma-edu.org). We have a partnership with University of Aegean in to foster continual development of their students (aegean.gr).



DSE- Danish Shipping Education



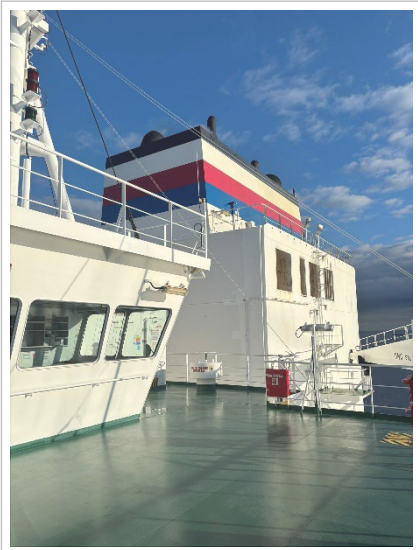
Danish Shipping Education is geared towards trainees from shipping companies such as Dorian LPG & involves a combination of theoretical & practical learning.



Trainees ensure a strong practical complement to the education's theoretical aspects and leading to holistic learning and solid understanding of shipping operations.



It combines theory and practice, and includes four in-person modules, which complement the practical on-the-job training and the online webinars.



Dorian LPG Internship Program in Greece

- › As we use to do all over these years, in co-operation with Aegean and Piraeus universities, our company employed for the year 2021, implementing and maintaining COVID-19 prevention and control measures, 2 students for their summer vocational practice.
- › Our Company's intention for all the students who interning at Dorian LPG, is the understanding of structure, functions and activities of a modern ship management office and return to their studies with the practical experience that will form the basis for further development.



CBS - Copenhagen Business School Internship & MBA Sponsorship program

- › Copenhagen Business School (CBS) is one of the largest business schools in Europe with more than 19,000 students and the only university that provides the business-oriented shipping bachelor in EU.
- › Dorian is partnering with the International Shipping and Trade CBS program in order to recruit interns and provide with the "hands on deck" experience within maritime industry.
- › The 9-month internship is an intense yet educational program that exposes new minds to operations, chartering and fleet performance departments' dynamics and provides an insight into how Dorian LPG and LPG business overall operates on the market.



Governance



Governance



Board Composition

Our majority independent Board of Directors (BoD) Committee has been established to ensure commitment to our stakeholder interests. Our board of directors is comprised of a diverse group of seasoned executives bringing backgrounds in shipping, energy trading and production, ship finance, and fund management. Five of the seven members of our board are fully independent of management, and only independent board members sit on the key subcommittees – audit, compensation, nominating and governance. We now have two women on our board.



Transparent Operations

We conduct our operations in a fair and extremely transparent manner. Our technical and commercial management is conducted through wholly owned subsidiaries, not through entities separately owned by our management. This structure ensures that our interests are aligned with all shareholders, which we believe is central to proper corporate governance.

The board has formed the following committees assisting with certain tasks and oversight.



Audit Committee

- ▶ The Audit Committee meets at minimum four times a year and periodically meets with the company's management, internal auditors and independent external auditors, separately from the Board.
- ▶ The Audit Committee has direct responsibility for the appointment, replacement, compensation, retention, termination and oversight of the work of the independent registered public accounting firm engaged to prepare an audit report.
- ▶ Committee comprises entirely of directors who meet NYSE's independent director classification.



Compensation Committee

- ▶ The Compensation Committee carries out the Board's responsibilities related to the compensation of the company's executive officers and provides guidance with respect to compensation matters.
- ▶ In view of the importance that independence plays in executive compensation, the Compensation Committee and the other independent directors regularly meet in executive session, without any members of management present.
- ▶ Committee comprises of three directors all of whom meet NYSE's independent director classification.



The Nominating and Corporate Governance Committee

- ▶ The Nominating and Corporate Governance Committee assists the Board in identifying, evaluating, and making recommendations to the Board concerning individuals for selections as director nominees for the next annual meeting of stockholders or to otherwise fill Board vacancies.
- ▶ The committee develops and recommends to the Board a set of corporate governance guidelines and principles applicable to the company. It reviews the overall corporate governance structure of the company and recommends improvements to the Board from time to time. The committee monitors progress of ESG efforts and together with management ensures integrity of reporting.
- ▶ Committee comprises entirely of directors who meet NYSE's independent director classification.

Governance



As part of establishing a strong corporate governance framework, and within the scope of our Risk Management procedures, we continuously assess our business operations, evaluate, and monitor the identified key business risks. In addition, twice a year we conduct internal audits on the activities that affect our financial statements.



We have adopted and communicated our Code of Business Conduct and Ethics, applicable for all the company’s employees, directors, officers, and agents.



The code covers key topics including but not limited to Conflicts of Interest, Honest and Fair Dealing and Anti-Corruption and Anti-Bribery.



We are committed to ensure an honest and trustworthy working environment, not only to our personnel ashore but also to our crew members onboard.



We are committed to high standards of ethical, moral, and legal business conduct.



During 2023, no bribery, fraud, or other whistleblowing incidents were recorded.



We have an Anti-Bribery and Corruption Policy which memorializes our commitment to adhere faithfully to both the letter and spirit of all applicable anti-bribery legislation in the conduct of our business activities worldwide.



We ensure a close monitoring of our employees’ compliance with our code of business conduct and ethics, as well as reporting procedures to relevant violations. During 2023, we had no violations by any ashore or onboard personnel and zero monetary losses because of legal proceedings associated with bribery or corruption.



To ensure elimination of incidents in areas with high corruption risk, in 2023, 0 ports calls were performed in countries that are positioned in the 20 lowest rankings of Transparency International’s Corruption Perception Index (CPI).



To ensure compliance with applicable laws and regulations of the countries where we operate, we have established various policies and procedures including our Whistleblowing Policy. We have contracted Issuer Direct, a confidential and secure third-party system to facilitate Whistle blower reporting for employees, directors, officers, contractors, subcontractors, agents, and vendors to raise concerns without fear of retaliation for reports made in good faith.



The vast technological advancements in our daily operations and the complexity of the electronic equipment onboard our vessels are linked with a high risk of human error and cyber threats. As digital processes are an integral part of our business operations, it is the responsibility to protect our company, clients, and personal data. Our Cyber Security Policy is designed following the best industry’s security practices and provides guidance to our employees related to their role and job responsibilities.



Through our Cyber Security Policy, we aim to ensure that information and systems vulnerable to Cyber-attacks are protected, regulatory and legislative requirements are met, Contingency Plans are in place, training is available to all our employees. Lastly, all breaches of information security, actual or suspected, are reported and investigated.

Governance

Transparent corporate governance is a key tenet of our Board's approach to oversight, and its members, in consultation with our counsel and selected experts, regularly review our practices and policies in comparison to other industry-wide standards and best practices.

Our board receives regular reports on the results of our environmental initiatives and our technical performance, as well as ad hoc updates on new technologies, if circumstances require.



Our board of directors is fully committed to overseeing and supporting our ESG initiatives.

Our Nomination and Corporate Governance Committee is charged with this responsibility, except for related party transactions, which are overseen by our Audit Committee.

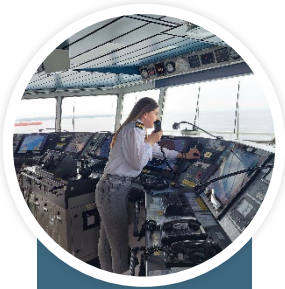
Changes are recommended and implemented as deemed required.

Snapshot of Dorian LPG's Performance Metrics - Environment



Description	Unit of measure	2023	2022	2021
Average Energy Efficiency Operation Index (EEOI)	gram of CO2 / ton-miles	15.6	16.9	17.6
Average Annual Efficiency Ratio (AER) per vessel	gram of CO2 / dwt-miles	6.5	6.8	7.3
Total energy directly consumed onboard the vessel	GJ	9,220	9,594	9,598
Total CO ₂ emissions	mt	702,602	701,852	748,051
Total Fuel consumption	mt	225,247	225,164	238,727
Total SOx emissions	mt	2070	2,096	2,211
Total NOx emissions	mt	14,652	14,847	15,670
Total PM ₁₀ emissions	mt	918	942	1003
Total N ₂ O emissions	mt	37,8	35,2	36,3
Total CH ₄ emissions	mt	13,53	13,51	14,32
Total BC emissions	mt	77.0	67	82.1
Total CO emissions	mt	624.5	623.7	661.0
Total waste generated	m3	11,443	10,588	12,939
Percentage of fleet implementing ballast water system	%	100	100	95.2
Number of spills and releases to the environment	number	0	0	0

Snapshot of Dorian LPG's Performance Metrics - Social



Description

Unit of Measure

2023

2022

2021

Description	Unit of Measure	2023	2022	2021
 Total seafarers on board	Number	476	500	523
 Seafarer retention rate	%	94.0	94.3	97.1
 Total shoreside employees	Number	88	81	81
 Company-wide gender diversity %	%	Female 38.6 Male 61.4	Female 34.6 Male 65.4	Female 33.3 Male 66.7
 Percentage of ashore employees with seagoing experience	%	19.3	13.6	19.8
 New hires*	Number	7	10	10
 Onboard internal audits and inspections	Number	95	97	97
 Port state control deficiencies and inspections	Number	7 deficiencies/29 PSC inspections	2 deficiencies/24 PSC inspections	2 deficiencies/24 PSC inspections
 Onboard injuries	Number	3	3	3
 Lost time injury rate per 1.000.000 manhours	Number	0.45	0.2	0.2
 Total Recordable Case Frequencies per 1.000.000 manhours	Number	0.45	0.45	0.6

Snapshot of Dorian LPG's Performance Metrics - Governance



Description

Unit of measure

2023

2022

2021



Port calls in countries that have the 20 lowest rankings in the Corruption Perception Index

number

0

0

0



Legal and regulatory fines and settlements associated with bribery or corruption

number

0

0

0



Number of violations of code and ethics policy

number

0

0

0

Appendix

Appendix I: Alignment with standards

SASB Marine Transportation material issues

	Disclosure Topic	Code	Page Reference
	Gross global Scope 1 emissions	TR0301-01	Pg. 9-13,
	Description of long-term & short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, & an analysis of performance against those targets	TR0301-02	Pg. 12-14
	Total energy consumed, percentage from heavy fuel oil, percentage from renewables	TR0301-03	Pg. 13
	Energy Efficiency Design Index (EEDI / EEXI) for new ships	TR0301-05	Pg. 10
	Air emissions for the following pollutants: NOx, SOx, and particulate matter (PM)	TR0301-04	Pg. 15
	Shipping duration in marine protected areas and areas of protected conservation status	TR0301-06	-
	Percentage of fleet implementing (1) ballast water exchange and (2) ballast water treatment	TR0301-07	Pg. 20
	Number and aggregate volume of spills and releases to the environment	TR0301-08	Pg. 40
	Lost Time Injury Rate (LTIR)	TR0301-12	Pg. 22, 41
	Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	TR0301-09	Pg. 42
	Amount of legal and regulatory fines and settlements associated with bribery or corruption	TR0301-10	Pg. 42
	Number of serious marine incidents	TR0301-11	Pg. 42
	Number of Conditions of Class or Recommendations	TR0301-13	Pg. 22
	Number of port state control (1) deficiencies and (2) detentions	TR0301-14	Pg. 22

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Officers Seminar – Riga, June 2023



Thank you to all Dorian seafarers, office personnel, and business partners for contributing to our ESG improvement efforts.