



Zodiac
Maritime

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Health, Safety and Environmental Report 2022



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View from the Chief Executive Officer

The constantly evolving global socio-political landscape ensured that 2022 was another dynamic year. Shipping, like other industries, had to navigate macroeconomic developments, global supply chain disruption and a potential restructuring of the global trade in energy and other commodities.

The current geopolitical conflict has had an immense humanitarian impact, with a significant number of our seafarers being directly affected. We have been and will continue to be there to provide our affected seafarers with all the support and assistance we can, to overcome this enormous challenge. Our manning offices have conducted extensive outreach and arranged evacuations for the families of affected seafarers. Since the conflict began, we have also devoted significant resources to ensure we continue to operate in compliance with all applicable sanctions.

The tanker markets bounced back in 2022 and optimism prevails for the coming year. This does not appear to be the case for the container and bulk markets, which are expected to be affected by low global growth expectations and high energy prices. At Zodiac Maritime, we always aim to maintain and strengthen resilience across our operations by quickly adapting to disruptions, while continuing to offer high quality services to our customers and safeguarding our people and assets.

2022 was another busy year for us on the energy efficiency front. Our dedicated teams worked hard to prepare for compliance with the International Maritime Organisation's (IMO) short-term measures aimed at cutting the carbon-intensity of all ships by at least 40% by 2030. Significant analysis, planning and investment on suitable technology was undertaken and we are pleased to provide additional details

about some of our projects later in this report. This comes on top of an already robust performance monitoring system encompassing technical and operational efficiencies that we have implemented at Zodiac Maritime over many years.

In 2023, our fleet will be expanded with new vessels utilising transition fuels such as LNG and LPG. While we are excited to have the benefit of fuel optionality on some of the operated vessels, we appreciate that this is a mid-term stepping stone towards shipping's decarbonisation.

The path to global fleet decarbonisation is a long and a still unclear one, which will require a combination of regulation and innovation by industry. We monitor closely the various pathways and emerging technologies, and we are committed to work with our customers to ensure appropriate steps are being taken to decarbonise the fleets that we manage, as and when a proven technology emerges.

While environmental matters are a high-profile issue for our industry, the promotion of safety on our fleet remains our top priority. In 2022, although our performance improved from the previous year, we still have further to go to achieve our objectives, and it is with sadness that we must report the loss of a crew member in a safety incident on board. We remain absolutely committed to driving improvements in our safety procedures to ensure we protect all our people, at all times. As ever, incidents that do occur are thoroughly reviewed and analysed so as to prevent, as far as possible, any reoccurrence.

Although the effects of the COVID-19 pandemic might have reduced for most of us ashore, seafarers are still impacted by restrictions in certain parts of the world. We have been there to support them all the way and we remain grateful for their patience, and continuing performance.

It is essential that we continue to seek more sustainable ways of working, while always supporting our complex operations. Our digital transformation project, a company-wide digitalisation

journey that we embarked on a few years ago, is well underway and is expected to enhance the sustainability and quality of our working practices.

Cyber security continues to rank among the highest of business risks and concerns about data privacy are on the rise. As we take protection of the privacy and assets of our internal and external stakeholders very seriously, we remain alert to developments, and we continue to invest in training and infrastructure.

Looking at the year ahead, we foresee some challenges but also opportunities arising. I am confident that thanks to the hard work, close collaboration, and respect for our work and each other that we have always shown here at Zodiac Maritime, we will have some good results to present in next year's report. In the meantime, I hope you enjoy reading the 2022 Report.

Daniel Ofer
Chief Executive Officer



The First Lady of Bulgaria Desislava Radeva visits a hotel in Varna where Zodiac seafarers' families were initially relocated.



Materiality Assessment

The 2022 Health, Safety and Environmental (HSE) Report covers issues arising during the reporting period which are considered as material to our operations. Although in general the term 'material' includes any issue which we consider to have significant impact on us or our stakeholders' operations, omission from this report does not imply that an issue is not important or given due consideration.

Zodiac Maritime maintains a quality management system incorporating both

international and national mandatory requirements, as well as voluntary standards including ISO 9001, ISO 14001, ISO 45001, and ISO 50001. As such, we regularly assess the wider context of the industry in which we operate, with reference to developing risks and opportunities that we need to address.

This report covers both the commercial fleet vessels under Zodiac Maritime's ship operation and management services run from our London office for calendar year 2022. The purpose of the report

is to provide our customers and other stakeholders with information on our HSE performance over 2022, using information collated from both internal and external sources. In recognition of the need for transparency, all information provided here has been externally verified by LRQA Group Limited (LRQA), as detailed in the Assurance Statement included in this report.

For further information please contact us. Our details are available on the final page of the report.



About Zodiac Maritime

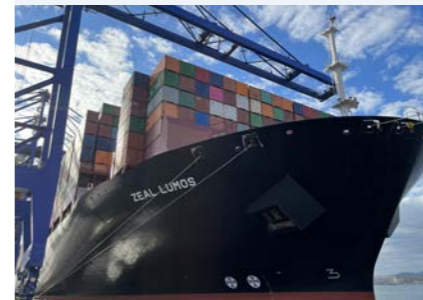
Zodiac Maritime Limited (Zodiac) is an international ship operating company for commercial vessels, providing a wide range of management services including commercial, technical, operations, crewing, sale and purchase, insurance, and legal services, as well as health, safety, quality and environmental management.

Zodiac Maritime manages a diverse portfolio of cargo-carrying vessels operating on international routes.

At the end of 2022, the operated fleet included a total of 128 vessels.

Fleet under Zodiac Maritime's management on 31 December 2022:¹

Container vessels



NUMBER:
26

CAPACITY:
Over 220,000 TEU

VESSEL TYPES:
1,700 to 15,000 TEU

Bulk carriers



NUMBER:
40

CAPACITY:
Over 5.7 million tonnes deadweight

VESSEL TYPES:
Handysize, Ultramax, Panamax and Capesize bulk carriers and Very Large Ore Carriers (VLOC)

Other key figures for 2022:

3,100+
Seafarers on board at any time

192
Office employees

4,700+
Port calls

8.70m+
Nautical miles of distance covered

0
Spills

0.79
LTIF (Health & Safety)

Tankers



NUMBER:
51

CAPACITY:
Over 4.5 million tonnes deadweight

VESSEL TYPES:
Chemical, Crude Oil and Product Tankers, LPG Carriers

Car carriers (PCTC)



NUMBER:
12

CAPACITY:
Over 78,000 units

VESSEL TYPES:
5,900 to 7,400 Vehicle Carriers

¹ As listed under Zodiac Maritime's Documents of Compliance (DOC), as issued by either the United Kingdom or Liberia.

Environment

Emissions and Energy Efficiency

Maritime shipping activity significantly contributes to air pollution given its reliance on internal combustion engines and fossil fuels. As the sector pursues future-proof solutions for decarbonisation and emission reduction, current major pollutants include carbon dioxide (CO₂), nitrogen oxides (NOx), sulphur oxides (SOx) and particulate matter (PM).

Zodiac Maritime acknowledges and aligns with the IMO GHG and air pollution strategies. Compliance with MARPOL Annex VI is of utmost importance to Zodiac. As such, we are strongly committed to monitoring and reducing our air emissions by applying new and existing measures on board the operated fleet.

Monitoring of fleet efficiency, carbon intensity and emissions is done via a sophisticated performance-monitoring system and a dedicated in-house energy efficiency team, in charge of reporting vessel performance. This allows us to actively involve all relevant teams into fleet efficiency.

Reduction of air emissions is achieved thanks to operational energy conservation practices applied on board, significant investment in vessel and equipment retrofits, and proactive exploration of new energy-efficiency technologies. Going forward Zodiac Maritime is looking to expand its operated fleet with newer, more energy efficient tonnage. Some of the retrofit projects undertaken by the company include bulbous bow optimisation, propeller boss cap fins, propeller ducts, LED lighting, variable-frequency drive motors and high-performance anti-fouling.

SOx emissions

Zodiac Maritime has been successful in reducing its SOx emissions by implementing a transition to very low sulphur fuels in compliance with IMO 2020 SOx regulations. Furthermore, the investment in scrubber retrofits on a portion of the fleet has resulted in a dramatic reduction of SOx emissions in 2020, with similarly low levels of emissions recorded for 2021 and 2022.

NOx emissions

Different NOx control levels (Tiers) apply to ships based on their construction date and operating area. Tier I and Tier II apply worldwide, while Tier III only applies in specific areas: North America and the United States Caribbean Sea, and the Baltic Sea and North Sea.

Zodiac Maritime is now actively monitoring NOx emissions for a second consecutive year. New vessels added to the fleet are designed for operation in Tier III NOx control areas and within the next two years, three new tankers and six new car carriers equipped with dual-fuel engines will join the fleet.

The new tankers will be fitted with LPG dual-fuel engines resulting in a reduction of NOx emissions in the range of 10–25% compared with Tier II engines on high sulphur fuel oil, while the new car carriers will be fitted with LNG dual-fuel engines achieving a reduction in NOx emissions in the range of 20–30%.

Emissions metrics

		Units	2020	2021	2022
Fuel consumption	Total fuel consumption (1)	Thousand metric tonnes (MT)	1,236	1,279	1,227
Emissions	CO ₂ emissions (2)	Thousand metric tonnes (MT)	3,860	3,992	3,832
	SOx emissions (3)	Thousand metric tonnes (MT)	12	13	10
	NOx emissions (4)	Thousand metric tonnes (MT)	– ²	88	86
	Refrigerant gas losses (5)	%	– ²	14.2	12.7

Activity metrics

Fleet data	Average fleet size (6)	Number of ships	128	129	127
	Deadweight (DWT) (7)	Thousand deadweight tonnes (MT)	12,883	13,381	13,305
	Total distance travelled by vessels (8)	Thousand nautical miles (nm)	8,478	8,730	8,740

Note: Regarding any number in brackets within tables, please refer to the Assumptions section on page 12 of this report.

² This is a new metric and historic data begin from 2021.

Refrigerant gases

The gases used in the refrigeration and air-conditioning systems of a vessel can have a significant global warming potential. Although deliberate release of these gases is prohibited, they can still escape into the atmosphere during improper plant maintenance or when there is a defect in the equipment. We have introduced a new KPI to measure the annual refrigerant gas losses in proportion to the total refrigeration

system capacity on our managed fleet, and in 2023 we will consider what additional measures can be implemented to further reduce gas losses.

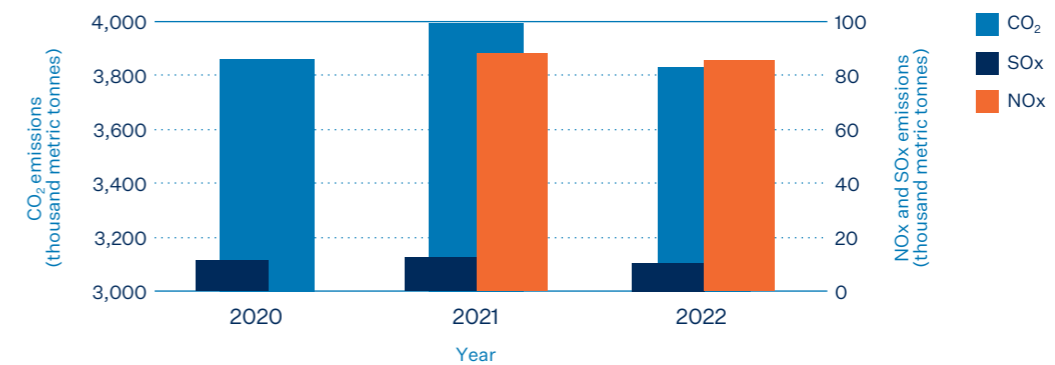
GHG emissions and Zodiac Maritime's strategy

In 2018, the IMO adopted an initial strategy on the reduction of Greenhouse Gas (GHG) emissions from ships engaged in international shipping. Zodiac Maritime's commitment is to align with

the IMO strategy in the reduction of GHG emissions through several methodologies implemented across the fleet, which are outlined within this report.

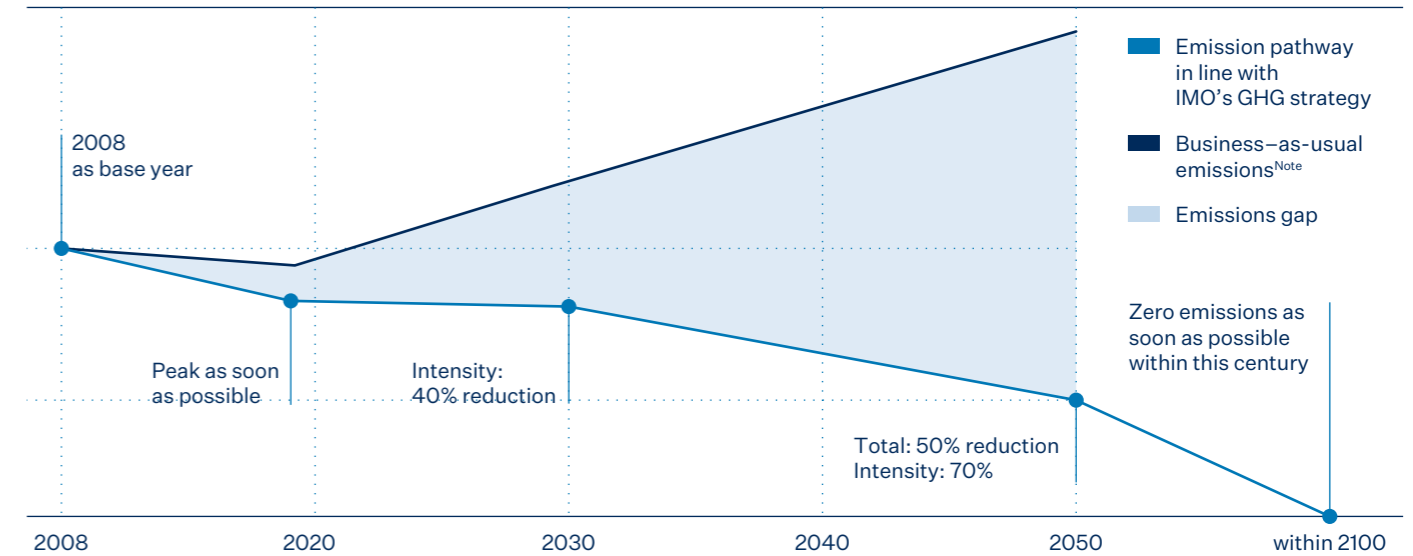
In 2022, we recorded a reduction of CO₂ emissions across the fleet. The addition of newbuild vessels with improved energy performance, the diligent monitoring of fleet efficiency and the retrofit of energy saving devices are the major contributors to this reduction.

Fleet emissions



IMO Strategy for major reductions in GHG emissions from shipping

Units: GHG emissions



Total: Absolute amount of GHG emissions from international shipping
Intensity: CO₂ emitted per tonne-mile
Note: The DNV GL business-as-usual emissions are illustrative, and not consistent with the emissions baseline used in the DNV GL modelling.
Source: DNV GL (2018a)

Energy conservation practices

Decarbonisation and reduction of emissions from the vessels require significant investment in energy efficiency through operational measures and technical upgrades.

Some of the most effective energy conservation practices are implemented fleet-wide in the Ship Energy Efficiency Management Plan (SEEMP I) and complemented with a ship-specific Shipboard Operational Carbon Intensity Plan (SEEMP III), to achieve compliance with Carbon Intensity Index (CII) requirements. These include:

- Slow-steaming (where possible), speed optimisation, weather routing, optimum scheduling and ‘just-in-time’ arrivals.
- Periodic inspections of the underwater hull area, propeller polishing and regular hull cleaning, when deteriorating performance is detected.
- Most-efficient engine configuration and strict compliance with the vessels’ planned maintenance system.

Efficiency improvement projects

Zodiac Maritime continues to actively invest in energy efficiency technologies that enhance vessel propulsion, reducing hull resistance and auxiliary

consumption. These technologies include the retrofit of propeller boss cap fins, pre-swirl stators, rudder bulbs, thrust fins and propeller duct, bulbous bow optimisation and propeller retrofits; application of most-advanced self-polishing and silicone hull anti-fouling coatings; fleetwide LED lighting and adaptive auto-pilot replacement programmes.

Over the last 3 years, numerous upgrade retrofits were completed or are in the process of being finalised:

Fleet upgrades

Installation	Number of vessels
Propeller duct	16
Propeller trimming	10
High-performance anti-fouling	25
LED lighting	13
Adaptive auto-pilot upgrade	10

Fuel savings from these installations range from 1% (auto-pilot upgrade) to 7% (propeller duct) of main engine consumption and can result in saving up to 70% (LED lighting) in lighting consumption.

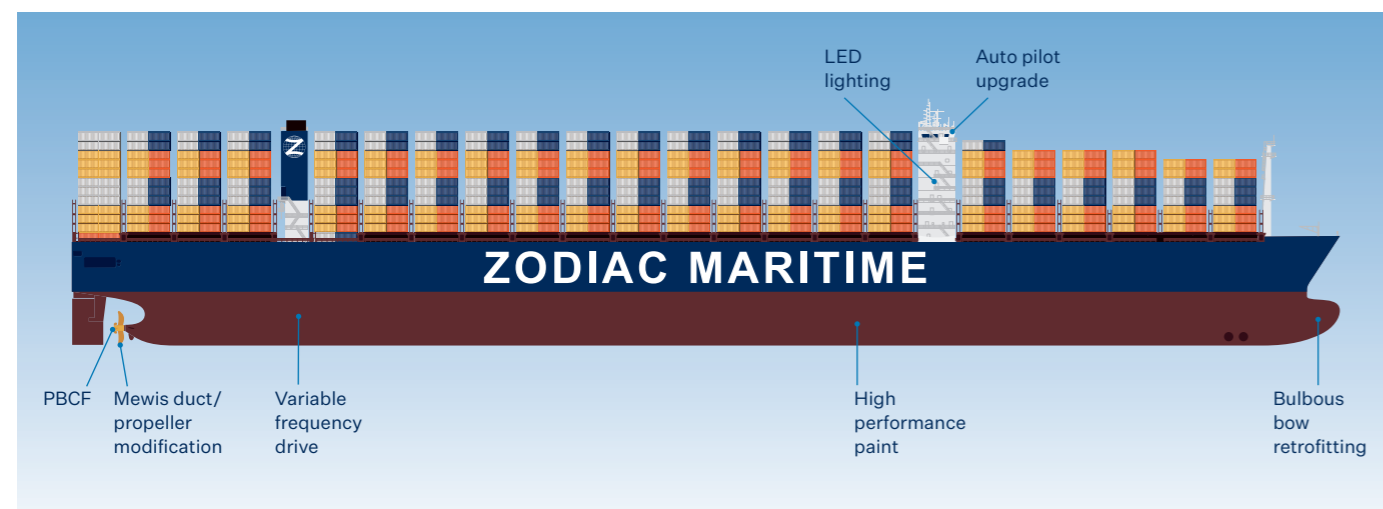
Moreover, we are exploring other fuel saving practices, including variable-frequency drive motors in the engine room, the installation of exhaust gas economiser power packs, deadweight increases and the trial of biofuel blends.

Monitoring performance

Zodiac Maritime uses an enhanced performance-monitoring system, which allows the team to collect and analyse data from the vessels to assess their performance. The system returns a series of key performance indicators which

are presented to and discussed with the responsible shore-management team on a regular basis. This allows for early detection of hull, engine and/or propeller performance deterioration facilitating timely decision-making when arranging hull cleanings, propeller polishings and engine overhauls.

Retrofitted energy-saving technologies



The system is also used for compliance purposes, as it allows us to collect and report data to the different GHG data collection schemes. These are the monitoring, reporting and verification (MRV) scheme run by the EU (Regulation (EU) 2015/757) since 2018 and the UK since 2023 (MGN 662(M)), as well as the data collection system (DCS) run by the IMO (MEPC 278(70)) since 2019.

by the IMO and selected as a base for the Carbon Intensity Indicator and calculation of CII rating. In addition, it is used within the Poseidon Principles, which were set out by a group of financial institutions and are used as a framework for assessing and disclosing the climate alignment of ship finance portfolios.

Moreover, Zodiac Maritime is actively

of the operated fleet’s total GHG emissions. New vessels are equipped with optimised hulls, enhanced propellers, the latest electronic-injection diesel engines, and energy-saving devices such as propeller boss cap fins and pre-swirl stators.

Shipping is heavily reliant on fossil fuels. Zodiac Maritime acknowledges that to achieve a decarbonised future, a transition to low-carbon fuels and new technologies will be required.

In 2023, Zodiac Maritime will expand the operated fleet with three newbuild dual-fuel LPG tankers. The use of LPG as a transition fuel significantly lowers a vessel’s CO₂ emissions up to 18% for diesel cycle engines, between 90 and 100% for SO_x emissions and up to 90% for particulate matter.

LNG is another alternative to conventional fuels that delivers an immediate reduction in emissions from ships. Within the next two years, the car-carrier fleet will be expanded with eight new ships fitted with dual-fuel LNG engines. The use of LNG reduces CO₂ emissions up to 24% and SO_x emissions to almost zero.

Efficiency metrics

	Units	2020	2021	2022
Efficiency Indicators AER (9)	gCO ₂ /DWT.nm	7.2	7.5	8.2
EEOI (10)	gCO ₂ /cargo ton.nm	18.6	18.7	19.5
EEDI (11)	gCO ₂ /DWT.nm	7.7	7.6	7.2

Note: Regarding any number in brackets within tables, please refer to the Assumptions section on page 12 of this report.

To ensure compliance with the latest MARPOL Annex VI carbon intensity regulations, the team also continuously monitors achieved carbon intensity of vessels and plans each voyage stage considering a compliant CII target.

monitoring the Energy Efficiency Operational Index (EEOI) that indicates operational efficiency of a ship in its real operating condition, considering capacity utilisation.

AER and EEOI

We consider the Annual Efficiency Ratio (AER) as the most relevant metric for operational efficiency, a metric developed

Alternative fuels and Energy Efficiency Design Index (EEDI)

The addition of newbuild vessels with EEDI values lower than those required by MARPOL is contributing to the reduction



Installation of propeller duct on M/T Hampshire



Application of high-performance anti-fouling paint on M/V Cape Buzzard

Energy Efficiency Existing Ship Index (EEXI)

Zodiac Maritime has finalised preparations to comply with the EEXI regulation. The Energy Efficiency Existing Ship Index is calculated in a similar manner to the EEDI and aims to reduce GHG emissions from ships. Within the fleet, 42 vessels already meet their specific required EEXI due to the efficiency of their latest technology electronic main engines and integrated energy-saving devices. For the remaining vessels, compliance is achieved through the installation of engine power limitations (EPL) and retrofit of energy saving devices such as propeller ducts.

Assumptions

1 Total fuel consumption

Total amount of fuel consumed by the company’s fleet during the calendar year. The number includes all fuel types consumed for main and auxiliary machinery for each vessel’s daily reported fuel consumption.

2 CO₂ emissions

Reported CO₂ emission is based on total fuel consumption of the fleet for the period derived from each vessel’s daily reported fuel consumption numbers with conversion factors provided by IMO for the various fuel types.

3 SOx emissions

Reported SOx emission is based on total fuel consumption for the fleet for the period derived from each vessel’s daily reported fuel consumption numbers. For each fuel type the SOx emissions are calculated from the sulphur content indicated in the Bunker Delivery Note (BDN).

4 NOx emissions

Reported NOx emission is based on the energy output of each engine installed for the period derived from each vessel’s daily reports and the specific NOx emissions from the approved technical file.

5 Refrigerant gas losses

Total annual losses (kgs) divided by the total capacity of the refrigeration and air-conditioning systems on vessels (kgs), expressed as a percentage.

6 Average fleet size

Reported number of vessels is calculated based on the weighted number of company-managed vessels within the period.

7 Deadweight tons (DWT)

Total DWT is adjusted by taking into account the varying time of each individual vessel within the fleet for the year reported,

8 Total distance travelled by vessels

The total distance sailed by all vessels in the fleet, whether in service or not and derived from each vessel’s daily reported distance within the period.

9 Annual Efficiency Ratio (AER)

Grams of CO₂ emissions divided by total distance travelled, multiplied by the total carrying capacity of the ship. The average AER number for 2020, 2021 and 2022 in this report is the average of the individual AER numbers for the applicable vessels.

10 Energy Efficiency Operational Index (EEOI)

Grams of CO₂ emission divided by ton-miles, calculating the number of tons transported over the distance travelled. The average EEOI number for 2020, 2021 and 2022 in this report is the average of the individual EEOI numbers for the applicable vessels.

11 Energy Efficiency Design Index (EEDI)

All vessels built from 2013 and onwards have EEDI assigned. Each ship’s EEDI value is the product of power installed, specific fuel consumption, and carbon conversion, divided by the product of available capacity and vessel speed at design load. The average EEDI number for 2020, 2021 and 2022 in this report is the average of the individual EEDI numbers for the applicable vessels.

Prevention of Marine Pollution

Zero spills in 2022

The release of hydrocarbons or other chemical substances in the marine environment can have significant impact on the ecosystem and the health and economic activities of the local communities. In 2022 no such spills at sea occurred in our fleet.

Waste management

The management and disposal methods of shipborne waste is strictly regulated by the MARPOL Convention. The only permitted discharges overboard are food waste and swept cargo residues (including cleaning agents) in wash water that are not harmful to the marine environment.

We closely monitor the annual waste production on our operated ships. A high number of scheduled dry-dockings of vessels in 2021 and 2022 have contributed to the increased amount of waste generated on board. Discharges of garbage at sea were in full compliance with international and local regulations and accounted for approximately 18% of total garbage produced on board. This percentage appears higher than previous years and is mainly attributed to the

trade pattern of a small number of bulk carriers which required frequent changes to the cargoes loaded and thus, frequent washing of the cargo holds.

Most of the waste generated is disposed of at port reception facilities, while another waste-disposal method is the onboard incineration of certain types of waste when the ship is an adequate distance from shore and sensitive sea areas. At Zodiac Maritime, we have extended the prescribed distance from shore, instructing vessels to only incinerate when beyond a state’s territorial waters even when MARPOL and local regulations permit doing so within. This is designed to further protect coastal communities and ensure compliance with any local requirements. Moreover, we continue using best practices, such as consolidating the dispatch of supplies to ships, with the aim of reducing the generation of waste from excessive packaging, as well as the carbon footprint of these deliveries.

Container loss at sea: impact to the environment

Containers can be lost overboard due to adverse weather conditions, navigation

incidents or improper stowage and securing arrangements on board. Lost containers can cause contamination of the marine environment, especially if their contents include harmful or toxic materials.

In 2022, and for the fourth year in a row, no vessel operated by Zodiac Maritime lost a single container overboard.

Environmental incidents

We enforce strict environmental compliance across the operated fleet and any deviations from our standards are dealt with very seriously. A fine was imposed on one vessel due to the condition of some waste receptacles on board not fully complying with the MARPOL Annex V requirements. On another occasion, a vessel was reported violating the speed limit in a Right Whale Seasonal Management Area off the east coast of the USA. The two incidents were investigated in an appropriate manner, and the important lessons learnt were communicated across crews to prevent reoccurrence.

Environmental performance metrics

Performance Indicator	Units	2020	2021	2022
Average fleet size	Number of ships (6)	128	129	127
Oil spills to water	Number of incidents (>1 barrel spilt)	0	0	0
	Number of incidents (<1 barrel spilt)	1	0	0
Garbage production	Cubic metres	9,700	10,400	10,600
Garbage disposal to sea	Percentage of total garbage production	13%	14%	18%

Note: Regarding any number in brackets within tables, please refer to the Assumptions section on page 12 of this report.



Environment



Protection of Marine Biodiversity

Ballast water management

Taking on ballast water is essential for ships to maintain stability and navigational safety in light cargo conditions. However, the transfer and introduction of microorganisms to foreign ecosystems can present a significant environmental risk.

Zodiac Maritime's operated fleet performs ballast water operations in accordance with the IMO's Ballast Water Management Convention. The Convention requires ships to sufficiently exchange their ballast or treat it with a Ballast Water Management System (BWMS). At the end of 2022, 91% of the vessels were operating a BWMS, with the rest of the fleet scheduled for a retrofit in time for compliance with the IMO deadline (8 September 2024).

Biofouling management

In addition to the carriage of invasive aquatic species in ballast water, ships can potentially accumulate and transfer such organisms on their hull. Biofouling also increases the ship's drag in the water and reduces its hydrodynamic performance, therefore increasing fuel consumption and the ship's GHG emissions.

The IMO has developed voluntary Biofouling Guidelines which at Zodiac Maritime, we have applied as a mandatory fleet-wide requirement since 2019 to mitigate the impact from ship biofouling.

Further environmental initiatives

A Particularly Sensitive Sea Area (PSSA) is an area of the marine environment that has been identified by the IMO as particularly sensitive on account of recognised ecological, socio-economic, or scientific attributes where such attributes may be vulnerable to damage by international shipping activities. The IMO mandates ship routing and reporting measures for vessels transiting these areas. We further instruct our vessels not to discharge otherwise permitted waste and effluents when sailing in PSSAs to ensure maximum protection of the local ecosystem.

We prohibit the discharge of treated bilge water from vessels travelling within any state's territorial waters, surpassing MARPOL requirements regarding the permitted distance from shore.

We are pleased to have implemented an environmental compliance module to the entire fleet. The module visualises environmental regulations on a chart and advises the user of any applicable restrictions along a voyage route. We

expect that the use of this module will greatly assist with on board decision making and benefit the local environment.

Responsible ship recycling

As part of its management services, Zodiac Maritime is able to provide assistance to ship owners looking to sell a vessel for recycling. As responsible ship operators and managers, Zodiac Maritime has always ensured that such sales are conducted in a strictly lawful manner.

Part of Zodiac's ethos is to continually improve its services and review best practices. Although not yet in force, Zodiac considers that the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships 2009 (the Hong Kong Convention) will provide a new benchmark for the way responsible stakeholders in the shipping industry recycle ships, and that the standards of the Hong Kong Convention are ripe for adoption now. Zodiac's policy is that if the owner of any vessel within the operated fleet requests assistance on a sale for end-of-life recycling purposes, we will only provide such assistance on the condition that the vessel is recycled in accordance with the Hong Kong Convention (as well as any other laws and regulations that may apply).

All vessels calling at European ports are now required to carry and maintain an Inventory of Hazardous Materials (IHM), under the European Union Ship Recycling Regulation. Once the required criteria for the entry into force of the Hong Kong Convention are fulfilled, the maintenance of an IHM will become an international requirement.

Zodiac Maritime continues to invest significant time and resources in ensuring that its business has the least possible impact on health, safety, and the environment, and operates fully in compliance with all applicable laws and regulations. The entirety of the fleet carries an approved IHM, irrespective of the trading pattern of individual ships.

Health and Safety

Safety Performance

Throughout Zodiac Maritime's operations, we remain committed to the prevention of workplace-related injuries and illnesses. In 2022, sadly, one of our crew lost his life during hold cleaning operations.

Whenever we experience any injury or incident within the fleet, we fully investigate each case to ensure that the identified actions and lessons learned can be fed back into our safety management system. Together with regular updates derived from changes to legislation and industry best practice, experience shared from both within and outside the company drives continual improvement of the system.

In addition to routine updates, we are also engaging in simplification of our management system. In 2022, we initiated a full review of our emergency reporting, enclosed space entry and mooring procedures as part of a long-term project to condense and simplify our system.

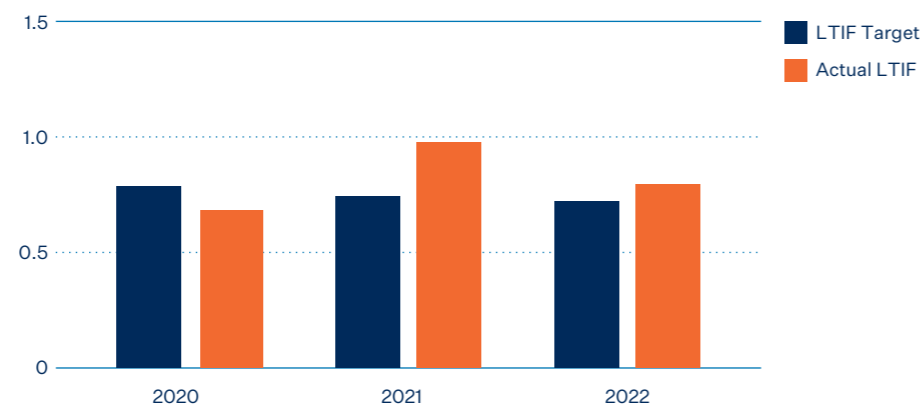
In 2022 we continued to present our webinar series to vessel crew, including hazard identification, risk assessment and toolbox talks, as well as continuing with navigation, anchoring, and maritime crew resource management courses to enhance the safety of our operations.

As a key measure of safety performance, the Oil Companies International Marine Forum (OCIMF) defines Lost Time Injury Frequency (LTIF) as the number of cases where a seafarer has been injured so that they cannot return to work on the same day (lost time injuries), per million man-hours of exposure (time on board). Our annual targets are set against this

and other metrics with the intention of driving improved performance with achievable goals, by taking historical performance into account. During 2022, the overall LTIF across the fleet has reduced from the previous year.

In 2022, we had no groundings or collisions at sea, however we did experience one collision at anchor with another anchored vessel. No injuries or pollution resulted from this incident, but there were some valuable takeaways in terms of watchkeeping and decision-making in congested anchorages, which were shared with crew across the operated fleet.

Lost Time Injury Frequency – All fleet



Occupational Health

As well as hazards presenting direct risk of injury, seafaring life poses many occupational health risks which can impact crew in the long and short term. Our safety management system incorporates both the Code of Safe Working Practices for Merchant Seamen and the ISO 45001:2018 Standard for Occupational Health and Safety

Management. These standards assist us in the systematic identification and mitigation of these exposures including hazardous atmospheres, noise, vibration, chemicals, and temperature extremes, as well as infectious diseases to which seafarers might be vulnerable.

Health and Wellbeing at Sea

The nature of ship operations means that crew do not have access to health and medical services for long periods of time. All seafarers are required to undertake pre-joining medical examinations to help reduce the risk of onboard illness. Officers are trained in the provision of medical care and supported by the

round-the-clock Maritime Telemedical Assistance Service (TMAS), but we consider preventive rather than remedial measures to be more effective where possible. This is why individual health on board is so important to us - from access to exercise facilities and healthy food options, to social spaces equipped with entertainment to help crews relax and unwind.

We know that mental health is just as important as physical health on board, both for the individual wellbeing of crew and for the safe operation of our vessels. All our seafarers are provided with mental health training and have access to a helpline in case they require support which cannot be provided on board for any reason.

Despite the best efforts of all involved, illnesses do occur. During 2022 there were 76 seafarers repatriated on medical grounds, and 6 crew members who were taken ill and subsequently passed away either on board or during hospitalisation.

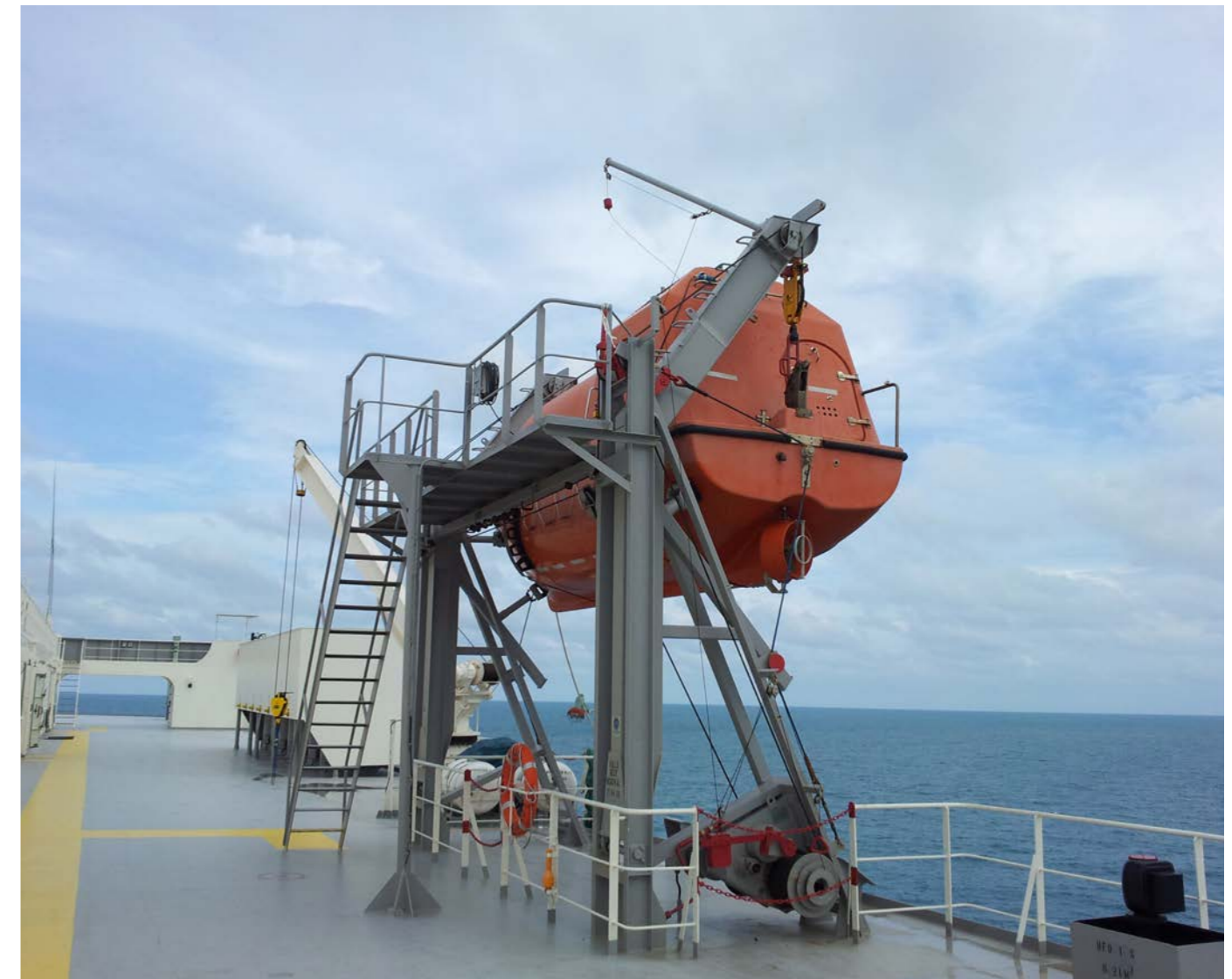
COVID-19

2022 saw the reopening of the majority of the world's borders after the pandemic, with the return to increasingly normal operations. There are still challenges to be faced, particularly in ensuring efficient crew changes, but these are much more manageable than during the peak of the pandemic and we are able to relieve crews in a timely manner in the vast majority of cases.

We are glad to see restrictions on shore leave being relaxed in certain ports, as this is an important element in allowing

seafarers to relax and be away from work pressures for a time. Diligence in preventing the introduction of infection to the vessel and crew is still required, and this will continue to remain a priority.

Ashore, this year saw the return of normal travel to vessels for inspections, audits, and other visits, enabling the more informal face-to-face engagement and communication between vessel crews and shore staff which has been absent since the start of the pandemic.



Inspection Performance

Port State Control Inspections

For vessels trading globally, Port State Control (PSC) is a key element in ensuring that compliance with applicable international and national regulations is maintained, particularly those controlling safety, environmental protection, and crew welfare.

Regional PSC organisations that operate under Memoranda of Understanding (MOUs) are established to coordinate PSC activities in that specific area. Our performance is reported within the largest regional MOU organisations, Paris MOU (covering Europe and eastern Canada), Tokyo MOU (covering large parts of Asia, China and Australasia), Viña del Mar MOU (covering South America) and the US Coast Guard (USCG).

During 2022, our vessels were inspected by PSC over 200 times throughout

the several thousand port calls made. The PSC 'clean inspection' rate remains high, as in previous years, with a positive 73% for the year 2022.

13 of our vessels qualified for the US Coast Guard's prestigious Qualship 21 initiative as at the end of 2022. Qualship 21 status is only conferred on vessels meeting rigorous acceptance criteria, with high standards of performance for both the ship and the operating company. To highlight, less than 20% of all foreign-flagged vessels that operate in the United States meet the strict eligibility requirements of this program.

Our company performance currently continues to rank as 'medium' for the Tokyo and Paris MOUs. We will monitor our PSC performance and strive to further improve our vessels' inspection results.

PSC Concentrated Inspection Campaigns (CIC) are carried out for a period of three months and focus on a specific topic. Paris and Tokyo MOUs included a CIC in the routine PSC from September to November 2022, which focused on various aspects related to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW Convention).

Ships in the Zodiac fleet were inspected 30 times under the detailed requirements of the CICs, and we are very pleased to report no findings during these inspections.

2022 PSC inspection performance summary

Authority ³	Total number of inspections	Number of inspections with zero observations	Average number of observations per inspection	Detentions
Paris MOU	54	36	0.85	0
Tokyo MOU	54	32	1.04	1
USCG	47	36	0.28	0
Viña del Mar MOU	24	20	0.21	0

³ In some locations, PSC inspections carried out are recorded in multiple PSC MOU databases. These inspections are shown here under each individual MOU against which they are counted, therefore some inspections will be double-counted.

Tanker Vetting

Ships in our tanker fleet (carrying crude oil, products, gas, and chemicals) are routinely inspected by representatives of the OCIMF (SIRE) and the Chemical Distribution Institute (CDI) to verify compliance with international legislation and industry standards. Charterers can

assess the suitability of a tanker to carry their cargoes based on the ship's vetting inspection performance, so it is essential that vessels achieve good results in these inspections.

Our performance remains high in vetting inspections and compares favourably

when benchmarked against the industry performance.

We are pleased that our tankers continue to be chartered to carry cargo for most of the major oil companies in the market.

Vetting performance summary 2020-2022

Programme	Average number of items raised per inspection			Management review of performance
	2020	2021	2022	
Ship Inspection Report (SIRE) ⁴	1.62	1.75	1.75	Achieved target performance
CDI	3.05	3.30	2.59	Achieved target performance



⁴ INTERTANKO shares the results of members' SIRE inspections.

Our People

Long-Standing Relationships

We are pleased to report high retention rates for both our teams on board and in the London Head Office for yet another year. In 2022, our staff turnover rate in our Head Office was only 7.3% (excluding planned retirement), with an average length of service of 9 years. Onboard retention rates remain high, at 78% for the whole crew and 87%⁵ for the senior officers.

At Zodiac Maritime, we run a long-service award scheme to honour and recognise our shore staff and seafarers' dedication, loyalty, and contributions to the company. In 2022, we presented 454 awards in recognition of 10 years' service or more.

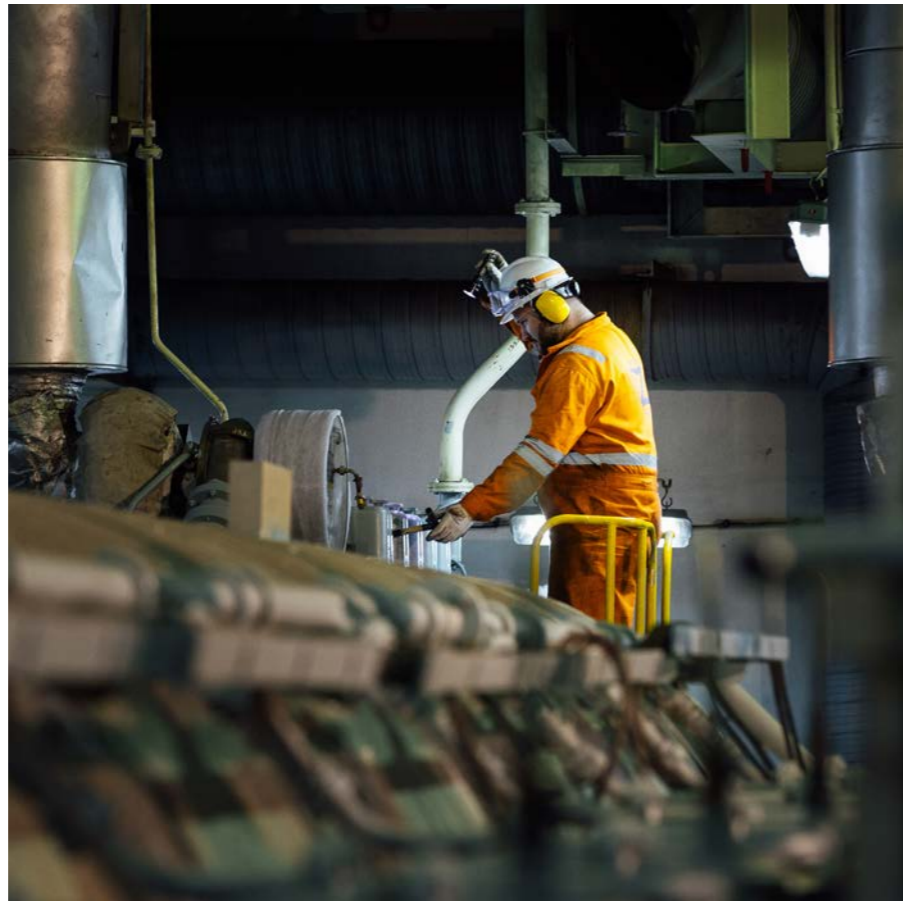
An Inclusive Working Environment

Zodiac Maritime has a zero-tolerance policy for any form of discriminatory practices or behaviour against its employees and seafarers and is committed to ensuring that all employees and seafarers are treated and treat others with dignity and respect and can work in an environment free from harassment and bullying. It is our policy to provide a healthy working environment free of discrimination on the basis of age, colour, nationality, race or ethnic origin, sex, sexual orientation, religion, belief, or any other personal characteristic.

Shipping is by definition an international industry which is reflected in the workforce on board our ships and within our shore-based office. We are proud of our multinational workspaces, with over 29 different nationalities on board and over 27 different nationalities ashore, working side by side towards our common goals.

Professional Development

Whether at sea or in shore management roles, it is vital that all our employees and



seafarers have the requisite knowledge and experience to carry out their duties safely and efficiently. At Zodiac Maritime, we aim to align this need with the career ambitions of our team, to enable us to achieve our goals together and provide a dynamic working environment that encourages personal growth. Training and mentoring, as well as various other initiatives, contribute to this.

A wide range of media is used both on board and ashore to deliver extensive training. We use recognised training providers as well as designing and delivering our own training internally based on identified needs. Our training catalogue is regularly reviewed and expanded where necessary to address changing areas of regulation, technology, or best practice.

We continue to offer cadet sponsorship to young maritime professionals beginning their training for a seagoing career and we are very pleased to see many of these cadets having now progressed to senior officer level on our vessels. In 2022, we sponsored 306 cadets starting their professional maritime training with us.

Investing in the Next Generation

Scholarships are available to support the ongoing education for the children of Zodiac Maritime seafarers and employees. We are proud to confirm that over the last 14 years, 57 scholarships have been awarded, with a further 4 scholarships available for 2023.

⁵ Retention rate calculated based on an industry-standard formula developed by INTERTANKO. Available at www.intertanko.com.

Anti-Corruption

Corruption can potentially be linked to violation of human rights, circumvention of environmental and quality standards, and endangerment of sustainable development. 'Corruption' is commonly perceived as the acceptance of bribes, but from a business perspective it can also

be interpreted as granting or accepting excessive business advantages.

Zodiac Maritime is part of the global supply chain, and therefore bribery and corruption are considered a high risk for our business. As a company incorporated in the UK, our operations are subject to

the UK Bribery Act 2010. We have taken a proactive approach to fighting corruption and have procedures in place to protect our employees and prevent the giving or acceptance of payments, inducements, or bribes in order to secure business with Zodiac Maritime.

Cyber Security and Data Privacy

Zodiac Maritime continues to advance its security programme to improve its cyber defences. Working alongside our selected partners, we are further realising the benefits that security operations offer to improve detection of modern threats and our response.

This approach recognises that not just our technology, but also our people and processes are integral to meet modern cyber challenges to the maritime sector and global logistics environment.

Regarding personal information, we are committed to respecting and protecting individuals' privacy. All Personal Data we collect at Zodiac Maritime during our interactions with internal and external stakeholders is used in compliance with applicable data privacy laws and regulations, including the EU General Data Protection Regulation. More information can be found in our Privacy Policy⁶.



⁶ <https://www.zodiac-maritime.com/public/privacy-notice.xhtml>



LRQA Independent Assurance Statement

Relating to Zodiac Maritime Ltd.'s Health, Safety and Environmental Report for the calendar year 2022

This Assurance Statement has been prepared for Zodiac Maritime Ltd in accordance with our contract but is intended for the readers of this Report.

Terms of Engagement

LRQA was commissioned by Zodiac Maritime Ltd (Zodiac) to provide independent assurance on its Health, Safety and Environmental Report 2022 ("the report") against the assurance criteria below to a limited level of assurance using LRQA's verification procedure. LRQA's verification procedure is based on current best practice, is in accordance with ISAE 3000 and ISAE 3410 and uses the following principles of - inclusivity, materiality, responsiveness and reliability of performance data.

Our assurance engagement covered all of Zodiac's managed commercial fleet and evaluated the reliability of the health, safety and environmental data and information.

Our assurance engagement excluded vessels that are not listed under Zodiac's Documents of Compliance as issued by either the United Kingdom or Liberia, and excluded the data and information of Zodiac's suppliers, contractors and any third parties mentioned in the report.

LRQA's responsibility is only to Zodiac. LRQA disclaims any liability or responsibility to others as explained in the end footnote. Zodiac's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of Zodiac.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe that Zodiac has not, in all material respects:

- Met the requirements above
- Disclosed accurate and reliable performance data and information as no errors or omissions were detected
- Covered all the issues that are important to the stakeholders and readers of this report.

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. LRQA did not verify the data back to its original sources, nor did it assess the accuracy and completeness of the data reported by individual vessels.

LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks were undertaken as part of the evidence gathering process for this assurance engagement:

- Assessing Zodiac's approach to stakeholder engagement to confirm that issues raised by stakeholders were captured correctly. LRQA verified compliance with Zodiac's Stakeholder Engagement Management Policy.
- Reviewing Zodiac's process for identifying and determining material issues to confirm that the right issues were included in their Report. LRQA benchmarked reports written by Zodiac and its peers to ensure that sector specific issues were included for comparability. LRQA also tested the processes that Zodiac uses to determine the material issues in order to evaluate whether Zodiac makes informed business decisions that may create opportunities that contribute towards sustainable development.



- Auditing Zodiac's data management systems to confirm that there were no significant errors, omissions or misstatements in the report. LRQA reviewed the effectiveness of data handling procedures, instructions and systems, including those for internal verification. LRQA also spoke with certain key people responsible for compiling the data and drafting the report.

Comments

Further comments and findings, made during the assurance engagement, are:

- Stakeholder inclusivity: LRQA is not aware of any key stakeholder groups that have been excluded from Zodiac's stakeholder engagement process.
- Materiality: LRQA is not aware of any material issues concerning Zodiac's sustainability performance that have been excluded from the report.
- Responsiveness: LRQA is not aware of any weaknesses in the responsiveness of Zodiac to its stakeholders.
- Reliability: Data management systems are considered to be well defined.

Points of information

- Zodiac has utilised the fuel carbon dioxide emission factors from the "IMO International Maritime Organization MEPC.1/Circ.684: Guidelines for Voluntary Use of the Ship Energy Efficiency Operational Indicator (EEOI) (17/8/09)". These factors do not account for any non-carbon dioxide combustion generated greenhouse gases.
- Sulphur dioxide emissions arising from fuel and diesel oil combustion have been estimated using a calculation based on consumption tonnage and molecular weight.

LRQA's standards, competence and independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 *Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition* and ISO/IEC 17021 *Conformity assessment – Requirements for bodies providing audit and certification of management systems* that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is Zodiac's certification body for a range of management system standards. This does not compromise our independence or impartiality.

Paul Jackson (Lead Verifier)
For and on behalf of LRQA Group Limited
1 Trinity Park, Bickenhill Lane,
Birmingham, B37 7ES, United Kingdom.

Issued: March 11, 2023
LRQA reference: LRQ00002924

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Zodiac
Maritime

For more information on Zodiac Maritime Ltd.
or its HSE activities, or to give us feedback
on our report, please contact us at:

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