



PANGAEA
LOGISTICS SOLUTIONS



PANGAEA LOGISTICS SOLUTIONS LTD

ESG REPORT FOR 2021

ABOUT PANGAEA

Pangaea Logistics Solutions Ltd (*Pangaea or the Company*) is a US publicly listed (NASDAQ: PANL) dry bulk shipping company with expertise in the operation of bulk carriers and bulk logistics services. The group includes Americas Bulk Transport, Nordic Bulk Carriers, Phoenix Bulk Carriers, and Seamar Management.

The combined group typically operates approximately 60 ocean vessels worldwide, of which 24 vessels are owned by the Company. We are headquartered in Newport, Rhode Island, with offices in Athens, Copenhagen, New Orleans, and Singapore.

Pangaea transports a wide variety of commodities, including bauxite, cement, cement clinker, construction aggregates, fertilizers, grains, iron ore, limestone, metallics, and steel scrap.

OWNED FLEET

Bulk carriers | AS OF 31 DECEMBER 2021

TOTAL FLEET DWT CAPACITY

1,691,453

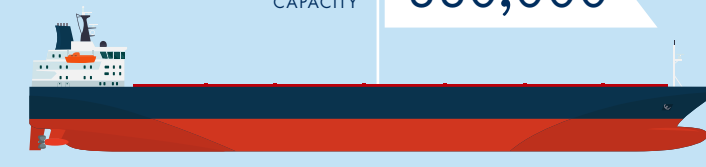
POST-PANAMAX

4

VESSELS

APPROX. DWT CAPACITY

380,000



LENGTH: 230 M

NORDIC NULUUJAAK
NORDIC QINNGUA
NORDIC SANNGIJUQ
NORDIC SIKU

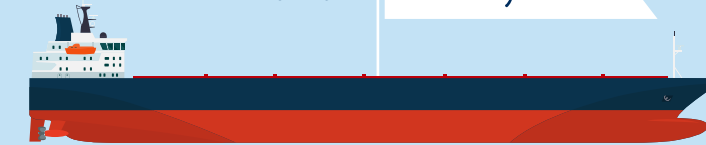
PANAMAX

9

VESSELS

APPROX. DWT CAPACITY

684,000



LENGTH: 225 M

NORDIC ODYSSEY
NORDIC ORION
NORDIC OSHIMA
NORDIC ODIN
NORDIC OLYMPIC
NORDIC OASIS
BULK PANGAEA
BULK XAYMACA
BULK PROMISE

ULTRAMAX

3

VESSELS

APPROX. DWT CAPACITY

181,000



LENGTH: 200 M

BULK COURAGEOUS
BULK DESTINY
BULK ENDURANCE

SUPRAMAX

8

VESSELS

APPROX. DWT CAPACITY

443,000



LENGTH: 199 M

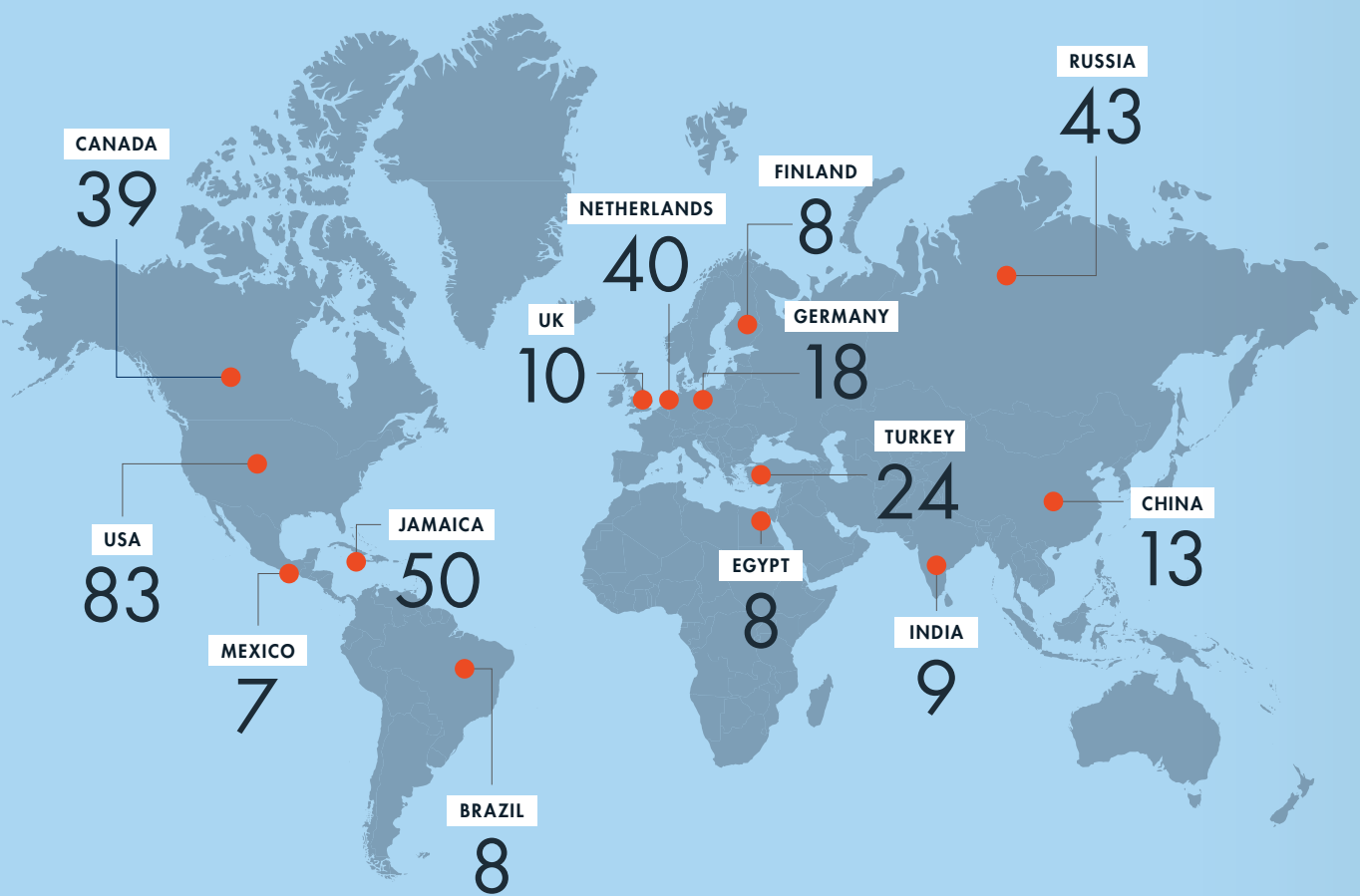
BULK FREEDOM
BULK FRIENDSHIP
BULK INDEPENDENCE
BULK NEWPORT
BULK PRIDE
BULK SPIRIT
BULK TRIDENT
BULK VALOR

TRANSPARENT REPORTING

This is Pangaea Logistics Solutions Ltd's 2021 ESG standalone report. It builds on, and meets requirements of the Sustainability Accounting Standards Board (SASB), Marine Transportation Standard (2018). The report presents our performance in environmental, social and governance spectrum for financial year from 1 January 2021 until 31 December 2021. Throughout this report *Pangaea, the Company, we, us* and *our* refers to Pangaea Logistics Solutions Ltd and its subsidiaries.

PANGAEA'S GLOBAL PRESENCE

Number of port calls in our most visited countries in 2021



CEO STATEMENT

I am pleased to present our 2021 ESG report and I am proud of the efforts of the entire team at Pangaea during a year that was remarkable in many different ways.

In 2021, we remained consistent and kept working on our sustainability priorities, of which our top priority is our people. We work constantly to the highest standards of health, safety and environment (HSE) management and compliance to help ensure the health, safety and well-being of our employees and crew. We focus on building a strong HSE culture on shore and onboard to promote truly operational excellence in the HSE spectrum.

We support the ambitious goals of the IMO on decarbonization and transition to a lower carbon economy. In 2021, we modernized our fleet to reduce its carbon footprint. We made significant investments, purchasing 7 modern and more efficient vessels, and expanding our fleet by 20%. We made some progress in reducing our emissions per ton mile and we are exploring alternative short-term solutions. In 2022, we will be testing the viability of using biofuels in our fleet and we will invest in data related entities that may provide opportunities to reduce emissions in the future.

As the global lockdowns faded, the year 2021 proved to be a strong year for us both within ESG and financially. In addition to making great strides in reaching our sustainability priorities, our financial results reached new records due to a pronounced increase in market demand, strong dry bulk markets, and our concentration on ESG priorities. We are convinced good corporate practices produce demonstrable results.

In December 2021, Pangaea's Co-founder, Chairman and CEO, Ed Coll, passed away. For over 25 years, Mr. Coll led the Company from Newport, Rhode Island to become a leading worldwide integrated logistics provider in the dry bulk market. It was under his lead that our company became a thriving actor in the global marine shipping industry. He was a great leader, and his legacy in our Company will last. We will remain committed to his strong dedication to ESG values and ethics in all aspects of our Company.



Mark Filanowski
Chief Executive Officer
Pangaea Logistics Solutions Ltd.

HIGHLIGHTS OF 2021

REVENUE

\$718.1
MILLION

88%
INCREASE



VESSELS

24
OWNED VESSELS

7
NEW ADDITIONS
TO THE FLEET



DEADWEIGHT TONNAGE

1.7
MILLION

32%
DWT CAPACITY
GROWTH

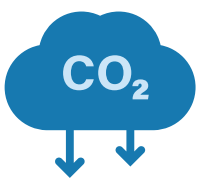


Environment

GRAMS OF CO₂ PER TON-NAUTICAL MILE

4.75
AER

3.5
EEDI



Social

LTIR (LOST TIME INCIDENTS RATE)

1.1*

DIVERSITY AMONG ONSHORE EMPLOYEE

30%
WOMEN



Governance

PORT STATE CONTROL DETENTIONS (PSC)

zero

TOTAL AMOUNT OF MONETARY LOSSES AS A RESULT OF LEGAL PROCEEDINGS ASSOCIATED WITH BRIBERY OR CORRUPTION

zero



* Due to lack of data resulting from sanction-related issues, the rate covers only 14 out of 24 vessels.

EXTERNAL COMMITMENTS

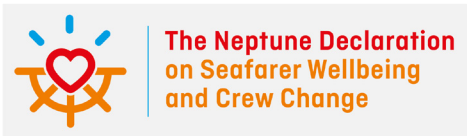
Global sustainability challenges cannot be solved without joint efforts and collaboration. Pangaea is committed to partake in this collective project and work to embed sustainability throughout its operations. The Company is a member of various organizations and signatory of several frameworks.



The Trident Alliance
supports the implementation and enforcement of global sulphur regulations.



Clean Ocean Access
supports sustainable activities in and around Narragansett Bay.



The Neptune Declaration
supports and promotes the welfare of the seafarers.



The Gulf of Guinea Declaration
counters the rising instances of piracy and assures the safety, well-being and human rights of seafarers.



Charter for More Women in Shipping
initiated by Danish Shipping. By signing this charter, Pangaea commits to actively focus on gender equality within its organization.



The Marine Mammal Observation Network
organized by Green Marine, and applicable when operating in the Canadian Arctic (the company is a reporting member).



Save the Bay
Organization with a mission to protect, restore, and improve Narragansett Bay.



Woods Hole Oceanographic Institute
Collaboration with WHOI focused on monitoring the vast and open ocean to enable a long-standing need for more scientific observations.

The vessels under the management of Seamar Management SA are active participants in the Assistance Vessel Rescue System. Automated Mutual-Assistance Vessel Rescue (AMVER) is a computer-based global ship-reporting system used worldwide by search and rescue authorities to arrange assistance to people in distress at sea.



Pangaea is also a member of The Baltic and International Maritime Council (BIMCO) and the Danish Shipowners' Association through the Danish subsidiary Nordic Bulk Carriers, which is part of the Innovation Committee. Senior leaders at Pangaea are also members of the American Bureau of Shipping (ABS).

SUSTAINABLE VALUE CREATION IN PANGAEA



Environment

- Strict management of safety procedures and processes for environmental protection
- Investments in a modern fleet, employment of innovative energy-efficiency technology to optimize operations, and minimize actual and potential adverse environmental impacts



Social

- Building and promoting health and safety for our employees and crew
- Promoting diversity, equality and inclusion in the workplace
- Contributing to stable global trade and development



Governance

- Fostering a strong company culture of transparency and compliance
- Compliance with all relevant international and national laws and regulations
- Transparent reporting

SDGs as a compass for long-term value creation

Pangaea believes in creating long-term value by ensuring the interests of our stakeholders while working on enhancing and protecting the value for our shareholders. Our efforts are guided by the United Nations Sustainable Development Goals (SDGs), a framework created to help tackle urgent global challenges and achieve a sustainable future for all.

Shipping transportation, as a key enabler to sustainable economic growth and stable global trade, plays a crucial role in achieving the SDGs.

Accordingly, the Company recognizes its role and responsibility in contributing to the achievement of the SDGs. While Pangaea acknowledges the significance of all SDGs, it has identified six that are the most material to the company and on which Pangaea has the biggest impact. By contributing to the SDGs, the Company not only creates value for its diverse stakeholders but also creates long-term value through building a resilient company.

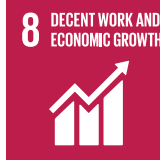


SUSTAINABLE DEVELOPMENT GOALS



Ensure healthy lives and promote well-being for all at all ages

- Pangaea strictly observes and implements maritime regulatory frameworks, striving to ensure health and well-being of its employees and crew.
- The Company provides their employees with health benefits.
- The Company always promotes a motivating and rewarding workplace for all the people working here. The company strives to create an inspiring atmosphere where people can collaborate and be creative and where initiatives and high performance are being compensated with various other benefits and advancement opportunities.



Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

- With its marine shipping services, Pangaea facilitates stable economic growth.
- Pangaea's number one priority is the safety and well-being of our employees. Therefore, we have numerous health, safety and security standards and processes in place across the globe.
- We implement in our operations Safety of Life at Sea Convention (SOLAS) and all relevant International Labour Organization (ILO) conventions, together with other relevant international laws and regulations to ensure observance of labour rights. Pangaea requires equally high standards from its business partners.
- We foster an equal, inclusive and diverse workplace.



Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

- Pangaea strives to create resilient business by focusing on building a modern shipping fleet. Innovation is key to combating climate change and decarbonization of marine shipping industry. Hence, the company adopts innovative, environmentally-oriented technologies, enabling increased operational efficiency and enhancing its positive impact on the planet and people.
- In 2021, Pangaea explored the viability of using biofuel in its fleet. A trial will be conducted in 2022 to assess its future implementation on a wider scale.
- In 2021, Pangaea initiated collaboration with the Woods Hole Oceanographic Institution (WHOI) to advance marine research.



Take urgent action to combat climate change and its impacts

- Pangaea focuses on energy efficiency to reduce greenhouse gas (GHG) emissions by endorsing IMO's GHG strategy, modernizing and renewing its fleet.
- As part of the Company's fleet modernization program, it renewed its owned fleet with a total of 7 modern vessels that include 3 second-hand high quality design vessels, and 4 newbuilding high specification vessels, with the citation DNV 'CLEAN' and fitted with TIER III NO_x reducing technology that significantly reduces emissions.
- The Company invested in modern hull coatings, enhancing fuel efficiency and reducing the environmental footprint.
- To optimize the speed of its vessels and hence reduce fuel consumption, the Company utilizes performance monitoring and weather routing services, that are based on forecasting algorithms and machine learning.
- Pangaea established Ship Energy Efficiency Management Plans (SEEMP) to improve the efficiency of our vessels.
- The Company strictly observes relevant laws and regulations for maritime transport sustainable operations.



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

- Pangaea has zero tolerance for corruption in any form and is committed to working actively toward eradicating corruption and bribery in all forms. Through our internal policies and procedures, we ensure the highest level of ethical conduct.
- We collaborate with authorities and our peers from the shipping industry to address corruption and bribery challenges that our industry is facing in our daily operations. We work towards aligning the transport industry in pursuit of promoting ethical business conduct.
- Pangaea strives to protect and promotes human rights across its value chain.
- Pangaea implements transparent reporting and promotes its whistleblower channel.



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

- Pangaea actively addresses sea and marine resources by ensuring compliance with relevant international laws and regulations.
- Pangaea is committed to conservation and protection of marine resources by closely monitoring its vessels with regards to protection of marine resources, especially when operating in marine protected areas. We report on shipping duration in marine protected areas.
- By having appropriate environmental safety processes in place, the Company prevents potential spills.
- To reduce the risks for potential pollution, the Company is working with ports authorities to maximize the management efforts.
- To combat the problem of pollution with invasive species from one area to another, Pangaea invested in modern ballast water treatment in 88% of its owned fleet.
- The Company is collaborating with various organizations (WHOI, Green Marine, Save the Bay, Clean Ocean) to support and promote clean oceans and protect marine resources.

PANGAEA'S SUSTAINABILITY COMMITMENTS

Pangaea's ESG strategy is build on 10 commitments within the environmental, social and governance spectrum.



Environment

- 1 Modernization of the fleet
- 2 Effectivization of the fleet
- 3 Supporting IMO's GHG Strategy of carbon intensity reductions



Social

- 4 Adequate management of HSE
- 5 Fostering safety culture
- 6 Creating an equal, diverse, and inclusive work environment



Governance

- 7 Compliance with laws and regulations, ensuring ethical conduct in the company
- 8 Ensuring responsible recycling
- 9 Close management of human rights risks in our value chain
- 10 Good and transparent governance



SUSTAINABILITY PRIORITIES

Environment

- 1 Minimizing environmental impacts
- 2 Transition to a low carbon economy

Social

- 3 Diversity, inclusion and equality at workplace
- 4 Health and safety of our employees and crew economy

Governance

- 5 Human rights observance
- 6 Transparency and compliance with laws and regulations
- 7 Business ethics and anti-corruption



ENVIRONMENT

The marine shipping industry inherently affects air and water quality, which in turn impacts marine and terrestrial ecosystems, marine biodiversity and societies. Pangaea recognizes and assumes its responsibility to manage and minimize its adverse environmental impacts and works continuously to comply with all relevant environmental laws and regulations.

EMISSIONS

GHG EMISSIONS

International shipping accounted for approximately 2% of global energy-related CO₂ emissions in 2020.¹ Although shipping is the most fuel-efficient mode of transportation, its size and ever increasing global trade means that its GHG emissions are still very significant.

Pangaea considers decarbonization to be one of the main global challenges and seeks to contribute to the transition from reliance on fossil-based fuels. The Company commits to minimizing its carbon footprint by endorsing the International Maritime Organization's (IMO) strategy on reduction of GHG emissions, to reduce CO₂ emissions by 40% by 2030. To realize that ambition, Pangaea invests in modernizing and improving the efficiency of its fleet, and in the adoption of innovative technology.

To enhance efficiency of its fleet, the Company utilizes performance monitoring and weather routing services on both its owned and chartered fleet. Using sophisti-

cated forecasting algorithms and machine learning, the Company optimizes the speed of its vessels to reduce the amount of fuel consumed when the ships encounter adverse weather and/or currents. Pangaea tracks fuel and power consumption of its owned fleet in real-time. This gives us access to immediate and actionable data that allows us to operate and maintain our fleet in the most efficient manner.

Part of the Pangaea fleet is ice classed, designed for operations in harsh weather and ice. These ships have more engine power than conventional ships, and efficient fuel consumption is of utmost importance for these vessels. We aim to work closely with tonnage suppliers for these ships through collaboration both commercially and operationally, when practically possible.

In 2021, there has been 11% increase in CO₂ emissions due to the 32% growth of our deadweight tonnage (DWT). This slight increase of CO₂ emissions is also

a consequence of a significant post-Covid growth of global trade, which saw an increase in demand for consumer goods and, consequently, an expansion of our operations and fleet.

We have established Ship Energy Efficiency Management Plans (SEEMP) to improve the efficiency of our vessels. Through the SEEMP, we ensure that all our ships are operated efficiently by:

- optimizing the speed of the vessel
- making course changes to avoid higher fuel consumption caused by rough weather
- hull treatment and coating with modern technology coatings in dry dock to improve speed and reduce fuel consumption

These measures help to increase Pangaea's ships' efficiency and generate operational improvement. As the SEEMP is specific to each ship and must be tailored to the ship, cargo type, routing, and other factors, a SEEMP cannot be established on a group or fleet level. Consequently, we expect to enhance our fleet efficiency performance as we target improvements on specific vessels.

AIR QUALITY

Air pollutants, such as sulfur oxides (SO_x), nitrogen oxides (NO_x), and particulate matter (PM), are closely connected to fuel usage in the marine shipping industry. They impact air quality and human health, especially affecting port cities and local populations. Hence, there is a strong, growing trend of increasing environmental regulations, pushing toward more fuel-efficient engines and use of cleaner fuels in vessels.

The costs of the environmental regulations may have a significant financial impact on companies in the marine shipping industry that do not reduce their emissions. Therefore, Pangaea takes active risk approach to tackling its emissions by maximizing fuel efficiency. In this way, the Company reduces its adverse environmental impacts, providing Pangaea with a better market position financially, as the

Additionally, the Company operates a fleet of chartered-in vessels. The number of chartered-in vessels depends on market conditions and the transportation needs of our clients at any given time. Historically, the number of chartered-in vessels has been approximately 60 ocean vessels across the group companies. For these vessels, we typically seek to employ the most fuel-efficient designs available, as more efficient vessels provide a competitive advantage and better economic return.

With increasing regulations to curb CO₂ and expectations from both capital markets and stakeholders, there is undoubtedly a lot of pressure on the marine shipping industry. Unfortunately, at present, there is no viable solution for carbon-free marine transportation. Until such a viable solution is available, Pangaea will focus its current GHG reduction efforts on energy efficiency measures and operational optimization. We see a slight increase in the CO₂ emissions per nautical mile due to the 20% increase of the fleet. However, as a Company we have become more efficient in terms of deadweight tonnage (DWT) capacity as far as CO₂ emissions are concerned.

Company reduces its operating costs, in addition to potential costs connected to non-compliance. This approach provide Pangaea with a tangible competitive advantage, by offering its customers an attractive fleet in terms of emissions and cost efficiency. More-over, it allows Pangaea to demonstrate that it meets the increased expectations of a broad spectrum of stakeholders.

Pangaea's investments in upgrading to a more fuel-efficient fleet, is part of its long-term strategy of building a sustainable and commercially viable business. While allocating capital in upgrading Pangaea's fleet in the short-term constitutes a tangible expense, it will be offset by significant savings in fuel costs over the long-term.

FORGING INNOVATION TO COMBAT CLIMATE CHANGE

BIOFUELS

In 2021, Pangaea explored the viability of using bio-fuels to power its fleet. The trial of utilizing biofuel is already scheduled to take place in 2022. The company intends to test technical viability and potential of this alternative fuel to further consider it an option for longer term use.

SCIENCE ROCS

Pangaea is also tackling the global climate crisis through collaborating with the Woods Hole Oceanographic Institution's (WHOI) scientists to facilitate and advance marine research. In 2021, Pangaea's team initiated a collaboration with the WHOI on the Science Research on Commercial Ships (Science RoCS),

an initiative connecting scientists with commercial vessels to regularly monitor the vast and open ocean, particularly along repeat routes in hard-to-reach areas. Pangaea's first vessel will begin participating in the project in the first part of 2022. The aim is to provide an otherwise unattainable, simultaneous set of observations collected regularly during round trips of a vessel. The vessel will collect data, such as the speed of ocean currents, seawater temperature and salinity, which will help scientists forecast weather, understand climate change, and predict flows that spread flora, fauna, and contaminants. The initiative is focused on making ships' science data streams broadly available onshore and to help inform changes that can make human activity, including shipping, more sustainable as it relates to the health of the ocean.



ECOLOGICAL IMPACTS

POLLUTION

Ballast water is used to provide stability, optimize trim and reduce stress on the vessel's hull. However, ballast water contains various organisms and when taken from one region and released in another, the species can potentially become invasive to ecosystems and pose a serious ecologic or economic risk, potentially endangering local communities.

Since eliminating negative ecological impacts is very high on Pangaea's environmental agenda, the Company invested in installing, modern ballast water systems in its owned fleet. Per year-end 2021, 88% of Pangaea's owned fleet was equipped with modern ballast water treatment systems.

In addition, we have chosen not to install scrubbers on our fleet, eliminating any need for additional fluid discharge into the marine environment that is caused by open loop scrubbing. In the case of closed-loop scrubbing, it reduces the need for the necessary periodic removal of toxic waste to shore, which again introduces the need for disposal.

Our technical management policies and strict system processes reflect our commitment to avoidance of any potential spills. In case of an accidental spill, the Company has routines in place to limit negative impacts to the environment and ensure diligent reporting.

We foster a company culture that ensures environmental protection, and our target of zero spills reflects our ambitions in this area. In 2021, Pangaea reached the target with no spill incidents.

RECYCLING

We are committed to responsible recycling, performed with respect for the environment, human health and safety. The Company retires its oldest vessels through industry recycling methods, including scrapping in ship breaking yards on the Indian subcontinent. These recycling methods are being closely reviewed by various official and unofficial entities who are attempting to designate new international standards for work safety and environmental concerns in the recycling processes.

Pangaea is closely monitoring the developments in the regulatory landscape so that when appropriate standards come into force, the Company will implement them. In the meantime, Pangaea focuses on strict compliance with the standards developed under the International Maritime Organization's Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships.

SOCIAL

The success of our company relies on the work and dedication of all the talented people that constitute Pangaea’s family. We promote an equal, diverse, and inclusive environment where everyone is treated with respect and dignity, encouraged to develop themselves professionally. Our people are our greatest asset, therefore, Pangaea considers their health and safety of utmost importance.

SAFETY, LABOR CONDITIONS, AND HUMAN RIGHTS

EMPLOYEE HEALTH AND SAFETY, AND SECURITY

Pangaea’s number one priority is the safety and well-being of its employees. Our commitment is reflected in numerous safety standards and processes in place globally across the Company. We work continuously to minimize the safety risks associated with incidents that are inherent to the industry. The greatest safety risks for the marine shipping workers are associated with the exposure to hazardous weather conditions and handling cargos at ports.

Health and safety of our crew is also critical for safe and effective operations of the Company. Therefore,

Pangaea is committed to work relentlessly to ensure safety of our workers, fleet and the environment by implementing adequate and effective safety management processes. Pangaea’s HSE performance is regularly presented to and reviewed by the Board.

We strive to foster a Company’s culture that ensures safety both at sea and on shore. We continue to improve our vessel performance to always be ready for external inspections, and we are implementing several measures to promote staff continuity.

Pangaea’s targets reflect its ambitions and guide the performance within HSE.

¹ Employees to proactively and routinely identify and eliminate their unsafe behaviors and those of their co-workers. Behaviors, unsafe conditions and other precursors that can lead to incidents to be recorded, analyzed, and addressed.

² Complaints related to MLC 2006: Promote health awareness of seagoing personnel. Improvement of applicable health, safety and quality standards. Continuous reduction of occupational health hazards.

³ An intervention action by the port state, taken when the condition of a ship or its crew does not correspond substantially with the applicable conventions.



In 2021, we achieved our targets related to fatalities, complaints, and detentions. There were 2 incidents recorded during 2021. The causes of these incidents were closely investigated, and corrective actions were undertaken to help prevent reoccurrence.

In 2021, we experienced no serious injuries to people and no material damage to any of our ships. Our lost time incident rate (LTIR) was 1.1¹ in 2021, a slight decrease from the previous year (1.5 in 2020). We are constantly working on improving safety awareness and preventing any job-related injuries.

Going forward, we prioritize our HSE strategy by focusing on managing risks in our operations, developing HSE leadership and creating proactive HSE company culture.

DIVERSITY, EQUALITY AND INCLUSION

Pangaea recognizes the importance of inclusion, diversity and equality regardless of ethnicity, national origin, gender, age, disability, sexual orientation, or religion. We strive to provide an inclusive work environment for our employees.

In 2020, Pangaea signed the Charter for More Women in Shipping initiated by Danish Shipping, by which the Company commits to actively focus on gender equality within the organization. By the end of 2021, there were 30% women in our total onshore workforce. There were three women in leadership positions. There were no female Board members in 2021, however, the process to enhance the gender balance was started. At the time of publishing this report, the Board has one female member. Pangaea will continue to work on establishing a strategy and defining concrete targets to realize our inclusion, diversity, and equality ambitions, including in the Board.

CREW AND EMPLOYEES

In 2021, each of our vessels was crewed with 20–25 independently contracted officers and crew members and, on certain vessels, directly contracted officers.

Our technical managers were responsible for locating, contracting and retaining qualified officers for its vessels. To ensure that all the crew members on Pangaea's vessels have the qualifications and licenses required to comply with international regulations and shipping conventions, we rely on the crewing agencies to handle each crew member's training, travel and payroll.

By 31 December 2021, the Company had 74 shore-based personnel and approximately 500 independently contracted seagoing personnel on its owned vessels. The shore-based personnel are employed in the United States, Athens, Copenhagen and Singapore.

HUMAN RIGHTS

Pangaea is committed to respecting and protecting human rights as stipulated in the International Bill of Rights, the International Labour Organization's Fundamental Conventions and the Maritime Labour Convention.

Being an international company, with global operations and supply chain, we recognize and assume our responsibilities to protect and promote human rights across our value chain.

Pangaea has implemented a Human Rights Responsibility Policy that outlines the Company's support and respect for internationally recognized human rights, addressing also human trafficking and child labor. Pangaea strictly prohibits the use of human trafficking, bonded/forced work, and child labor, and expects these same standards from the vendors, agents and suppliers of products we purchase and whose services we employ.

Going forward, Pangaea will strive to continuously work towards strengthening human rights management in its operations as well as in the value chain, and focus on building awareness in the Company.



¹ Due to lack of data resulting from sanction-related issues, the rate covers only 14 out of 24 vessels.

GOVERNANCE

Good corporate governance is a foundation for ensuring that a company conducts business properly. It regulates risks, ensures compliance and helps to cultivate company culture, based on integrity, transparency and ethical business performance.

Pangaea’s governing documents and procedures guide its performance, inform the Company’s risk management, and ensures compliance with relevant

international and national laws and regulations. Pangaea is committed to responsible and ethical business conduct throughout its operations.

Good corporate governance is also a crucial concern for Pangaea’s Board. The Board, consisting currently of seven members, approves the Company’s policies, oversees its operations, and reviews updates on compliance and the Company’s ESG performance. In addition, the Board has established three committees to ensure that Pangaea fulfils its responsibilities to various stakeholders.

1 Audit Committee
The Audit Committee assists the Board in fulfilling its responsibilities to shareholders and oversees the Company’s financial reporting processes. It also assesses risk monitoring and management processes. The Audit Committee also shares responsibility with the Board to oversee sustainability initiatives and climate-related risks.

2 Compensation Committee
The Compensation Committee assists the Board in ensuring retention and succession plans for key executives, as well as the periodic review of the Company’s compensation strategy and its alignment with the long-term goals of the Company.

3 Nominating Committee
The Nominating Committee assists the Board in ensuring the appropriate size, functioning, and needs of the Board including, but not limited to, recruitment of high-quality Board members and committee composition and structure.

Pangaea’s governing documents

- Code of Ethics
- Human Rights Responsibility
- Prohibition on Human Trafficking Policy
- Prohibition on Child Labor
- Anti-Corruption Compliance Policy
- Insider Trading Policy
- Related Person Transactions Policy
- Whistleblowing Policy
- IT Acceptable Use Policy

WHISTLEBLOWING

Pangaea encourages reporting of any wrongdoing and relies on the good faith of its employees and external parties to report justified complaints of wrongdoing and/or inappropriate behavior at any level. The Whistleblower Policy outlines the complaint and investigation procedures for concerns regarding any alleged misconduct, including in particular questionable accounting or auditing matters, violations of law, rules, regulations and/or direct threats to public interest, such as fraud, health or safety violations, and corruption. Complaints and concerns are treated in strict confidence and as anonymously as possible in the required investigations. In 2021, no whistleblowing cases were reported.

BUSINESS ETHICS AND ANTI-CORRUPTION

As a company with global operations, we are often exposed to a vast array of challenges. Some are due to legislative frameworks, some to different cultures, while others place us in ethically-challenging situations. Facilitation payment demands in ports, or other form of corruption, are not an uncommon phenomenon for companies in the shipping industry. Therefore, shipping companies are under increasing international scrutiny to ensure strict compliance with anti-corruption and anti-bribery laws. Corruption impedes access to global markets, increases operational costs, and poses legal and reputational risks to a company’s social license to operate.

Therefore, good and transparent governance is a crucial part of how we conduct business, both on shore and on our vessels. Pangaea’s Code of Ethics stipulates high standards, and guides our behavior with regards to business integrity, transparency, compliance and ethical business conduct. Pangaea’s Anti-Corruption Compliance Policy ensures the Company’s compliance with applicable anti-corruption laws, and strictly prohibits all improper payments, transfers, bribes, all types of corrupt activity and payments to public officials. The policies apply to all employees.

Since anti-corruption is very high on our agenda, Pangaea is conducting anti-corruption trainings for its employees, as part of the policy’s compliance procedure. Training activities are appropriately adopted depending on employee’s responsibilities within the Company.

Suspected activities, breaching our Anti-Corruption Compliance Policy, should be communicated to our managers, the Board, Company’s Legal Department or the whistleblowing channel.

In 2021, no monetary loss as a result of legal proceedings associated with bribery or corruption, was recorded.

INSIDER TRADING

Pangaea enforces strict policies on insider trading and related person transactions, which are supplemented by securities laws applicable to Pangaea and its employees.



SASB DISCLOSURES

Accounting metric ▾	Unit of measure ▾	Data 2021 ▾	Data 2020 ▾	Data 2019 ▾	Code ▾
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GREENHOUSE GAS EMISSIONS

CO ₂ emissions ^A					
Gross global Scope 1 emissions: Financial control approach	Metric tons CO ₂ -e	296,274	266,250	333,748	TR-MT-110a.1
Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Qualitative description	Page 5, 6–17			TR-MT-110a.2

Energy consumed ^B					
(1) Total energy consumed	Gigajoules (GJ)	4,009,986	3,066,488	4,465,737	TR-MT-110a.3
	Percentage (%)	100	100	100	
(2) Percentage heavy fuel oil	Gigajoules (GJ)	3,080,427	896,746	3,736,702	
	Percentage (%)	77 ¹	29	84	

EEDI					
Average Energy Efficiency Design Index (EEDI) for new ships	Grams of CO ₂ per ton-nautical mile	3.55	No new ships in 2020	3.75	TR-MT-110a.4

AER ^C					
Average Efficiency Ratio (AER): weighted average	Grams of CO ₂ per ton-nautical mile	4.73	4.75	5.39, 5.61	Additional

Accounting metric ▾	Unit of measure ▾	Data 2021 ▾	Data 2020 ▾	Data 2019 ▾	Code ▾
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AIR QUALITY

Other emissions to air ^D					
(1) NO _x (excluding N ₂ O)	Metric tons	6,636	7,509	9,635	TR-MT-120a.1
(2) SO _x	Metric tons	785	777	3,639	
(3) Particulate matter	Metric tons	519 ²	156	466	

ECOLOGICAL IMPACTS

Marine protected areas ^E					
Shipping duration in marine protected areas or areas of protected conservation status	Number of travel days	306 ³	113	Not available	TR-MT-160a.1

Implemented ballast water					
(1) Exchange	Percentage (%)	21	60	68	TR-MT-160a.2
(2) Treatment	Percentage (%)	88	45	32	

Spills and releases to the environment					
(1) Number	Number	0	0	0	TR-MT-160a.3
(2) Aggregate volume	Cubic metres (m ³)	0	0	0	

BUSINESS ETHICS

Corruption index					
Number of calls at ports in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Number	60	47	15	TR-MT-510a.1

Corruption					
Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	Reporting currency	0	0	0	TR-MT-510a.2

¹ Note that *Percentage heavy fuel oil* includes HSHFO and LSHFO in 2021 while in the calculation for 2020 included only HSHFO.

² Due to a change of a method of calculation, for the sake of comparability, PM emissions can only be compared to emissions from 2019.

³ Due to lack of data availability resulting from sanction-related issues, the figure covers only 10 out of 24 vessels.

EMPLOYEE HEALTH & SAFETY

Lost time incident rate ^f					
Lost time incident rate (LTIR)	Rate	1.1 ¹	1.5	1	TR-MT-320a.1

ACCIDENT & SAFETY MANAGEMENT

Marine casualties ^g					
Incidents	Number	2 ¹	2	2	TR-MT-540a.1
Very serious marine casualties	Percentage (%)	0	0	0	

Conditions of class ^h					
Number of Conditions of Class or Recommendations	Number	28 ¹	15	17	TR-MT-540a.2

Port state control ⁱ					
(1) Deficiencies	Rate	0.88 ¹	0.44	0.93	TR-MT-540a.3
(2) Detentions	Number	0	0	0	

OUR OPERATIONS IN NUMBERS

Number of shipboard personnel	Number	504 in 2021	TR-MT-000.A
Total distance travelled by vessels	Nautical miles (nm)	888,872 in 2021	TR-MT-000.B
Operating days	Days	7,281	TR-MT-000.C
Deadweight tonnage	Deadweight tons	1,691,485	TR-MT-000.D
Number of vessels in fleet	Number	24	TR-MT-000.E
Number of vessel port calls	Number	563	TR-MT-000.F

1 Due to lack of data availability, resulting from sanction-related issues, the figure for 2021 covers only 14 out of 24 vessels.

DISCLAIMER AND ASSUMPTIONS

Figures provided as per the end of the financial year (December 31).

Figures provided in this report are based on the estimates outlined below:

- A CO₂ emissions:** Calculations are based on IMO emission factors and fuel consumed. The financial control approach has been applied for Scope 1.
- B Energy consumption:** Calculations are based on tonnes of oil equivalents (toe) using DEFRA conversion factors to calculate energy consumed in gigajoules (GJ). Note that *Percentage heavy fuel oil* includes HSHFO and LSHFO in 2021 while in the calculation for 2020 included only HSHFO.
- C Average efficiency ratio (AER):** Carbon intensity metric estimated based on fuel consumed, distance travelled (nm), and deadweight tonnage (DWT).
- D Other emissions to air (NO_x, excluding N₂O, SO_x and particulate matter):** Estimated based on distance travelled (nm) and a tool developed by Danish Shipping for calculating emissions from bulk carrier vessels. The method of calculation was updated in 2022.
- E Marine protected areas:** The following vessels sailed in areas with the mentioned status during 2021: Nordic Orion, Nordic Odin, Nordic Olympic, Nordic Nuluujaak, Nordic Qinnqua, and Nordic Sanngijjuq. Due to lack of data availability, resulting from sanction-related issues, the figure for 2021 covers only 10 out of 24 vessels.

- F Lost time incident rate (LTIR):** The rate is calculated based on (lost time incidents) / (1,000,000 hours worked), and includes incidents resulting in absence from work beyond the date or shift when they occurred. Due to lack of data, resulting from sanction-related issues, the the figure for 2021 covers only 14 out of 24 vessels.
- G Marine casualties:** The definition of a marine casualty is based on the United Nations International Maritime Organization’s (IMO) Code of International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident Resolution MSC 255(84), paragraph 2.9, chapter 2 of the general provisions. Due to lack of data availability, the figure for ‘Incidents’ for 2021, covers only 14 out of 24 vessels.
- H Conditions of class:** The data provided represents the number of Conditions of Class or Recommendations Nordic Bulk Carriers has received from a Flag Administration or a Recognized Organization (RO) that has been delegated to the authority to issue such findings. The scope of disclosure includes all Conditions of Class regardless of whether they resulted in withdrawal, suspension, or invalidation of a vessel’s Class certificate.
- I Port state control:** Deficiency rate is calculated using the number of deficiencies vessels received from regional port state control (PSC) divided by total number of port state control inspections.



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