

SUSTAINABILITY & ENVIRONMENTAL REPORT 2019



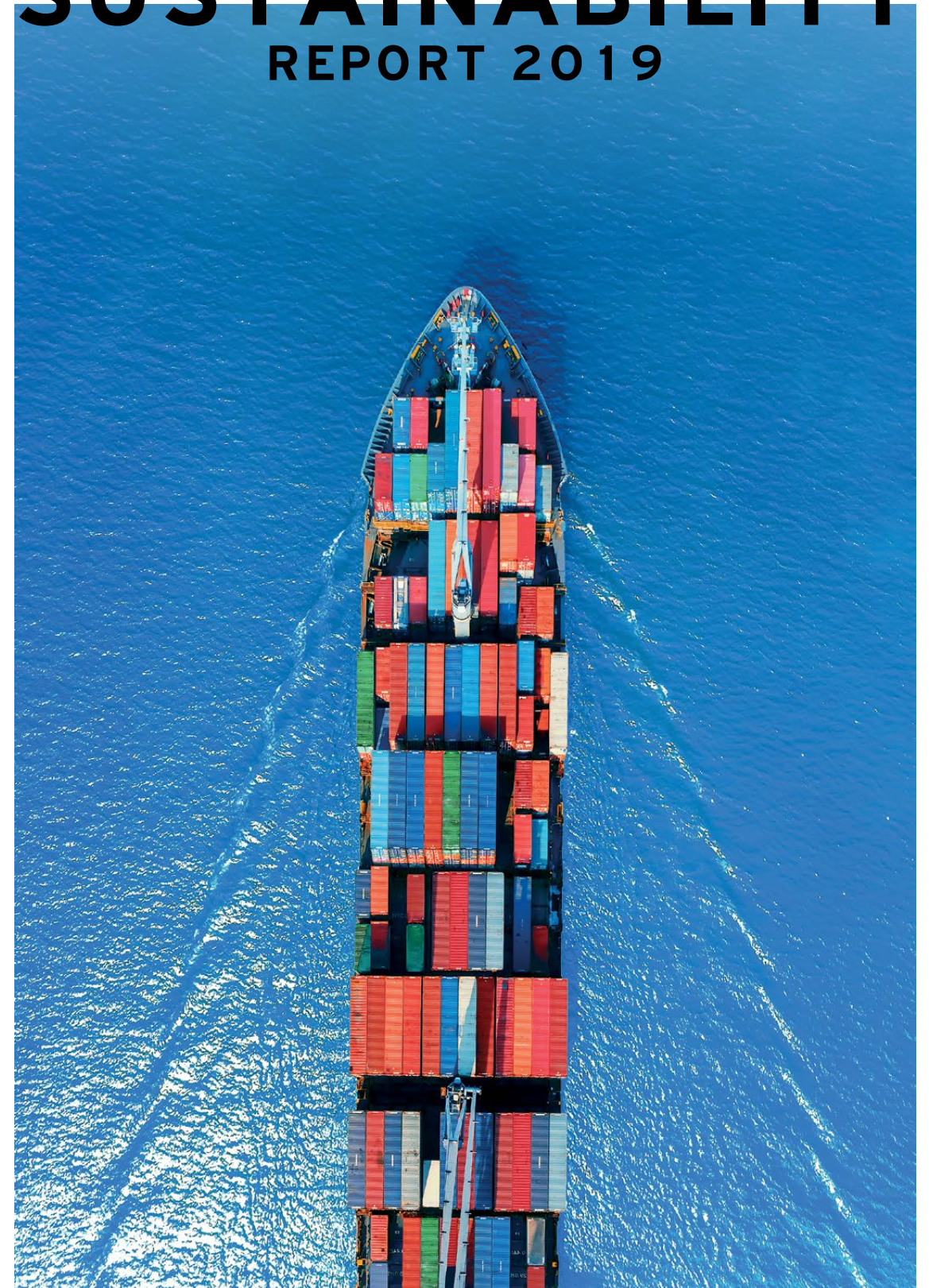
danans

SUSTAINABILITY

REPORT 2019

“The earth is what we all have in common”

Wendell Berry
Naturalist & writer



DISCOVER OUR STRENGTHS

World Class Shipping
Leading Edge Expertise
Quality - Safety - Responsibility
Experience - Stability - Discipline



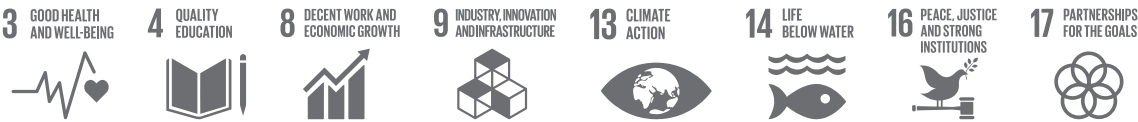


2019 HIGHLIGHTS

- Undertook 5869 training hours in Greece and our branches
- Completed 120 bridge simulator training hours
- Increased further reporting of Near Misses, counting 213 reports for this year
- Achieved a zero spillage record
- No incidents of non-compliance with social, environmental and economic laws and regulations

Over the last 2 years:

- 15.9% decrease in the use of Heavy Fuel Oil
- 78.1% increase in the use of Low Sulphur Fuel Oil
- 11.4% decrease in CO₂ emissions
- 18.7% decrease in SO_x emissions and 11.6% decrease in NO_x emissions



MESSAGE FROM THE COMPANY’S MANAGEMENT



The principles of sustainability are an inextricable part of our culture onboard and ashore. In order to uphold these principles, we strive to maintain the highest level of ethical conduct as well as social and environmental responsibility. We are optimistic that shipping and sustainability can shape a better future and we are committed to actively contribute towards the achievement of the UN Sustainable Development Goals by 2030, especially those related to the prosperity and safety of people, to the protection of the environment. Our people are our most important asset and therefore we place our utmost attention to their health, safety and wellbeing, as well as to their continuous training and development. Through a variety of employee initiatives, we build teamwork and create a safe and enjoyable working environment.

The protection of the marine environment from increasing levels of pollution and the reduction of CO₂ emissions lie at the heart of Danaos’s agenda. We are fully embracing new technologies that improve vessels’ energy efficiency and developing eco-friendly technologies. Our in-house Research and Development department, consisting of three qualified Mechanical

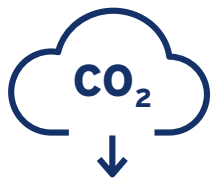
Engineers and Naval Architects, one certified Chemist and a PhD Computer Science developer, are all involved in the development and application of the above technologies and systems, which are in line with Danaos’ material commitment to our Sustainability and Environmental policies.

In 2019 we continued to improve our performance in key areas such as employee and crew training (5869 training hours), near miss reporting (213 reports), spillage record (zero spills), as well as environmental performance as indicated by the continued decrease of Heavy Fuel Oil use, CO₂ emissions, SO_x emissions and NO_x emissions. We are also pleased that more employees participated in volunteering actions and we maintained our support to social initiatives.

This year we are setting even more ambitious goals which showcase our commitment to sustainability and its integration in our everyday activities and corporate strategy. This report describes all the above in a transparent and credible manner and showcases our sustainability strategy.

The Management Team of Danaos Shipping

Danaos meets IMO 2030 carbon intensity targets 11 years ahead, by achieving **41.5 % reduction in CO2 emissions per ton*miles for year 2019 compared with base year 2008!**



The first target was achieved!

Throughout the years from 2008 to 2019, the average carrying capacity of the fleet has increased, several optimizations have been carried out in order to make the vessels more efficient and along with the economies of scale effect stimulated by the addition of newbuilding vessels in the fleet, the operational performance indicator of the Danaos Fleet, has significantly improved.

Along with necessary modifications/ optimizations performed on the main engine in order to support speed reduction, Danaos has examined 38 energy efficiency improvement methods and invested in several of them such as bulbous bow optimization, propeller retrofit, low friction paints, propulsion improvement devices, draft increase and others.. Moreover, Danaos fully supports Sea Routing optimization and vessels are

guided accordingly in order to strictly follow the plan.

The necessity for evaluating the investments made led to the creation of a smart operational platform (WAVES) that analyzes and processes data as a decision making supporting tool, while it produces automatic alerts in the event of deviations from the optimal operation, thereby always ensuring close monitoring and timely and effective response to any problem.

The result of the above strategy, was for Danaos to be fully in line with IMO guidelines and targets, having reached the 2030 goals well in advance!

In the meantime Danaos has taken the next steps, to investigate alternative fuels for shipping and work further on optimizations aiming at achieving higher emission reduction, while ensuring alignment with various strict carbon neutrality initiatives such as the Poseidon Principles.



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ABOUT THE SUSTAINABILITY REPORT 2019

WHO WE ARE

Aim

The aim of the present sustainability report is to inform all stakeholders about our sustainability performance, in a complete and comprehensive manner.

Targets and Reporting Period of the Sustainability Report

Our Sustainability Report analyses the strategy and the annual actions of the Company in the pillars of Sustainability, Environment, Society, our Employees and Economy/Governance from January 1st to December 31st 2019. It also includes our commitments regarding the principles and the strategy of Danaos Shipping on Sustainability, and the progress achieved based on the goals set in our previous Sustainability Report.

In this Chapter
GRI 102-50
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GRI 102-53

Application of the Global Reporting Initiative (GRI)

This is Danaos Shipping's fourth Sustainability Report and the third report prepared in accordance with the guiding principles of the Global Reporting Initiative (GRI) Standards.

Contact for the Report

For any further queries concerning the Sustainability Report and our Social Responsibility Initiatives for 2019, you may contact us at sustainability@danaos.com.



Danaos Shipping is the exclusive Manager of DANAOS Corporation (DAC). DANAOS Corporation is a leading international owner of container ships who deploys its container ship fleet mainly under multiyear charters with major liner companies that operate regularly scheduled routes between large commercial ports. Founded in 1972, Danaos Shipping has developed into a well-structured organization, putting emphasis on technological solutions to optimize the management of its vessels.

Experts in shipping

With a long history of operating and investing in the shipping industry, Danaos Shipping manages one of the largest independently owned fleet of modern, large-size containerships. Our dedication to innovation, safety, efficiency and environmental responsibility has helped us forge our reputation as the leading provider of containership management services in the world.

Acknowledged innovators

Danaos Shipping has been widely recognized for its operational performance, technological innovation, high operational standards and commitment to sustainability. This recognition also acknowledges the company's dedicated management, strong work ethic and sustainable development ambitions.

Environmentally active

Environmental sustainability is a priority as we look to the future. We constantly employ the highest operating standards on board to ensure an ethical, safe and pollution free environment for our people, the community and the marine life overall.

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COMPANY MILESTONES

During the early 1960's Dimitris Coustas was drawn towards shipping and began making his first investments. In 1963 he purchased his first ship, a 3,600 dwt single-deck freighter that he subsequently renamed "Amalia" to honor his wife, Amalia Coustas. By 1966, Dimitris, along with a business partner, owned 3 vessels. In 1972, Dimitris assumed sole control of the company, which began operating as Danaos Shipping, an entity that survives to this day and acts as our operations manager. Three years later, the fleet totaled 5 vessels with an aggregate capacity of 35,000 tons.

By 1981, Dimitris Coustas had reduced the company's fleet to a single vessel, 'John,' named after his son. He proceeded to order three new vessels, which were delivered in 1984.

In 1986, DANAOS Management Consultants was co-founded by Dr. John Coustas. This company has been responsible for the creation of innovative and dynamic vessel navigation and management systems that are deployed throughout the industry.

DANAOS Corporation prides itself on having a distinct edge in technology and information systems. To this day, our affiliate software house DANAOS Management Consultants is regarded as a world leader in technology solutions for the shipping industry.

In 1987, Dimitris Coustas appointed his son, Dr. John Coustas as Managing Director and CEO of DANAOS. After assuming management of DANAOS,

John began to implement a strategy focused on acquiring large, modern containerships which would then be chartered to international liner companies. When John assumed the position of CEO, the DANAOS fleet consisted of three bulk carriers. In the early 1990s, John began to dramatically expand the fleet, beginning with the acquisition of 7 2,700 TEU containerships, which were subsequently leased to the Korean company Hanjin on long-term charters.

DANAOS' containership capacity grew at a 32% annual compound rate from 1993 to 2005.

This growth occurred through multiple shipping cycles and was aided by the broad range of relationships we have developed and the quality of service provided to our customers, as well as our ability to exploit market opportunities during periods when there have been lower market demand and prices for containerships.

Shipping operations were consolidated under a single entity in 1998. Our name was changed to DANAOS Corporation in connection with our incorporation in the Republic of the Marshall Islands in 2005.

On October 6, 2006, DANAOS Corporation began trading on the New York Stock Exchange under the symbol 'DAC.' Since then, DANAOS' fleet has grown from 27 containerships with an aggregate capacity of 116,115 TEUs to 61 containerships with an aggregate capacity of 372,769 TEUs as of today. This includes five vessels acquired by Gemini Shipholdings Corporation, in which DANAOS holds a 49% equity interest.

Our Goal - Our Vision – Our Values

Our goal is to provide our customers with the highest quality of service while focusing on the safety of our crew and the protection of the environment. We seek to provide safe, efficient and cost-effective seaborne container transportation and remain the premier choice of containership owners. To meet this goal, we continuously make substantial investments in operational, technical and financial infrastructure while striving for environmentally friendly solutions.

We are committed to conducting our business with high ethical standards and the Company considers that effective Corporate Governance is an important part to the corporate success and the enhancement of shareholder value.

Being the exclusive manager of DANAOS Corporation (DAC), Danaos Shipping follows and abides by the Code and the Corporate Governance Guidelines of DAC. The purpose of the Code is to uphold the reputation

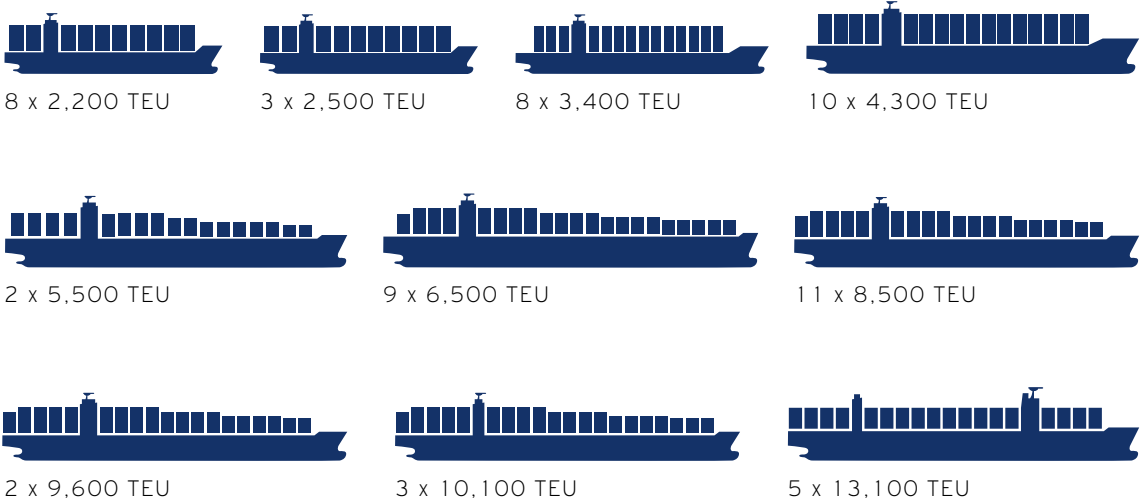
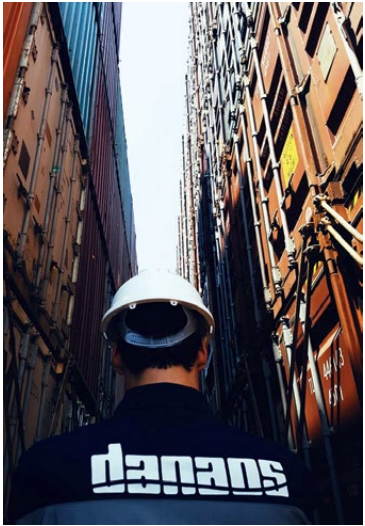
and integrity of DAC, its subsidiaries and its affiliate Company that are valuable assets, vital to the Company's success. No Code can replace the thoughtful behavior of an ethical employee. The purpose of

this Code is to raise employee awareness on areas concerning ethical risk, provide guidance to help employees recognize and deal with ethical issues, provide mechanisms for employees to report unethical conduct, and foster among them a culture of honesty and accountability.

Our Fleet

The Danaos Shipping managed fleet is represented by modern and high-quality vessels. Many of our containerships were built in the last seven years, using the most updated design innovations, and all enjoy a reputation for safety and reliability in the industry.

At the moment, we manage 61 container vessels ranging from 2,200 TEU to 13,100 TEU.





- FAR EAST - JAPAN
- USA EAST COAST - FAR EAST
- NORTH EUROPE - PERSIAN GULF
INDIA SUBCONTINENT



- USA - LATIN AMERICA
- FAR EAST SOUTH AFRICA
- FAR EAST
EAST COAST AFRICA



- SOUTH EAST ASIA - AUSTRALIA - NEW ZEALAND
- EUROPE - SOUTH AFRICA
- US WEST COAST - CENTRAL AMERICA



- NORTH EUROPE - SOUTH AFRICA
- SOUTH EAST ASIA - JAPAN



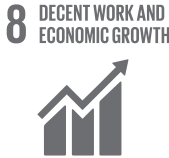
- ASIA - WEST AFRICA
- US-WEST COAST - AUSTRALIA - NEW ZEALAND



- CHINA- SOUTH EAST ASIA
- US GULF COAST- CARIBBEAN
- NORTH EUROPE - AUSTRALIA VIA SUEZ

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GRI 401-1

Our Employees



Our employees are the heart of our business and all our successes are the result of the commitment of each and every employee. In recognition of this, we strive to provide our employees with a top-quality working environment, attractive and competitive reward schemes and training programs that advance their professional and personal development.



Total Number of Employees			
Year	Crew on Board	Staff Ashore (Greek Office)	Staff Ashore (All Offices)
2017	1284	137	196
2018	1 164	139	195
2019	1284	139	198

Total number of employees 2017-2019

Total Number of Employees (Offices)		2017	2018	2019
		137	139	139
Educational Level of Employees	MSc	43.8%	47.5%	45.3%
	BSc	33.6%	43.2%	44.6%
	Secondary Education	22.6%	15.8%	10.1%

Education	2017	2018	2019
Female Employees	40.1%	40.3%	40.3%
Male Employees	59.9%	59.7%	59.7%
Employee Turnover	7.3%	3.6%	10.1%
Employee Hiring	5.1%	5.0%	10.1%

HR statistics include employee educational level, gender and new recruitments

Financial Information

DANOS SHIPPING has built a strong reputation in the shipping community by providing customized, high quality operational services in an efficient manner for both new and older vessels. Danaos Shipping provides DANAOS Corporation (DAC) with technical, administrative, and certain commercial services. The profitability of Danaos Shipping and growth are materially linked to the operation of DAC from which the Company derives all of its revenue. The financial statements of Danaos Shipping are audited on an annual basis by PricewaterhouseCoopers S.A., an independent registered public accounting firm. The audits conducted by PricewaterhouseCoopers S.A. are in accordance with International Standards on Auditing (ISAs), whilst the Company's financial statements are prepared in accordance with International Financial Reporting Standards as adopted by the European Union and the requirements of the Cyprus Companies Law, Cap. 113 which the Company is subject to as it has been incorporated pursuant to the laws of Cyprus.

Ethics & Corporate Governance

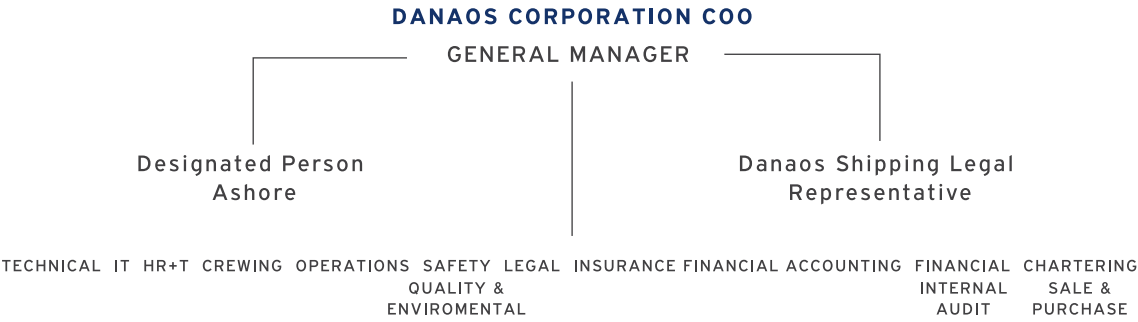
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Having established standard operating procedures, we have created accountability and a culture of compliance throughout our organization. This helps us ensure that our operations are consistent with environmental and safety laws, regulations and requirements. We have developed and implemented procedures for identifying, interpreting and effectively communicating compliance issues to our shore-based and onboard personnel.

Our employees, vendors, agents, technicians, contractors and consultants involved in the management or operation of our vessel are encouraged to report any environmental violations or safety compliance issues directly to the Company.

We provide a safe system for anyone who wishes to report an environmental violation to the Company in good faith. However, we retain the right to dismiss any employee or crew member on board any of the ships under our management for violation of the Company's environmental protection policies or applicable international rules and laws. We have established procedures for the receipt, recording, investigation, evaluation, reporting and closing of such reports. The online reporting capability does not substitute the Company's systems for reporting non-conformities, accidents, near misses or other non-compliance events. Rather, it complements and/or supplements the Company's reporting systems.

The following organization chart describes the Danaos Shipping Company structure:



Code and Policies

Danaos Shipping is committed to ethical behavior and values. Amongst its first priorities is to establish a corporate and working culture that enhances the value of ethics and promotes individual responsibility. To this effect, the Company follows and abides with the Code of Business Conduct and Ethics, the Code of Conduct & Ethics for Corporate Officers & Directors, the Ethics and Compliance Policy, and the Anti-Fraud Policy (collectively the “Code”), which set the highest standards for personnel conduct related to ethical behavior and alertness. The cornerstone in preventing fraud and anti-corruption is the creation of an environment that fosters morality, integrity and business conduct. In developing the Code, we have taken into account the ten principles of the United Nations Global Compact about labor, environment, anti-corruption and human rights.

Employees receive periodic training on the contents and importance of the Code, related policies, and the manner in which violations must be reported and waivers must be requested. Each employee of the Company certifies on an annual basis that they are in full compliance with the Code and related policy statements.

Specifically, the Corporate Governance Guidelines include the following:

- Danaos Corporation Anti-fraud Policy
- Code of Business Conduct & Ethics
- Code of Conduct & Ethics for Corporate Officers & Directors
- Ethics & Compliance Policy

In 2019 there were no fines for non-compliance with social and economic laws and regulations concerning provision and use of products and services.



Our Technical Department

Our Technical Department is responsible for the technical management of our fleet, providing advanced monitoring and knowledge on all relevant aspects. The ultimate goals of our Technical Department are the high vessel utilization, cost-effective efficiency and the promotion of environmental awareness.

We employ one of the largest technical departments worldwide and we are among the highest ranked companies in top university graduates’ employment with regard to superintendent/ vessel ratio (3 employees per fleet, for six vessels on average). Our teams are subdivided into smaller groups assigned to particular vessels. This structure, which has been tested over a long period of time, has delivered the highest KPIs and uptime in a demanding shipping industry.

Our supervisory system is enhanced by monitoring, organizational and analysis software and hardware. The core of our fleet monitoring system, Enterprise, is an integrated software system developed in-house which includes a variety of modules, such as the email exchange center, the planned maintenance system, the spares and supplies, the crewing, the operations and the ISM administrator. Collecting data from an online data acquisition and process system, called the WAVES Business Intelligence and Analysis Platform, supports the online monitoring system and the big data analysis.

All the hardware and software facilities mentioned above are constantly updated and built on state-of-the-art technologies, helping to foster the Danaos Shipping leading position of technical and operational expertise. Through technology, superintendence is applied to the highest level via enhanced analysis, effective troubleshooting, problems’ prediction or detection and reaction which contributes to minimum downtime and operating expenses.

The goals of our Operations and Technical department are related to developing state of the art systems and training employees accordingly and at the same time staying up-to-date with all new technologies and regulations, aiming at continuing on a better environmental performance. To achieve these goals, the WAVES system and an integrated system are already in use on all our vessels. Also, apart from our 8,100 TEU (within 2016), our 10,100 TEU (within 2017) and our 6,500 TEU (within 2018) vessel, our 8,500 TEU Jiangnan built vessels, 9,600 TEU SHI built & 13,100 TEU HSHI built vessels were fitted with a new bulb for better performance within 2019. Through further algorithm analysis we will cover more of our stakeholders’ needs, as will the development of neural systems. At the same time, continuous performance monitoring and evaluation of all our completed modification work will fully quantify the reduction in environmental emissions and fuel efficiency.

Our R&D Department

Officially established in 2011, our R&D department falls under the umbrella of the Technical Department. Our goal is to be at the forefront, generating innovative concepts and developing our knowledge and competencies to address our clients’ needs in a changing and evolving maritime environment. We apply our knowledge and technical expertise to improve our fleet’s fuel efficiency and our environmental performance, thus maintaining our competitive advantage and leadership position in the shipping industry.

At the same time we take pride in our technological expertise which spans from a complex operational chain from advanced systems to performance improvements. Each of our technological initiatives provides us with the potential to minimize the environmental impact of significant shipping operations worldwide without compromising our performance.

Our Policies and Certifications

Responsibility Policy

We have established standards and procedures to make sure that all vessels under management comply with all maritime environmental requirements set up under applicable international, flag state and port state laws. Among others, this includes:

- All United States’ federal and state statutes and regulations
- The Safety of Life at Sea Convention (SOLAS)
- The International Convention for the Prevention of Pollution from Ships (MARPOL)
- The International Safety Management (ISM) Code
- The International Ship and Port Facility Security (ISPS) Code
- The Ballast Water Management Convention
- Standards of Training, Certification, and Watchkeeping for Seafarers (STCW) Convention
- The Maritime Labour Convention, 2006
- International and nationally adopted low sulphur requirements



Environmental Policy
Environmental Management System

Danaos Shipping shares the commitment to a clean, healthy and sustainable environment for the whole community. We therefore take all appropriate measures to ensure that environmental safety will not be put at risk as a result of our business activities.

Our Principles for Protection of the Environment

- Environmental Management System
- Reducing emissions
- R&D, Innovation
- Waste and spill management
- Optimization
- Energy reduction and efficiency

The implementation of environmental principles into our company operations demonstrates that our personnel understand, action, and support a strong Environmental Management System (EMS). Through continuous monitoring, evaluation and improvement of environmental processes, in addition to raising awareness and employee educational procedures, we strive to be a pioneer in minimizing any negative impact of international shipping towards the environment.

Our commitment is to promote and establish a safe and pollution-free operating environment on board. To accomplish this, we use only the highest operating practices for environmental protection, safety, and quality issues. We aspire to improve our management systems continuously and to reach a high level of excellence in all aspects of our business to ensure pollution and accident-free operations.

ISO 50001
Energy Management

The Company was first certified in 2016. Through the ISO 50001 certification there are multiple benefits for Danaos Shipping, such as:

- Increased energy awareness among staff members at all levels
- Reduced greenhouse gas emissions and carbon footprint
- Increased energy cost savings for the organization and charterers alike
- Increased knowledge of equipment efficiencies



- Improved operational efficiencies and maintenance practices
- Enhanced corporate image and credibility with all stakeholders

Within 2017, two more vessels were enrolled, however, one of them was bareboat chartered in mid-2017, leaving the total number of vessels enrolled to four. The same applies for 2019. The four vessels selected are of different sizes categories: (CMACGM Moliere 6,500 teu, CMACGM Melisande 8,500 teu, Highway 2200 teu, Express Berlin 10,100 teu).

ISO 14001
Environmental Management

Danaos Shipping received its first ISO 14001 certification in 2008 and has maintained it every year since. During 2019 the company ran its environmental management system for a third year running, in compliance with the latest 2015 revision of the ISO 14001 standard, for which it has received the appropriate certification. It is an immensely important certification, as it presents a number of benefits for Danaos Shipping:

- Increases employees' awareness of the environmental impacts associated with their daily tasks
- Ensures compliance with statutory and regulatory requirements
- Reduces the number of possible environmental defects during a port state control inspection and/or eliminates potential fines from non-compliance
- Provides discounts on port dues



- Improves Company reputation and the confidence of customers
- Achieves strategic business aims by incorporating environmental issues into business management
- Provides a competitive and financial advantage through efficient use of materials and reduced waste
- Encourages better environmental performance of suppliers by integrating them into the organization's system.

**ISO 9001
Quality Management**

Danaos Shipping was first certified in 2015.

Through the ISO 9001 there are multiple benefits for the employees, such as:

- Increased reliability of services
- Greater competitiveness
- Productivity improvement
- Cost reduction and process improvement
- Decreased process errors
- Upgraded quality of services
- Enhanced customer satisfaction.

**Participation in Associations,
Events and Organizations**

We are actively seeking the participation in industry associations and committees in order to contribute to the advancement of the shipping sector through the exchange of experience and the support and promotion of sustainability and environmental issues.

- UNION OF GREEK SHIPOWNERS – Represents Greek-owned commercial vessels over 3000 GT under Greek and other flags
- SYN-ENOSIS – The Greek Ship-owners social welfare Company
- CYPRUS UNION OF SHIPOWNERS – The major representative organization of the international SHIPPING community with vessels under the Cyprus flag
- MALTA SHIPOWNERS

- PEMEN – Union of Engineers of the Greek Merchant Marine
- PEPEN – Union of Masters and Mates of the Greek Merchant Marine
- AMERICAN HELLENIC CHAMBER
- PIRAEUS MARINE CLUB
- GREEK SHIPPING PUBLICATIONS
- BIMCO – Baltic and International Maritime Council
- HELMEPA – Hellenic Marine Environment Protection Association
- PEMMEKEN – Union of Engineers of Internal Combustion Engines of Greek Merchant Marine
- CSSF (Container Ship Safety Forum)

**Our Awards and
Distinctions in 2019**

We have constantly been recognized as a pioneer in operational efficiency and technological innovations. The recognitions we have received serve as validation and give us added inspiration to continue working to make valuable and meaningful contributions to a more sustainable, eco-friendly future in the shipping industry.

AMVER Awards

Extraordinary achievements in maritime safety were honoured at the annual Safety at Sea Awards in London. The ceremony, held as part of London International Shipping Week 2019, saw maritime companies, charities and individuals recognised for achievements in training, product design, seamanship and bravery. The annual Safety



at Sea Amver Award for Seamanship was shared by three companies for the role that their vessels and crews paid in assisting a lone sailor, as he experienced a series



of mishaps on a journey from Cabo San Lucas, Mexico to Los Angeles in the USA. Danaos Shipping was one of them with the involvement of M/V Express Berlin. Captain Evangelos Loukas along Captain Dimitris Vourazelis and Captain George Kakouris traveled to London to attend the event and receive the award. The event was a perfect reminder that safety is always the priority, and the opportunity to recognise the contribution of our seafarers for their unselfish and brave rescues.

Furthermore, the Amver Awards Dinner, organized by The International Propeller Club of the United States, Port of Piraeus, in collaboration with the US Embassy in Greece and the United States Coast Guard, honored 217 Greek companies. It



is worth noting that Greece achieved true distinction as the first country to earn more than 2,000 AMVER Awards. Danaos Shipping was among the three Greek companies with the most vessels on the AMVER system during the past decade and was honored with the Fidelity Award.

**21st Annual Marine Money Greek Ship
Finance Forum**

The Management Team of Danaos Shipping attended the 21st Annual Marine Money Greek Ship Finance Forum, which took place in October 2019 at the Athens Hilton Hotel.

Dr. Coustas along with leading Ship-owners, discussed the changing Greek shipping and the finance landscape. He



emphasized on how the regulation and the changing trade patterns, coupled with the variable finance sources and the banking restrictions, have affected the way they see their business, choose their business partners and analyze the risk and reward.

During his panel discussion, Mr. Evangelos Chatzis highlighted the significant reduction in the lending capacity of the banking sector as the European banks have significantly scaled back. The Asian capital has become very relevant and at the same time there are a number of funds that have come up, deploying hundreds of millions of dollars, albeit at a high cost that is not justified, compared with historical

return on capital in shipping. He concluded by saying that once the next growth cycle comes up, people will be challenged to source the amounts of capital required and they need to be proactive and ready to re-adjust to the new financing trends.

15th Annual Forum by The Institute of Chartered Shipbrokers Greek Branch

The Institute of Chartered Shipbrokers Greek Branch organized its 15th Annual Forum, in cooperation with the British Embassy Athens, on the occasion of the Centenary Celebrations of the Institute



receiving its Royal Charter. Special speakers, eminent personalities and distinguished practitioners from the international shipping industry reviewed and discussed the effects of the trade war on the shipping era, expressing their opinions and making predictions for the future. Danaos Shipping was represented by our Commercial Manager, Mr Filippos



Prokopakis, who stated that although the trade war is having a sentimental impact across the industry’s players, especially regarding the containerized trade deriving from China, the development of new lines in South East Asia to the US in 2019 has balanced it out.

Capital Link Operational Excellence in Shipping Forum in Athens

Mr. Dimitrios Vastarouchas, Deputy Chief Operating Officer and Technical Director of Danaos Shipping participated in the Water Ballast Treatment System (WBTS) panel. With a 9-year track record, the Forum provides an interactive platform on the topic of Operational Excellence, Best Industry Practices and Sustainability linking shipping companies, charterers, government and non-government industry associations, classification societies, P&I Clubs, Registries, technology & service providers and the financial and investment community.



Watson Farley & Williams Shipping Seminar

Mr. Iraklis Prokopakis, our Senior Vice President and Chief Operating Officer, was among the speakers in the closing panel discussion titled “Greek Shipping - looking to the future” at the Shipping seminar. More than 300 shipping executives attended the seminar.



Supply Chain

We are actively working with our suppliers for the improvement of social conditions and the minimization of our environmental footprint. We recognize that everything is interconnected and that we share a common future. Through the collaboration with our suppliers we aim to achieve mutually shared targets and ease social considerations. The Company's Procurement Department is responsible for sourcing, analyzing, negotiating and supplying materials and services to meet the needs of the vessels and their personnel onboard. It interacts with hundreds of vendors and service providers across the globe producing tens of thousands of orders and service agreements.



Asignificantemploymentvolumeistherefore created, at a local and international level, for thousands of people and in the process has a considerable impact on the economy, in terms of job creation, production of revenue, empowerment of companies and improvement of the economy’s indices. In society the impact relates to the increased prosperity of people, sharing common interests and enjoying a chance for a better life. At the same time, an international culture is created and opportunities for

sharing knowledge and innovation emerge. Finally, on the environment the impacts relate to the fact that everything that is produced (material or service) has an effect on the environment. We believe, it is everyone’s duty to become conscious of the importance of our actions towards Earth.

Danaos Shipping, as a responsible corporate citizen of the world, supports and promotes every effort that improves the above parameters in the best possible way.

We constantly seek ways to improve procurement policies and procedures, especially those relating to key elements which contribute to responsible practices. We pay special attention to the extensive use of environmentally responsible vendors. Our vendors are already fulfilling our major criteria, and new co-operations are tested and considered in order to achieve our targets faster.

The ability to conduct business in a manner appropriate towards promoting ethical, social and environmental standards plays a major role in the selection of our suppliers. They are expected to take steps for continuous improvement in the aforementioned fields and adhere to our code of ethics and our commitment for environment protection, safety and proper working conditions in a responsible and sustainable way. Major areas of focus are equal opportunities, compliance with international labor standards (no child labor, decent working conditions), health and safety awareness, zero corruption tolerance, transparency and fair business policy. Although hundreds of suppliers cooperate with Danaos Shipping, the Company promotes ‘green’ and quality suppliers (holders of relevant certification i.e. ISO 14001 or ISO 9001) and targets the increase of their inclusion in procurement services.



More than 70% of our major suppliers and more than 50% of our medium and small suppliers have been characterized as “green suppliers” through our rigorous assessment of relevant certifications they hold. We aim at increasing these percentages to 85% and 70% respectively.

During 2019 there were no incidents identified during the life cycle of the organizations services which resulted in fines, penalties and/or warnings.

**ENGAGING WITH
EMPLOYEES, SOCIETY AND
ACADEMIC COMMUNITY**



In this Chapter
GRI 102-12
GRI 403-6

It is our main goal and a strategic priority to create value for the society and the community, in which we operate, and to keep our employees engaged and involved through various voluntary initiatives. We believe in the value and power of solidarity. We try to help those in need and sensitize our employees on the significance of a volunteer’s social contribution. We are therefore involved in a series of valuable initiatives and actions. We strive to provide a healthy working environment for our employees, taking special care of their wellbeing. Throughout the year we offer opportunities for entertainment and teambuilding.



Employees’ Functions

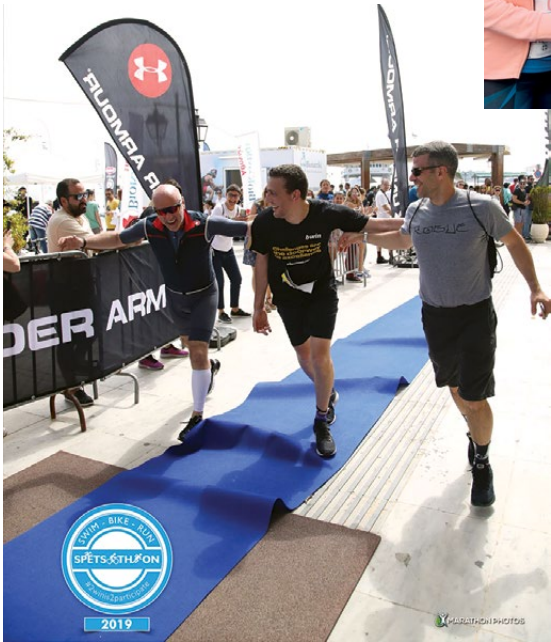


Christmas Celebrations for Children
Our employees with their families and children from Elepap (Rehabilitation for The Disabled) got together to celebrate the Christmas spirit and bake cookies in our offices in Piraeus.

Annual Beach Cleanup in Vouliagmeni
The volunteer beach cleanups have been established as a key information and awareness tool for the prevention of marine litter pollution. Under the motto “We clean what we left behind us during the summer”, Danaos Shipping contributed to this initiative by devoting a few hours to clean up the beach of Megalo Kavouri in Vouliagmeni. HELMEPA, the national coordinator of these activities in Greece, provided us with supporting material (cleanup organization instructions, posters) and the special Trash Data Form which showed that the cigarette filters were once again at the top of the list.



Running and Sporting Events



Athens Marathon
The Athens Marathon celebrated its 37th year and thousands of runners from all over the world flooded the streets of Attica setting a new record of 60,000 participants in all races and turning the entire weekend into a festival of running. Our Team was there both days running for ELEPAP.

Athina Half Marathon
We were among the 20000 runners at this exceptional spring experience in the heart of the city, bringing together sports, culture and entertainment.

Spetsathlon
The Spetsathlon is a mass sporting event being held on Spetses; an island boasting a long naval tradition and rich history, offering a variety of activities, short excursions and trips around the island in horse-drawn carriages. Our Team participated in the Spetses Triathlon Sprint Relay.

IRONMAN 70.3
The event took place in the area around Costa Navarino in Peloponnese. The challenge included a 1.9km swim, a bike course and a half marathon.



We participated in the Sprint Triathlon Relay Race in Epidavros.



Energy Duathlon Karpenissi
The race consisted of a 6km run, a 22km cycle and a 2.8km running leg.

Race for the Cure
We joined thousands of Athenians in the 11th annual "Greece Race for the Cure," one of the most popular races for breast cancer awareness worldwide. The event was organized by the Panhellenic Association of Women with Breast Cancer, called "Alma Zois", and the race's proceeds will be used to raise public awareness, promote prevention and early diagnosis and support those who are currently living with breast cancer.





In 2019 the Danaos Shipping **Basketball Team** was created, under the name 'Blue', which took part in the 1st Shipping Basketball League.



Our **Sailing Team** traveled to one of the most picturesque islands of Greece, Hydra



Rafting in Evinos River was such an amazing experience



Evenings at the theatre



Supporting the Community

Christmas and Easter Holidays
Christmas holidays always give us extra reasons of joy because we get to spend time with our loved ones in a festive spirit, opening up presents and sitting around the table enjoying the delicacies of the days.
But, while these days are around giving and sharing with your family and friends, it can also be used as an opportunity to give to people that are less fortunate. In the end it's the joy and love that we extend to others that brings the true happiness in our life.

“We make a living by what we get. We make a life by what we give”

Winston S. Churchill
(1874 -1965)

University and Student Visits

- 30 students from the Annual Maritime Programme, the official educational provider of the Institute of Chartered Shipbrokers in Greece, visited our premises. Captain Ilias Ladas introduced the students to the culture and the dynamic working environment of Danaos Shipping and he analyzed the current trends of the shipping industry while sharing real life experiences.
- Danaos Shipping and Danaos Management Consultants organized an educational visit for 80 students from the Metropolitan College of Athens. Captain Ilias Ladas welcomed the students and introduced them to the functions of Danaos Shipping while Mr Nomikos presented the software and operations of Danaos Management Consultants and their impact on today's market. At the end, Dr. Varelas analyzed the research and the development the company is working on and how innovation arises.
- It was a pleasure to welcome 35 Greek and foreign students from ICMA Centre & ALBA Graduate Business School. Captain Ilias Ladas and Mr. Prokopakis were both present to elaborate on the current shipping situation and on how Danaos Shipping coped with the shipping crisis. The visit ended with lots of questions and answers and the students left with useful tips for their future careers.



- A group of Chinese students who attend the Summer School of the European Institute of Nice, in cooperation with the Yunnan University of China, visited our premises in July. The purpose of the visit was to contribute to the "People-to-People" exchange between China and the West, while the main reason for the students who visited Greece was to learn about Greek Culture, current European politics and Greece's success stories! Danaos Shipping's Commercial Manager, Mr. Filippus Prokopakis, introduced the students to the basic principles of our company, the maritime sector in Greece and the commercial relations between China and Greece. Among others, he elaborated on our company's fleet evolution, the fleet utilization, the Internal Quality Control Records and topics on our Sustainability approach .



- Visit from students from the MSc in International Shipping, Finance and Management from Athens University of Economics and Business. Among them, there were 14 students from Korea Maritime and Ocean University in the context of cooperation between the two universities.
- For a 5th consecutive year, Professor Orestis Schinas from Hamburg School of Business Administration (HSBA) and his postgraduate students attended our premises. The students had the opportunity to explore our company and gain valuable insights into the current trends of the sector.





OUR APPROACH TO SUSTAINABILITY & CORPORATE RESPONSIBILITY

OUR APPROACH TO SUSTAINABILITY
AND CORPORATE RESPONSIBILITY

Stakeholder Engagement

In this Chapter Danaos Shipping recognizes the importance of all stakeholder groups whether these are internal stakeholders such as shareholders and employees (crew members and office employees) or external stakeholders such as suppliers and customers. Stakeholders are individuals or groups that may or may not engage in financial transactions with the company, but are affected by or can affect its actions. It is of highest importance for us to fulfil the needs and concerns of all these different groups, which will help us set the appropriate strategy, initiatives and goals. We have identified seven groups as our key stakeholders, with which we communicate at a daily basis, or when need, through a variety of communication channels in order to understand their concerns and respond in the most appropriate manner:

Our Stakeholders



The following table presents the company's main stakeholder groups, their expectations and how the company interacts and engages with them:			
Our Stakeholders	What they expect from us	Communication Channels and Frequency of Engagement	Our Response
Employees (Office staff & Seafarers)	Our employees expect from Danaos Shipping to be a fair employer, to provide safe working conditions and to care for the work-life balance of the employees, to provide opportunities for training and professional development, and to provide a discrimination-free working environment.	We support an ongoing open communication between management and employees. Engagement also through monthly internal meetings as well as an annual management review report. We host regular team building activities and employee welfare initiatives, and we hold regular employee satisfaction surveys.	Who we are Engaging with Employees, Society and Academic Community Material Issue: Occupational Health and Safety Material Issue: Training and Education Material Issue: Emergency Preparedness Material Issue: Risk Management Material Issue: Audits, Inspections and Surveys Environmental Report
Customers (Charterers)	Our customers expect high quality and flexible services, to provide ongoing and accurate support, to be flexible to their requirements, to be transparent, and to conduct our business in a sustainable manner (ethical, safe, environmentally-friendly, respecting of human rights).	We engage with our customers through our cargo booking process and our dedicated customer service coordinators. We also hold review meetings, every 6 months (or when needed), in order to share information on action plans and long-term strategy. We work closely with our customers to develop services that promote sustainability, and we participate to our customers' benchmarking systems and sustainability assessments.	Who we are Material Issue: Emergency Preparedness Material Issue: Risk Management Material Issue: Audits, Inspections and Surveys Environmental Report
Finance Related (Banks)	Our finance related stakeholders are interested in our company's creditworthiness and financial performance, to receive accurate information, in our risk control and assessment, and to the company's robust management processes and long-term growth.	We are in daily communication with our finance related stakeholders through our contracts, our financial reports, progress meetings, and our corporate presentation and in general our day-to-day transaction.	Message from the Company's Management Who we are Material Issue: Emergency Preparedness Material Issue: Risk Management Material Issue: Audits, Inspections and Surveys Environmental Report

Our Stakeholders	What they expect from us	Communication Channels and Frequency of Engagement	Our Response
Government Officials and Authorities (Port State Control)	Government officials and agencies expect from us to be compliant and consistent, to conduct safe and environmentally-friendly operation, to implement quality standards, to do our due diligence, and to generate economic growth.	We engage with government officials and authorities through notices/instructions about latest rules and requirements, through the results of our inspections and auditing programs, and through formal dialogue and communication channels.	Message from the Company's Management Who we are Material Issue: Occupational Health and Safety Material Issue: Energy Consumption Material Issue: Waste and Spill Management Material Issue: Emissions Material Issue: Environmental Compliance Material Issue: Emergency Preparedness Material Issue: Risk Management Material Issue: Audits, Inspections and Surveys Environmental Report
International and Industry Organizations and Regulators (e.g. IMO, HELMEPA)	These stakeholders expect our active participation, collaboration and support, to be up-to-date and compliant with new requirements, to operate in an ethical manner, and to promote the internal sustainability culture.	We engage though annual and ad-hoc meetings, through memberships, audits, through participation in high-kevel meetings, steering groups, committee, councils, forums and projects, as well as in the formation of joint action plans.	Who we are Material Issue: Occupational Health and Safety Material Issue: Energy Consumption Material Issue: Waste and Spill Management Material Issue: Emissions Environmental Report
Suppliers (port agents, manufacturers, shipyards)	Our suppliers expect a fair and long-term cooperation, the timely execution of our financial responsibilities, to inform them in time of any significant changes, and to exchange knowledge and business opportunities.	We communicate with our suppliers through our supplier performance evaluation, through service review meetings (with major suppliers), through our participation in supplier organized workshops and on-site visits.	Who we are Material Issue: Emergency Preparedness Material Issue: Risk Management Environmental Report
Society (NGOs, Local Communities)	Our social stakeholders expect from us to support social and economic development, to conduct our business in an ethical manner and protect human rights, to provide employment opportunities, and to participate in initiatives in order to support social and environmental causes.	We communicate through news published on our corporate web-site and social media accounts, through our donations and charities, and through our participation in discussions/ dialogue in sustainability forums organized by NGOs	Who we are Engaging with Employees, Society and Academic Community Our Approach to Sustainability and Corporate Responsibility Environmental Report



Our Material Issues

In this Chapter One of the key principles of the Global Reporting Initiative is the Materiality Principle. **GRI 102-46** An organization should report on topics which cause the most important economic, environmental and social impacts, and/or on topics that are considered as the most important by the organization’s internal and external stakeholders. During the process of determining those issues, an organization must actively involve its stakeholders and examine all the topics for the time period that the sustainability report will refer to. **GRI 102-47**



Methodology

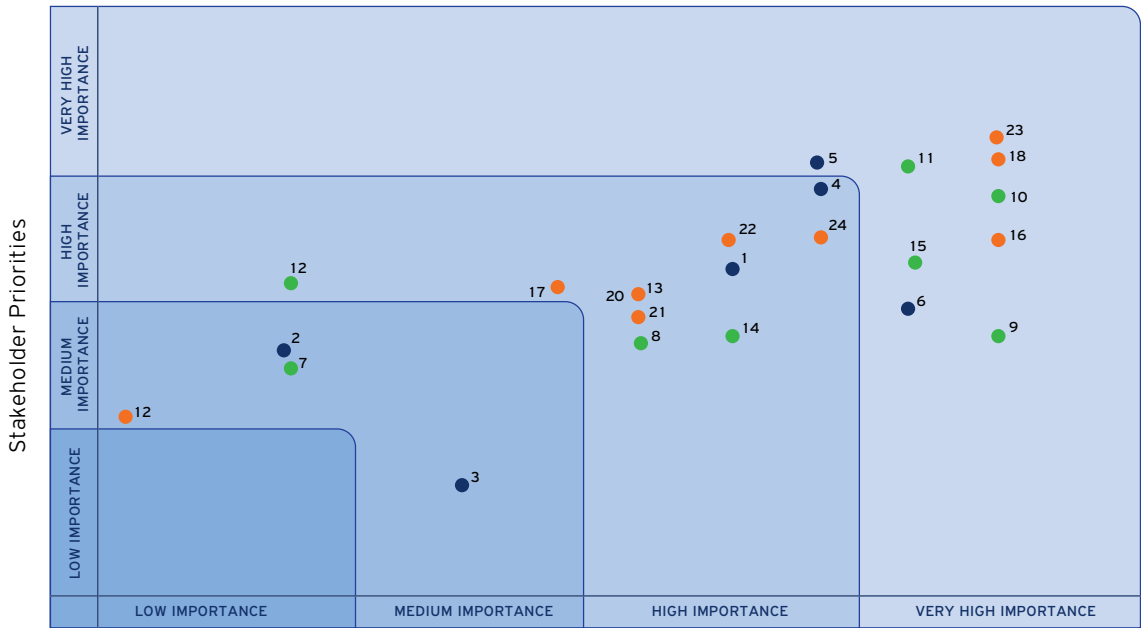
- Step 1** Choosing the stakeholders to be involved in the process.

Step 2 Identifying and prioritizing the sustainability topics (economic, environmental, workplace related, human rights, social, responsible products, etc.) using the GRI Standards. During this step, the material topics identified by other organizations in the Shipping sector were taken into account (sector benchmarking).

Step 3 Conducting a materiality survey, through a qualitative questionnaire, in order to identify the material topics. For every question a qualitative scale (very high, high, medium, and low) was used in order to evaluate the importance of each topic. The survey was addressed to our employees (office and crew members), to our charterers and to our suppliers.

Step 4 Analyzing the outcomes and results and presenting the topics in a materiality matrix. Upon completion of the materiality assessment process, the following topics were considered to be of very high importance, thus are included in the Danaos Shipping Sustainability Report.

- Occupational Health and Safety
- Training and Education
- Energy Consumption
- Waste and Spill Management
- Emissions
- Environmental Compliance
- Emergency Preparedness
- Risk Assessment
- Audit, Inspections and Surveys



● ECONOMIC ● ENVIRONMENTAL ● SOCIAL-EMPLOYEES-SERVICES-CLIENTS

MATERIALITY MATRIX LEGEND

- | | |
|--|---|
| 1. Economic Performance | 13. Employment |
| 2. Indirect Economic Impact | 14. Labor/Management Relations |
| 3. Procurement Practices | 15. Occupational Health and Safety |
| 4. Anti-corruption | 16. Training and Education |
| 5. Risk Assessment | 17. Diversity, Equal Opportunity and Non-discrimination |
| 6. Energy Consumption | 18. Emergency Preparedness |
| 7. Biodiversity | 19. Supplier Social Assessment |
| 8. Water (inc. Ballast Water) | 20. Security Practices |
| 9. Emissions (or Air Pollution) | 21. Corporate Responsibility Activities |
| 10. Waste and Spill Management | 22. Human Rights Assessment |
| 11. Environmental Compliance | 23. Audits, Inspections and Surveys |
| 12. Selective and Evaluating Supplier using Environmental Criteria | 24. Innovation and Digitalization |



Material Issues	Internal and External Boundaries (where the impacts occur)
Occupational Health and Safety	Danaos Shipping, Employees, Crew Government Officials and Authorities
Training and Education	Danaos Shipping, Employees, Crew
Energy Consumption	Danaos Shipping, Employees, Crew, Customers
Waste and Spill Management	Danaos Shipping, Employees, Crew, Society (NGOs, Local Communities), Government Officials and Authorities
Emissions	Danaos Shipping, Employees, Crew, Government Officials and Authorities
Environmental Compliance	Danaos Shipping, Employees, Crew, Customers, International and Industry Organizations and Regulators, Society (NGOs, Local Communities), Government Officials and Authorities, Finance Related Stakeholders
Emergency Preparedness	Finance Related Stakeholders
Risk Assessment	Danaos Shipping, Employees, Crew, Suppliers, Customers, Government Officials and Authorities, Finance Related Stakeholders
Audit, Inspections and Surveys	Danaos Shipping, Employees, Crew, Suppliers, Customers, Government Officials and Authorities



MATERIAL ISSUE:
Occupational Health And Safety



We hold the health, safety and wellbeing of our employees and crew at the highest level, and we constantly strive to provide the safest possible conditions. We have implemented an Occupational Health and Safety regime which is based on policies and procedures designed in a manner that ensures the health and safety of everyone involved in our operations. This regime includes the application of best practices in ship operation, working environment, prevention of injury (or loss of life), measures to respond to all identified risks to ship/cargo/environment, emergency preparedness, and the development of the health and safety skills of our employees and crew. Danaos Shipping was the first Greek company to be certified by Det Norske Veritas (“DNV”) and our global operations are audited by DNV and are successfully assessed as compliant with the IMO Code for SOPS.

Towards the success of our health and safety regime we have established and communicated policies in order to report, prevent and eliminate accidents and near misses. The main objective of the policy is for each employee and crew member to start and finish the day safe and healthy.

Year	2017	2018	2019
Near Misses	166	203	213

The policy also extends beyond employees and crew members to stevedores’ and visitors’ as well. The policy clearly states that all incidents (accidents and hazardous occurrences) are reported, investigated and analysed (without the fear of reprisal) in order to analyse the causes and prevent similar incidents in the future. We also

encourage reporting of incidents which do not result in injuries and near misses. These minor incidents are regarded as warnings signals for procedures and practices that merit revision and remediation.

All incidents are investigated by the ship’s Master, with the support of the safety Officer, seafarers’ safety representative or any other member of the Safety.

In this Chapter Environmental & MLC Committee. Danaos Shipping uses the most objective measuring tool, the Loss Time Injury Frequency (LTIF) which measures the number of hours a seafarer is unable to work due to injuries (the number of lost time injuries (fatalities + lost work day cases) per 1,000,000 work hours).

During 2019 we had on record 13 LTIs which equal to a LTIF rate of 1.12. We are encouraged to have seen a further increase in reporting of near misses, counting 213 reports for this year. This is attributed to all the efforts made to train our people onboard and actively engage them in recognizing and reporting a near miss.

To further decrease the LTIF rate we have incorporated the Lockout/Tagout system which is used to secure energy stored equipment in a manner that will render them safe to work on and prevent the inadvertent startup of such equipment while being worked on.

Additionally, from 2018 onwards we

started implementing a Behavior Based System approach in order to address the factors that influence and reinforce learning and behavior. Successful implementation leads to significant improvements to the safety performance, and through the BBS approach we aim to create a “total safety culture” throughout the company.

MATERIAL ISSUE:
Training and education



We consider our employees and crew members as our biggest asset, so we constantly invest in their talents and updating their knowledge. We provide opportunities for professional and personal development based on their needs and based on the company's needs. Throughout our training programs, we encourage bonding between people and promote the Danaos Shipping culture as



participants exchange views, ideas, and experiences. The main component of our success is based on the performance, devotion and technical expertise of our employees both onshore and offshore. We continuously identify training needs for employees and seafarers, and we have designed a customized training program to ensure safety awareness and competence.

	2017	2018	2019
Trained Seafarers in Greece	213	148	526
Trained Seafarers in Branches	2251	2335	2074
Training Hours in Greece	431	372	890
Training hours in Branches	604	3063	4979
Seminar hours	520	600	640
Seminar Attendances for Employees	155	158	147
Bridge Simulator Training Hours	272	126	120

Training Hours for employees in different categories (2017-2019)

It is important that employees and seafarers are trained on subjects such as environmental policy and goals, relevant environmental aspects, operational, monitoring and contingency procedures, updates in laws and regulations affecting ship operation, and day to day activities. The Danaos Shipping Assessment and Training Center (DATC) was established in 2016 in order to cover the newly arising training needs of the fleets' Officers, Crew and shore staff employees. It accommodates an on-premise installation, housed at the Danaos Shipping Piraeus offices, comprising of the full-mission Bridge Simulator and state of the art training facilities. The DATC personnel continuously supports and cooperates with all the Company's departments for the identification of their specific training needs and thus providing training activities aimed to further enhance the knowledge, the awareness, the competence and the performance of the Company's personnel. An integral part of the curriculum is our Company's Safety Management System (DSMS), as well as the feedback and lessons learnt from actual fleet experience. The training combines theoretical knowledge and practical training, tests and enhanced competence by using actual scenarios as simulation exercises. DATC has been certified and accredited by Lloyd's Register of shipping and the DMS (Cyprus Government Department of Merchant shipping) with the Approved Training Provider Certificate and the ISO 9001:2008 Certificate, pending the newly launched ISO 9001:2015 standard certification.

DATC accommodates an on-premise installation, housed at the Danaos Shipping Piraeus offices

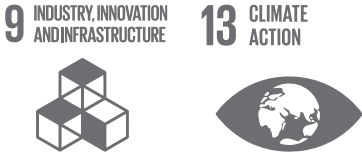
- BR(T)M: Bridge Resource Management (theory and simulation) (5 days)
- MRM: Maritime Resource Management (5 days)
- Mega carries Shiphandling basis Danaos Shipping 13,100/10,100 TEU vessels (2 days)
- Incident Command & Rescue Sim AFF Module (2 days)

Through the DATC the following Simulation Trainings are provided:

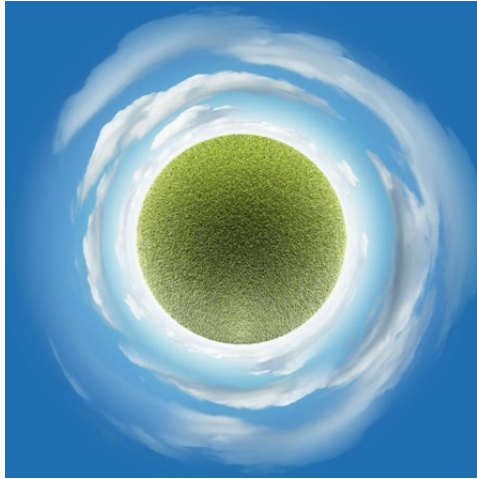
IN - HOUSE SEMINARS	
Leadership (Russia)	Damage Stability and Control (Russia)
Bridge Resource & Team Management	Leadership (Ukraine)
IMDG Handling (Russia & Ukraine)	Navigation (Russia & Ukraine)
P&I and FD&D Seminar	Marine Meteorology
Maritime Resource Management	Damage Stability and Control
Ballast Water Treatment (Russia)	Scrubber & IMO2020 (Russia)
Multicultural Communication o/b	Ballast Water Treatment & IMO2020 (Ukraine)
Scrubber (Ukraine)	Charter Party (Russia & Ukraine)
Leadership (Russia & Ukraine)	

OUTSOURCED SEMINARS	
New Labor law	10th Annual Greek Shipping Forum
5o International Conference (Artificial Intelligence & Legislation)	Training in US Waters workshop (organized by SQE Marine)
Global Sulphur Cap Forum Athens (organized by TOTAL)	Yokogawa Autopilot / Basic Troubleshoot (organized by Spacel)
Sulphur 2020 (organized by LR)	7012 Delta V Operator Interface for Continuous Control (organized by Emerson)
IMO DCS Webinar	Agile Audit by HIIA
3rd Cyber Security Conference	Global Liner Conference 2019
Using Industry Best Practices Effectively	STCW for Crewing Managers
Smart Marine Network	Hellenic American Maritime Forum (by Hellenic-American Chamber of Commerce)
1st DNV GL Marine Safety & Quality Forum	NI Hellenic “Maritime Day”
Clyde & Co “Annual Greek Shipping Conference”	Alfa Laval Boilers – 2020 Compliant Fuels & Upcoming Challenges for Boilers Perspective
Updated BWM Convention	2019 Incident Management Team Tabletop Exercise Athens (IMT TTX)
Data Analytics	5th Ship IT Conference
INCE Quarterly Shipping Briefing	Maersk’s Owners Seminar 2019
Expect the Unexpected - Annual HIIA Conference	2019 ACFE Green Annual Conference
Exclusive Cyber Security Shipping Roundtable	Annual Capital Operational Excellence in Shipping Forum
Current Trends in Shipping Seminar & Networking Reception	Hyundai Global Service Day
Shipping Benchmarking Initiative 2019 – Vessel OPEX & Quality Report	Dual Fuel Engines
Marine Insurance	19th Navigator 2019 – The Shipping Decision Makers Forum
2020: Navigating the Known Unknowns	KR Technical Seminar
Stevedore & Personal Injury Claims in the US (The Swedish Club)	Countdown to IMO Sulphur Cap 2020 (March Greece)
Exclusive Cyber Security Shipping Roundtable	

MATERIAL ISSUE:
Energy Consumption



In this Chapter Danaos Shipping vessels are operating on principal trade routes all around the world, including emissions control areas. The implementation process has required modification to the vessels in order to comply with the regulations and ensure



safe trade. Danaos Shipping has adjusted all vessels accordingly, in order to be able to use different fuel grades and operate safety in principle routes all over the world.

Our goal is to offer optimal sustainable transport solutions to our customers, solutions that are compliant with all the global trends and meet present and future requirements (legislative and otherwise). To achieve this, we successfully completed the modifications of all our vessels well before the required deadline, while at the same time we investigate further modifications in order to meet upcoming regulations.

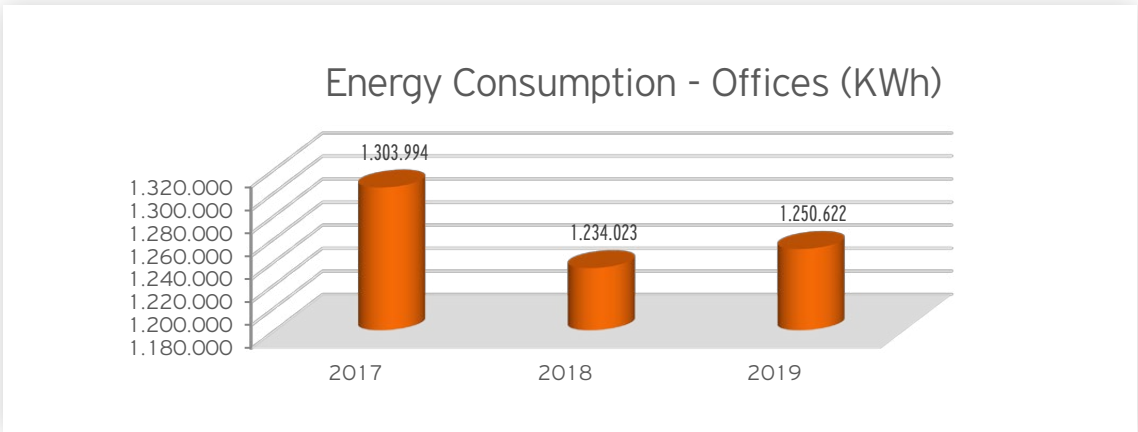
Our ambition is to incorporate the energy efficiency into our employees’ culture enabling them to meet regulatory and market requirements while we maintain our competitive edge. We have adopted SEEMP and ISO50001, and we have incorporated energy management algorithms into our WAVES analytics platform to monitor power efficiency and improve performance. We aim at even further power efficiency improvements and further implementation of ISO50001 with our fleet.

Climate change is considered to be the major global challenge during the next decades. Thus, one of our main concerns is to reduce energy consumption (electricity and natural gas), as well as fuels (gas and petroleum from the owned and leased vehicles), in order to reduce the Greenhouse gas emissions (GHG) and contribute to the minimization of climate change and its impacts. Our energy consumption is expressed in terms of fuel we use and is divided into the following key performance indicators: Heavy Fuel Oil (HFO), Low Sulphur Fuel Oil (LSFO), Marine Gasoil (MGO), Total Diesel Generators (D/G) Consumption at Sea. We also monitor

Our goal is to offer optimal sustainable transport solutions to our customers, solutions that are compliant with all the global trends



the energy consumed, in terms of electric power, by our headquarters. All energy performance indicators related to vessels’ performance along with relevant graphs are presented in detail in the Environmental report.



Energy Consumption – Offices (kWh) 2017-2019

Optimizations & Environmental Protection

As part of our core policy, in order to remain sustainable and address our client’s needs in the best possible way, we have studied numerous optimizations for our ships’ design, targeting increased fuel efficiency and a cleaner environment. Danaos Shipping has made extensive studies in the key areas below:

- Online Data Acquisition & Performance Monitoring
- Bulbous Bow Modification & Propeller Retrofits
- Cargo Flexibility & Reefer Maximization
- Shortening
- EEIMs
- Turbocharger Cut-Out (TC c/o)
- Trim Optimization
- Draft Increase
- Hull Appendages & Rudder Bulb

All retrofits applied on Danaos Shipping vessels are summarized in the Environmental Report.

Cargo Carrying Capacity Optimization

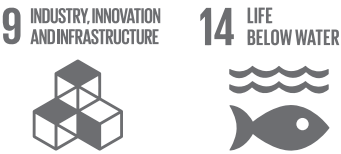
Cargo Carrying Capacity Optimization Danaos Shipping, acknowledging the difficulties of the current market and the responsibility of reducing the environmental footprint, has extensively investigated the options in minimizing the transportation cost and the subsequent fuel consumption required per TEU. The reduction of the fuel consumption per TEU can be achieved either through hull, engine optimizations and upgrades or through the increase of the transported container capacity. To this respect, wanting to take advantage of both options, Danaos Shipping’s Technical department has materialized a series of modifications such as bulbous bow renewals, replacement of propellers with highly efficient ones, main engine

derating & TC Cut out and ultra-low friction paints among others. The latest upgrades, installed on the 4x6,500 TEU vessels, have recently completed their dry docking obligations, proving that Danaos Shipping is investing towards the future and provides the market with vessels having the latest optimizations and adhering to the highest standards. New lashing rules, updates of the pre-existing Cargo Securing Manuals and Loading software are now utilizing higher Cargo capacity on Danaos Shipping vessels, with loading flexibility and heavier stack. The advantage of higher draft to accommodate more cargo which could benefit from it, derived from the results of the finite element & direct strength analysis.

We have studied numerous optimizations for our ships’ design, targeting increased fuel efficiency and a cleaner environment



MATERIAL ISSUE:
Waste and Spill Management



Danaos Shipping constantly practices the necessary due diligence with regards to environmental protection. Any procedure adopted and any action taken considers this interest as the outmost priority.

In this Chapter
GRI 306-3

Since the most common reason for the spillages is the human factor, the minimization to the exposure of any risk associated with pollution is a challenging task. Danaos Shipping has developed a strict Safety Management System and policies that promote pollution prevention as part of the Company's culture. Not only is the importance of International Conventions and Regulations being emphasized, but it has taken one step further to predict and

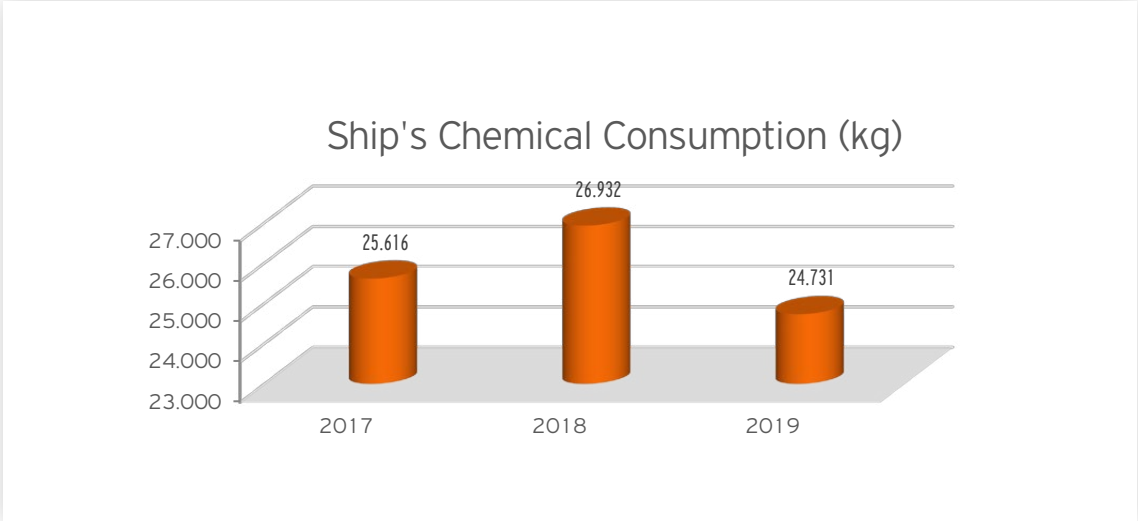
prevent any potential threats to the marine environment.

Our fleet is being maintained at the highest standards of the market, providing safe boundaries for the pollutants transported. The human factor is being controlled by selected Crew Pools from Danaos Shipping owned Manning offices, in-house training to promote environmental safety

culture & awareness, very frequent visits onboard by the Technical and Quality experts of the office

to evaluate the condition, safety and navigational measures and practices implemented. In addition, there are many onboard training programs and Computer Based Trainings (CBT) promoting training on the field and learning through repetition. The SMS system of Danaos Shipping has been awarded with an ISO 9001 & ISO 14001. On top of the Regulatory requirements, Danaos Shipping has applied a Green Policy with regard to the chemical composition used onboard, and a Garbage Management plan that prohibits disposal at sea and only to shore facilities.

The SMS system of Danaos Shipping has been awarded with an ISO 9001 & ISO 14001



Ship's Chemical Consumption (kg) 2017-2019

We are constantly operating with "zero spills" as our main goal, so it is not a coincidence that, in 2019, Danaos Shipping had a zero oil spillage record, something which rewards the structure and the efforts of the Company and its management. These efforts include, among others, a comprehensive series of seminars and the superintendence modernization which aims to enhance inspection efficiency. We also have taken measures to improve the management of waste generated by our headquarters. We monitor the average paper consumption per employee per day, and we take steps to inform our employees how they can reduce their consumption of paper. In 2019 the consumption of A4 sheets in our office was 25.5 sheets per employee per day.

Dangerous Goods Cargo
Transportation

Whenever we transport dangerous goods (DG) we apply specific policies and procedures in order to ensure prevention of accidents to persons or property as well as to the environment. On an annual basis we carry more than 75000 tons of dangerous goods. Mitigating the risks associated with hazardous materials requires the application of safety precautions during their transport, use, storage and disposal. With respect to the transportation of dangerous goods, our major responsibilities are:

- a) To present with accuracy the ship's specification, concerning DG carriage onboard.
- b) To sign transparent and comprehensive contracts/charter parties with clients; DG carriage, limitations and restrictions have to be clearly addressed to involved parties.
- c) To exercise due diligence in the ship's operations.
- d) To carry out proper maintenance in order to avoid hazards and damages that might lead to DG cargo damage and adverse consequences.

We constantly strive to improve our performance and the efficiency of our

policies and procedures. Towards that end we have amended the Planned Maintenance System and ship's inspection in order to take further into account the contributing factors to cargo safety. The HR & Training Department (HR&T) has also developed and applied onboard the "Know Your Vessel" campaign, to eliminate risks of bad operation and misjudgment, training courses for ship personnel, in-house navigation simulations and numerous courses for Company staff. Also, the Company monitors through WAVES the carriage of DG to keep statistics and alert the attention of parties involved.

Ballast Water

Danaos Shipping is committed to protecting the aquatic environment by adopting a Ballast Water exchange policy for all managed vessels, which prevents the transfer of harmful alien aquatic species from one region to another



through Ballast water. Within 2019 only, a total volume of 5996209.8 cubic meters of ballast water has been exchanged through the Danaos Shipping PING fleet, contributing to the significant goal of marine environment protection and environmental footprint reduction. Danaos Shipping is aiming to go one step further, to explore possibilities of further efficacy. The R&D Department of Danaos Shipping has thoroughly investigated the optimum solution of the alien species' elimination through the use of Ballast Water Management System available on the market. Each of these systems was evaluated for its efficiency, technical competence, operational flexibility, durability and environmental friendliness, based on its operational principle certification and acceptance by the IMO, USA Environmental Protection Agency and the European Committee. In 2018 the first BWM system was successfully installed and commissioned onboard our first vessel, while all vessels are upgraded with "ready-to-use" reception of pipelines which will expedite the installation of the selected Ballast Water Treatment equipment. At the same time, Danaos Shipping uses antifouling paints of the latest technology -which are TBT Free-, containing biocides that are non-bio-accumulative to the aquatic organisms and are degraded and detoxified in the environment, complying with existing environmental regulations and future legislation. We aim to preserve the good records from the implementation of the Ballast Water Management Plan and, through the adoption of new technology, to further improve our environmental footprint and contribute to a cleaner marine environment.



	2017	2018	2019
Total Ballast (m3)	6,073,075.1	5,969,978.4	5,996,209.8
Ballast exchange increase compared to last year	9.5% (decrease)	1.7% (decrease)	1.3% (decrease)
Change in FO consumption per ton of ballast exchange compared to last year	3.6% (decrease)	8.0% (increase)	+8.6% (increase)

Ballast water performance

More information on our waste and spill management and performance can be found in our environmental report.

MATERIAL ISSUE:
Emissions



GRI 305-1 We monitor closely
GRI 305-4 our emissions due to
GRI 305-5 our commitment towards
GRI 305-6 reducing our impact to
GRI 305-7 climate change, as well as
due to compliance to laws
and regulations. Our Emissions Control
Schemes includes:

- CO₂ INDEX pilot with GL
- WPCI ESI INDEX
- Green Passport SoC by KR for 10,100 TEU series vessels
- Certification of Inventory of Hazardous Materials Certificate by DNV-GL for 13,100, 8,500 and 3,400 TEU series vessels
- Ship Energy Efficiency Management Plan Statement of Compliance with GL
- Annual environmental reporting concerning environmental safety (emissions KPIs) and technical initiatives to improve performance



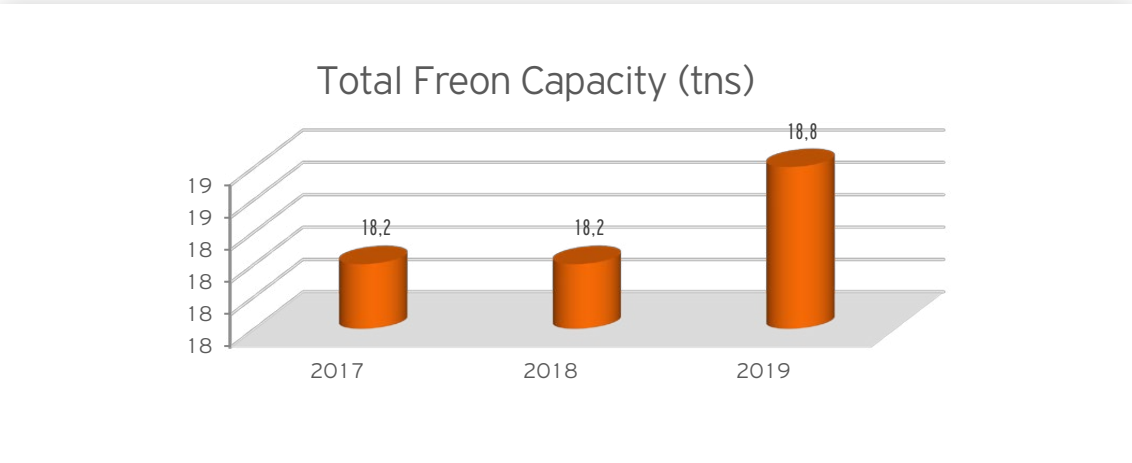
All emission related graphs and metrics are presented in detail in the environmental report. These metrics include CO₂, NO_x, SO_x.

ENVIRONMENTAL IMPLEMENTATIONS ABOUT EMISSIONS	
CO ₂ Emissions are monitored and calculated from 2010 onwards.	SEEMPs have been on Danaos Shipping vessels since 2013. SEEMP goals are evaluated every year from vessels' consumptions and operational profile.
CO ₂ Emissions calculations are incorporated in Danaos Shipping WAVES with quarterly produced reports, indicating the cumulative emissions per quarter per vessel.	Environmental Report is produced every year including CO ₂ SO _x NO _x emissions and efficiency indexes.
Danaos Shipping has voluntarily taken part in DNVGL's EEOI certification program from 2008 onwards.	

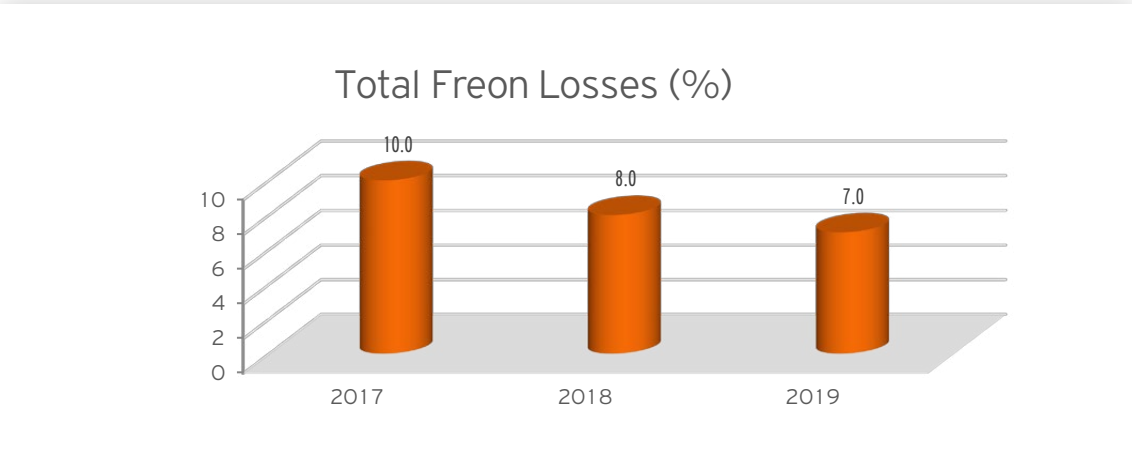
Emissions environmental implementations

Ozone Depleting Substances

Danaos Shipping has incorporated the modifications from the old systems to the new ones and, according to the regulations, any deliberate emission of ODS is prohibited. For new building vessels, any installation containing ODS, such as halons and chlorofluorocarbons (CFCs), is prohibited. The Freon Types in use are R-404A and R-407C. Freon losses for 2019 were at 7% of the total capacity (1280kg approximately). Since 2016 we have managed to reduce our Freon losses from 11% to 7%.



Total Freon Capacity (tns) 2017-2019



Total Freon Losses (%) 2017-2019

We plan to reduce greenhouse gas emissions and mitigate climate change, based on EU F-gas Regulation (517/2014) adopted 1 Jan 2015 for reduction of use of HFCs. A service ban on HFCs with high Global Warming Potential (GWP>2,500) like R-404A, R-507 and R-422D has been imposed since 1 Jan 2020. The F-gas regulation applies to all EU countries and EU flagged vessels. Therefore, replenishment of retrofit of systems with lower GWP refrigerants takes place where required.

MATERIAL ISSUE: Environmental Compliance



In this Chapter We have established
GRI 307-1 and implemented a robust Environmental Management System to comply with relevant national and international legislation, regulations and voluntary initiatives which the company subscribes to. As an example, we are an active member of the Hellenic Marine Environment Protection Agency. Our fleet systematically complies with or exceeds environmental laws and regulations. Our advanced solutions (such as electronically controlled engines) are designed to optimize fuel efficiency while reducing emissions – which help tackle global warming. Danaos Shipping is committed to operating at all times within the boundaries of environmental laws and regulations, such as the standards imposed by the IMO, the U.S. Oil Pollution Act of 1990, CERCLA (spills and releases of hazardous substances), The Clean Water Act, The Clean Air Act, and the EU MRV regulation. We carefully examine potential incidents of non-compliance and we set appropriate action plans to investigate the incident and to ensure that similar incidents do not occur in the future. During 2019 there were no incidents of non-compliance with environmental laws and regulations.



MATERIAL ISSUE:
Emergency Preparedness



In this Chapter Danaos Shipping has taken all necessary measures and resources in order to protect our employees and crew, as well as our operations and vessels, in cases of emergency. We monitor closely all parameters in order to ensure that all equipment and vessels are kept in top operating order. We have established procedures to identify all

potential emergency situations, and we have prepared plans for each one. These plans are communicated to all employees and crew members, and at the same time we provide training (computer-based and physical) in order for them to be ready to respond in emergency situations. An important parameter in our emergency preparedness system is our hands-on management system on board every vessel, detailed in the Ship Security Plan (“SSP”). Measures stipulated in the SSP are designed to prevent any unlawful act likely to jeopardize the safety and security of persons, property and environment. All employees, crew members, visitors, inspectors, suppliers, and any third party seeking to board the ship, are also required to comply with the SSP.

Our SSP entails:

- Safeguards for passengers and crew
- Procedures to protect ports and the community at large
- Contingency measures in the event of a security breach
- Comprehensive training
- Active promotion of security awareness among personnel both ashore and on-board
- Regular documented interviews, internal audits and security assessments
- Ongoing review and update of company security policy and measures



Crisis Management undertaken by Danaos Shipping is prepared to deal in the most efficient way with any Incident that might evolve into a Crisis, prevent it if feasible or handle the process and contain it. A specific Emergency Response Plan and an in house Emergency Response Service system have been developed to support the whole process and provide specific instructions and task allocations on a per case basis.

MATERIAL ISSUE:
Risk Management



In this Chapter There are a number of risks associated with the shipping industry. These risks can be classified through multiple aspects of risk including business, safety, environmental, stock and tax related, and operational risks.. For instance, we identify as risks the climate change and greenhouse gas restrictions and how they will impact our business, the increased inspection procedures and new

security regulations, piracy risks, marine disasters, and environmental accidents. We provide a detailed analysis in our Annual Report of all the risks that we have identified and influence our performance in various levels which can be located in the corporate website (<https://www.danaos.com/investors/financial-information/annual-reports/default.aspx>).

At the same time we have policies and procedures for risk assessment onboard our vessels. These policies and procedures aim at the identification, assessment and management of risks onboard in order to determine the best course of action (e.g. elimination, or substitution). Once an appropriate course of action has been determined our processes include review of the action plan, re-evaluation and corrective measures if necessary.

MATERIAL ISSUE:
Audits, Inspections and Surveys



In this Chapter For Danaos Shipping, good records in PSC (port state control) examinations are an indication of a sound safety management system and associated culture within the organization. Apart from the regulatory PSC inspections, The Danaos Shipping fleet is also subject to the annual safety inspections performed by our Flag States. All recorded deficiencies are immediately rectified and preventive actions are taken to the satisfaction of the local Port State Control. Additionally, on a Company level, the deficiencies are collectively analyzed- evaluated to avoid repetition of similar deficiencies and



the necessary corrective measures are circulated for training purposes to the rest of our fleet. At present, Danaos Shipping stands as a High Performance Company in the Paris MOU and maintains an excellent inspection record in the US Coastal Guard (USCG). Auditing is an on-site verification process, such as inspection or examination, to verify that the Company's activities and results comply with the planned arrangements and requirements. There are two categories of audits which are related to Danaos Shipping activities: the internal and the external audits. Both are conducted within the Company and onboard vessels to verify compliance with the established safety

and environmental laws and regulations. The internal audits are scheduled on the basis of the status and importance of the system to be audited and are carried out by personnel who:

- Are independent from the person responsible for the area to be audited, and
- Have received appropriate training.

All systems of Danaos Shipping Safety Management are audited at least to the minimum requirements (once per year in the Head Office and not exceeding 12 months on board each vessel) and at any greater frequency, as deemed necessary, in accordance with the status and importance of the activity. Audits are coordinated by the Safety Quality and Environmental Department. Unscheduled audits are performed if a serious deficiency in any part of the DSMS becomes evident during third party inspections, from accidents and hazardous occurrences, review of records or during routine operations. Timely corrective action is undertaken for both shore and shipboard deficiencies, which does not exceed 3 months. Audit findings, Non Conformities or Observation notes are collectively analyzed and evaluated during the management review process,

Year	2017	2018	2019
Internal Audits	65	67	69
External (3rd Party) Audits	23	30	19

Internal and external audits

PSCI-FSI Defects Comparison Table				
	Insp/Vsl.	Def per Ins.	% Ins.w/o d	ISM rel.
2017	3.59	0.69	71%	0%
2018	3.65	0.59	79%	0%
2019	3.34	1.00	70%	0.14%

IPSCI-FSI defects comparison table (2017-2019)

so that any useful outcome can be utilized and incorporated in system revision and management of change. Findings that pose a serious threat to the safety of personnel or the ship or a serious risk to the environment are analyzed with the RCA method and immediate corrective action is undertaken. Third party audits are performed by an RO member of IACS annually at the Danaos Shipping Piraeus office and twice within a 5 year cycle on board. The main purpose of these third party audits is to maintain the validity of the Company D.O.C. and Vessel S.M.C. by verifying the effectiveness of the Company SMS. The results of these audits are also analyzed with the RCA method and the corrective actions are incorporated within our system. During 2019 we have performed 69 internal audits as well as 19 third party audits carried out by DNV-GL, KR and LR to ensure that our systems remain in compliance with the ISM/ISPS Code, the ISO 9001, ISO 14001, ISO 50001 standards and the MLC Convention. 44 MLC inspections were carried out by qualified MLC auditors without major deficiencies and vessels were certified successfully.

In pursuit of managerial excellence, we have established our own KPIs by participating in the BIMCO SHIPPING KPIs program, from the early stages of its inception. BIMCO SHIPPING KPIs allows ship-owners and managers to compare their ships' efficiency against the performance of the industry and sector averages. It is a well-organized standard, consisting of 64 different performance indicators (PIs) which are directly observable or measurable within the Company (including: number of fire incidents, exposure hours, number of navigational related deficiencies, number of collisions etc.). The PIs then formulate the next level of Key Performance Indicators (KPIs) which measure the Company's performance in relation to the target set. The target is common for all participants and accepted as the industry standard. On the highest level, the KPIs combine with the shipping Performance Indexes (SPIs) in order to express the overall performance within specific main areas such as:

- Health and safety management and performance
- HR management performance
- Environmental performance
- Navigational safety performance
- Operational performance
- Security performance and Technical performance



Actions and Future Goals

Topics	Actions for 2019-2020	Progress	Goals for 2020-2021
Employees	More employees' engagement to volunteering	Achieved	Conduct a 360 employee survey (offices) with the view to provide constructive feedback
	Additional and focused on specific needs training	Achieved	Additional Training more focused on specific needs including Sustainability topics
	Well trained and familiar with new technologies and regulations employees to be competitive and achieve better performance	Achieved	Well trained and familiar with new technologies and regulations employees to be competitive and achieve better performance. Issue a Code of Conduct for all Stakeholders
Crew	Maintain a high level of safety culture among crews through training onboard and ashore	Ongoing	Maintain a high level of safety culture among crews through training onboard and ashore
	Focus on systematic analysis of the information retrieved through the Near-Miss reporting	Ongoing	Focus on systematic analysis of the information retrieved through the Near-Miss reporting.
	Improve the flow of communication between ship and office	Ongoing	Improve the flow of communication between ship and office
Society	Explore new areas of need in the community and assist accordingly	Achieved	Explore new areas of need in the community and pick up initiatives with high societal impact

Topics	Actions for 2019-2020	Progress	Goals for 2020-2021
Environment	Total collection & segregation of recycled materials. Total collection /recycling Shipboard & Office	Ongoing	Further decrease the paper consumption in offices, and increase the recycling of materials generated shipboard and in the company offices
	Aim to complete Inventories for 45% of the Fleet during 2019 and finalize the issuance of Inventories for the vessels required as per EU Regulation during 2020	Ongoing	Aim to complete Inventories for 45% of the Fleet during 2019 and finalize the issuance of Inventories for the vessels required as per EU Regulation during 2020
	Continue with the monitoring of issuance of necessary declaration forms and statements for the proper follow up of approved Inventories	Achieved	Continue with the monitoring of issuance of necessary declaration forms and statements for the proper follow up of approved Inventories
	To adopt new environmental friendly technologies, i.e. Scrubbers on the agreed vessels in the view of IMO 2020 regulation and BWMS on all vessels in the view of Ballast Water Management regulation. The target is to ensure the successful installation and smooth operation onboard	Ongoing	Adopt new environmental friendly technologies, i.e. Scrubbers on the agreed vessels in the view of IMO 2020 regulation and BWMS on all vessels in the view of Ballast Water Management regulation. The target is to ensure the successful installation and smooth operation onboard
Customers & Suppliers	85% (from 70%) of our major suppliers and more than 70% (50%) of our medium and small suppliers to been characterized as "green suppliers" through the assessment of relevant certifications they hold	Ongoing	85% (from 70%) of our major suppliers and more than 70% (50%) of our medium and small suppliers to been characterized as "green suppliers" through the assessment of relevant certifications they hold
	Improving procurement policies and procedures, all key elements which contribute to responsible practices. Special attention to the extensive use of environmentally responsible vendors	Achieved	Update procurement policies and procedures to include more sustainability related topics (social, labor and environmental) and partners' surveys

Our Commitment to the UN Sustainable Development Goals

In this Chapter At Danaos Shipping we have adopted the United Nations Agenda 2030, as expressed in the form of the Sustainable Development Goals for 2030. It is our decision to actively contribute to their achievement, through the promotion of environmental protection, health and safety and innovation.

We have made it our priority to contribute towards the Goals (SDGs) that are directly linked to our activities and all issues that are material to Danaos Shipping, as well as those that are considered Sector challenges. Here below you can find a list that links our material issues and initiatives with the Sustainable Development Goals that are closely linked with our activities and operations.



SDG	ISSUE – GRI INDICATORS	OUR RESPONSE – REFERENCE
<div>3</div> <div>GOOD HEALTH AND WELL-BEING</div> <div></div>	<div>Occupational Health and Safety</div> <div>GRI 403-1</div> <div>GRI 403-2</div> <div>GRI 403-3</div> <div>GRI 403-4</div> <div>GRI 403-5</div> <div>GRI 403-6</div> <div>GRI 403-7</div> <div>GRI 403-9</div> <div>Emergency Preparedness</div> <div>Risk Assessment</div>	<div>Occupational Health and Safety</div> <div>Material Issue: Emergency Preparedness</div> <div>Material Issue: Risk Management</div>
<div>4</div> <div>QUALITY EDUCATION</div> <div></div>	<div>Training and Education</div> <div>GRI 404-1</div> <div>GRI 404-2</div>	<div>Material Issue: Training and Education</div>
<div>8</div> <div>DECENT WORK AND ECONOMIC GROWTH</div> <div></div>	<div>GRI 102-8</div> <div>GRI 401-1</div>	<div>Who we Are – Our Employees</div>

<div>9</div> <div>INDUSTRY, INNOVATION AND INFRASTRUCTURE</div> <div></div>	<div>Energy Consumption</div> <div>GRI 302-1</div> <div>GRI 302-5</div> <div>Waste and Spill Management</div> <div>GRI 306-3</div> <div>Audits, Inspections and Surveys</div>	<div>Material Issue: Energy Consumption</div> <div>Material Issue: Waste and Spill Management</div> <div>Material Issue: Audits, Inspections and Surveys</div>
<div>13</div> <div>CLIMATE ACTION</div> <div></div>	<div>Energy Consumption</div> <div>GRI 302-1</div> <div>GRI 302-5</div> <div>Emissions</div> <div>GRI 304-1</div> <div>GRI 304-4</div> <div>GRI 304-5</div> <div>GRI 304-6</div> <div>GRI 306-7</div>	<div>Material Issue: Energy Consumption</div> <div>Material Issue: Emissions</div>
<div>14</div> <div>LIFE BELOW WATER</div> <div></div>	<div>Waste and Spill Management</div> <div>GRI 306-3</div> <div>Emergency Preparedness</div> <div>Risk Assessment</div>	<div>Material Issue: Waste and Spill Management</div>
<div>16</div> <div>PEACE, JUSTICE AND STRONG INSTITUTIONS</div> <div></div>	<div>Environmental Compliance</div> <div>GRI 307-1</div> <div>Risk Assessment</div>	<div>Material Issue: Environmental Compliance</div> <div>Material Issue: Emergency Preparedness</div> <div>Material Issue: Risk Management</div>
<div>17</div> <div>PARTNERSHIPS FOR THE GOALS</div> <div></div>	<div>Employee and Society Engagement</div> <div>GRI 102-12</div>	<div>Engaging with Employees, Society and Academic Community</div>

GRI Standards Index

In this Chapter: GRI 102-3, GRI 102-10, GRI 102-41, GRI 102-48, GRI 102-49, GRI 102-51, GRI 102-54, GRI 102-55, GRI 102-56

The present Sustainability Report of Danaos Shipping is the Company’s fourth attempt to communicate its sustainability performance, and covers our activities during 2019. It was evaluated by the Centre for Sustainability and Excellence (CSE) according to the reporting guidelines of GRI STANDARDS and was verified as an “in-accordance core” GRI Standards Report.

GRI STANDARDS NUMBER	DISCLOSURE TITLE	REPORTING REQUIREMENTS
General Disclosures		
Company Profile		
GRI 102-1	Name of the organization	Who we are
GRI 102-2	Activities, brands, products, and services	Who we are
GRI 102-3	Location of headquarters	3, Christaki Kombou Str., 3011, Limassol, Cyprus 14, Akti Kondyli Str., 18545, Piraeus, Greece
GRI 102-4	Location of operations	Who we are
GRI 102-5	Ownership and legal form	Who we are – Ethics & Corporate Governance
GRI 102-6	Markets served	Who we are
GRI 102-7	Scale of the organization	Who we are
GRI 102-8	Information on employees and other workers	Who we are – Our Employees
GRI 102-9	Supply chain	Who we are – Supply Chain
GRI 102-10	Significant changes to the organization and its supply chain	No significant changes during the reporting period
GRI 102-11	Precautionary Principle or approach	Who we are
GRI 102-12	External initiatives	Engaging with Employees, Society and Academic Community. Our Commitment to the UN Sustainable Development Goals.
GRI 102-13	Membership of associations	Who we are
Strategy		
GRI 102-14	Statement from senior decision-maker	Message from the Company’s Management
Ethics and Integrity		
GRI 102-16	Values, principles, standards and norms of behavior	Who we are
Governance		
GRI 102-18	Governance structure	Who we are – Ethics & Corporate Governance
Stakeholder Engagement		
GRI 102-40	List of stakeholder groups	Our Approach to Sustainability and Corporate Responsibility
GRI 102-41	Collective bargaining agreements	Danaos Shipping follows all national laws and regulations regarding collective bargaining agreements, and during 2019 there were no incidents of non-compliance recorded

GRI STANDARDS NUMBER	DISCLOSURE TITLE	REPORTING REQUIREMENTS
GRI 102-42	Identifying and selecting stakeholders	Our Approach to Sustainability and Corporate Responsibility
GRI 102-43	Approach to stakeholder engagement	Our Approach to Sustainability and Corporate Responsibility
GRI 102-44	Key topics and concerns raised	Our Approach to Sustainability and Corporate Responsibility
Report Profile		
GRI 102-45	Entities included in the consolidated financial statements	Who we are
GRI 102-46	Defining report content and topic Boundaries	Our Approach to Sustainability and Corporate Responsibility
GRI 102-47	List of material topics	Our Approach to Sustainability and Corporate Responsibility
GRI 102-48	Restatements of information	There are no restatements of information between this and previous reports
GRI 102-49	Changes in reporting	There are no significant changes in our sustainability reporting process
GRI 102-50	Reporting period	About the Sustainability Report 2019
GRI 102-51	Date of most recent report	Our previous report was published in 2019 for our 2018 sustainability performance and initiatives
GRI 102-52	Reporting cycle	About the Sustainability Report 2019
GRI 102-53	Contact point for questions regarding the report	About the Sustainability Report 2019
GRI 102-54	Claims of reporting in accordance with the GRI Standards	This report has been prepared in accordance with the GRI Standards: Core Option
GRI 102-55	GRI content index	GRI Index
GRI 102-56	External assurance	We have not sought external assurance for our sustainability report
Specific Disclosures		
Anti-corruption		
GRI 103	Management Approach	Who we Are
GRI 205-3	Confirmed incidents of corruption and actions taken	During 2019 there were no confirmed incidents of corruption
Energy Consumption		
GRI 103	Management Approach	Material Issue: Energy Consumption Environmental Report
GRI 302-1	Energy consumption within the organization	Material Issue: Energy Consumption Environmental Report
GRI 302-5	Reductions of energy requirements of products and services	Material Issue: Energy Consumption Environmental Report
Emissions (Air Pollution)		
GRI 103	Management Approach	Material Issue: Emissions Environmental Report
GRI 305-1	Direct (Scope 1) GHG emissions	Material Issue: Emissions Environmental Report
GRI 305-4	GHG emissions intensity	Material Issue: Emissions Environmental Report

GRI STANDARDS NUMBER	DISCLOSURE TITLE	REPORTING REQUIREMENTS
GRI 305-5	Reduction of GHG emissions	Material Issue: Emissions Environmental Report
GRI 305-6	Emissions of ozone depleting substances	Material Issue: Emissions Environmental Report
GRI 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Material Issue: Emissions Environmental Report
Waste and Spill Management		
GRI 103	Management Approach	Material Issue: Waste and Spill Management Environmental Report
GRI 306-3	Significant Spills	Material Issue: Waste and Spill Management Environmental Report
Environmental Compliance		
GRI 103	Management Approach	Environmental Compliance Environmental Report
GRI 307-1	Non-compliance with environmental laws and regulations	Environmental Compliance Material Issue: Emergency Preparedness Material Issue: Audits, Inspections and Surveys Environmental Report
Employment		
GRI 103	Management Approach	Who we are – Our Employees
GRI 401-1	New employee hires and employee turnover	Who we are – Our Employees
Occupational Health and Safety		
GRI 103	Management Approach	Material Issue: Occupational Health and Safety
GRI 403-1	Occupational health and safety management system	Material Issue: Occupational Health and Safety
GRI 403-2	Hazard identification, risk assessment, and incident investigation	Material Issue: Occupational Health and Safety Material Issue: Emergency Preparedness Risk Management Material Issue: Audits, Inspections and Surveys
GRI 403-3	Occupational health services	Material Issue: Occupational Health and Safety
GRI 403-4	Worker participation, consultation, and communication on occupational health and safety	Material Issue: Occupational Health and Safety
GRI 403-5	Worker training on occupational health and safety	Material Issue: Occupational Health and Safety Material Issue: Training and Education
GRI 403-6	Promotion of worker health	Engaging with Employees, Society and Academic Community
GRI 403-9	Work-related injuries	Material Issue: Occupational Health and Safety
Training and Education		
GRI 103	Management Approach	Material Issue: Training and Education
GRI 404-1	Average hours for training per year per employee	Material Issue: Training and Education

GRI STANDARDS NUMBER	DISCLOSURE TITLE	REPORTING REQUIREMENTS
GRI 404-2	Programs for upgrading employee skills and transition assistance programs	Material Issue: Training and Education
Risk Assessment		
GRI 103	Management Approach	Risk Management
Emergency Preparedness		
GRI 103	Management Approach	Material Issue: Emergency Preparedness
Audits, Inspections & Surveys		
GRI 103	Management Approach	Material Issue: Audits, Inspections and Surveys

This Sustainability Report has been conducted by the Centre for Sustainability & Excellence



“The proper use of science is not to conquer nature but to live in it”

Barry Commoner

ENVIRONMENTAL

REPORT 2019



INTRO

In Danaos, it is our commitment and an integral part of the company's culture to provide a fleet of highly efficient and optimized vessels in order to remain competitive and maintain the lead in our class.

The approach we have adopted in this direction is based on three pillars:

- *The establishment of an R&D department*
- *The study of 38 energy efficiency improvement measures*
- *The development of WAVES data analytics Platform*

Our R&D department is made up of specialists involved in research, who, among other things, study a large number of proposals for optimizing the energy efficiency of vessels, and through a process of internal evaluation, propose investing in those they consider potentially useful and effective.

The study of 38 measures, is aimed at increasing the energy efficiency of vessels - a project that started in 2008 and continues to this day - through updating data and adding new innovative systems that can be applied to the company's ships. In this context, we have worked with reputable shipping partners and are among the first to exchange feedback and suggestions with leading liner companies that belong to our clients' portfolios.

Of course, the above mentioned measures are now well known, and several of them have already been implemented. For us, the differentiation lies in the way one can control the actual consumption penalty, identify the cause and take corrective actions immediately.



It is vital to grasp the problem quickly and to be the fastest to solve it. It was this need that laid the foundation for the third pillar of our strategy, which was the realization of the vision we had seven years ago for the design and implementation of WAVES. WAVES is the implementation and digitization of our ideas and 40 years of experience, integrated within the company's business platform, and incorporated into its workplace culture. WAVES has given us enormous capabilities and is primarily aimed at being able to monitor closely and control the performance of the vessels and, therefore, the investments we have made.

To reach a desirable level of emissions, a series of measures followed by speed reductions would have to be implemented. In this context, it was imperative to compare the actual performance of the vessels with the objectives we had set in order to identify any deviations. With the algorithms we devised, we managed to prevent the development of performance penalties, which gives the company a competitive advantage.

The above are our key steps that required that the company invest around \$ 87 million over a decade. Of the \$87 million, about \$45 million is dedicated exclusively to optimizing consumption and the reduction of emissions.

Of course, to all the above, one must add our huge investment in training people both onboard and ashore and the huge effort applied to change the workplace culture and enhance people's awareness, embedding and active participation.

Dimitrios Vastarouchas,
*Deputy Chief Operating Officer
and Technical Director*

When the company's R&D was first established in response to the increasing market needs and, of course, our customers' need for efficient and environmentally sound vessel operation, we placed emphasis on the study of energy efficiency optimization methods for vessels. This includes optimizing the vessels' design, their operating profile, as well as the way their performance is monitored. In this context, we have studied and evaluated 38 methods of optimizing the energy efficiency of vessels, which we have categorized according to the system that was optimized: propulsion system (main engine -propeller), fuel, on board energy management, reduction of hull roughness, intervention on the hull design to reduce friction or ripple resistance, or improvement of vessel operation.

Having studied all these measures, we arrived at a conclusion about whether they would be worth implementing on containerships. Of course, the expected returns of each measure vary and do not work cumulatively. Therefore, during the first phase, we first had to evaluate which measures were worth implementing on the company's vessels, and by taking into account each ship's hull lines, equipment, and special features, to assess its dynamics through CFD studies and model tests in experimental tanks. After they were implemented, we were able to determine the real savings from those in which we chose to invest. The necessity for evaluating the investments done led to the creation of a smart operational platform (WAVES) that analyzes and processes data as a decision making supporting tool. The purpose of the WAVES platform is to take advantage of both office and ship-generated data to bring added value to DANAOS in an

The purpose of the WAVES platform is to take advantage of both office and ship-generated data to bring added value to DANAOS in an environment where data flows are constantly increasing

environment where data flows are constantly increasing. In essence, what we have tried and managed to accomplish with WAVES is to combine DANAOS's long experience in ship management with new technologies to maximize the company's operational efficiency and gain a competitive advantage. The platform performs a comparison between the actual operating data and the data we had expected as a result of the investments made in each ship and goes on to produce automatic alerts in the event of deviations from the optimal operation, thereby always ensuring close monitoring and timely and effective response to any problem.

In an effort to evaluate the performance of the ship's energy efficiency measures, we developed the corresponding EEDI (Energy Efficiency Design Index) index for all the company's vessels regardless of the year of their construction (corresponding to the EVDI index developed by Carbon War Room and RightShip). The above indicator was then calculated after optimization was completed on each ship, and its reduction coefficient was determined, which reflects the level of efficiency increase compared to that of the original design. It is noteworthy that after investing \$ 87 million, an EEDI improvement of over 20% on over 60% of the fleet was achieved.

While considering the CO₂ footprint for four distinctive carrier capacity categories of Danaos fleet ranging from 6,500 to 13,000 TEUs the speed reduction and the improvements applied on each vessel resulted in an over 50% improvement in the EEOI compared with theoretical values basis on initial vessel design for specific route.



Evi Politi,
R&D Manager

REGULATORY UPDATE

Nowadays, environmental sustainability is becoming a major concern in the shipping industry, as the increasing environmental regulations are having a significant impact on shipping dynamics. During 2019 the shipping industry was counting down to the 1st of January 2020, for the implementation of the new limit to 0.5% on fuel oil sulphur of ships trading outside Sulphur Emission Control Areas (ECAs), with benefits for the environment and human health. As of March 2020, the carriage of non-compliant fuel for combustion purposes, for propulsion or operation onboard ships, will be prohibited, unless a ship is fitted with a scrubber. The time has come for Shipowners to decide, from a plethora of opinions, on the most appropriate method for ships' compliance, including low sulphur fuels and alternative fuels or alternative arrangements such as an exhaust gas cleaning system (also known as scrubber), while remaining commercially sustainable in the long term.

The total number of ships with the exhaust gas cleaning systems, either installed or on order is approximately 4,000 as of early 2020 according to latest analysis (ref. DNV GL), which validates the Scrubber-predicted figures from analysts, since 4,000 was the figure that Exhaust Gas Cleaning Systems Association (EGCSA) predicted in 2019 that would be installed as of beginning of 2020, while back in 2016 the CE Delft had predicted in the Official Fuel Availability Report that when the IMO 2020 global 0.5% sulfur cap should come into force in 2020, some 3,800 vessels would be operating with scrubbers.

The year of 2019 brought significant milestones related with the EU MRV and IMO DCS requirements under MARPOL Annex VI

A limitation of the scrubber option is the implementation of strict local regulations that restrict or completely prohibit the discharge of wash water from open-loop scrubbers or prohibit the use of scrubbers. On the other side, during 2019 the anti-scrubber movement appears to be fading, according to the announcement from several Port Authorities around the world, indicating they have no intention of banning the use of open-loop scrubbers in their waters since up to now there is no compelling research that has come to light suggesting they should. Moreover, recent CE Delft study showed that open-loop scrubbers have a minimal effect of seawater quality in port and will be presented to IMO for thinking on scrubber pollution and future work at evaluation and harmonization of rules and guidance on the discharge of washwater from EGCS into the aquatic environment, including conditions and areas.



The compliant fuel used after 1st January 2020 to meet the 0.5% global sulphur cap could be either residual or distillate fuel oil. Blended grades of both 0.5% Sulphur-max residual fuel oil and 0.1% Sulphur-max distillate are expected to be the predominant compliant products that will be initially available. However, an important issue for the ships is that the quality, availability and quantity of these different types of fuel were unknown within 2019, and immediately after 1st January 2020 these are likely to vary considerably between individual ports. Shipowners have to ensure that ISO 8217:2017 is specified as the required standard when ordering 0.5% sulphur fuels for use after the 1st of January 2020.

Last but not least, climate change remains the driving force behind energy efficiency regulations to improve the environmental performance and reduce the carbon footprint



The year of 2019 brought significant milestones related with the EU MRV and IMO DCS requirements under MARPOL Annex VI. For ships subject to EU MRV regulation, the first year of monitoring ended in 2018 and the first reporting is taking place in early 2019. The collected monitoring reports were submitted for verification and after successful verification, emission reports were submitted directly to THETIS-MRV, which is operated by the European Maritime Safety Agency (EMSA). For IMO DCS, which applies to all ships of 5,000 gross tonnage and above, 2019 is the first monitoring period. In order to comply with the IMO DCS requirements, each ship is required to have onboard SEEMP Part II, describing the methodology that will be used for the data collection and the processes that will be used to report the data to the ship's Administration. Once the verified data will be reported, it will be transferred to the IMO Ship Fuel Oil Consumption Database (GISIS), where it will be kept anonymized, in the view of enabling the IMO to evaluate the need for further technical and operational measures for enhancing the energy efficiency of international shipping.

Last but not least, climate change remains the driving force behind energy efficiency regulations to improve the environmental performance and reduce the carbon footprint, paving the way for cleaner shipping operations globally. The Shipping industry, is pushed to develop cleaner and energy efficient vessels, while research on alternative fuel is constantly increasing and considerable investment is made in the development of more energy-efficient engines and low-carbon fuels for ships.



OUR PROJECTS

ONLINE DATA ACQUISITION &
PROCESS SYSTEM

WAVES

RETROFITS & OPTIMIZATIONS

WATER BALLAST TREATMENT

MRV & IMO DCS EMISSIONS
REPORTING

EXHAUST GAS CLEANING
SYSTEMS

IMO 2020: FUELS

LOW FRICTION ANTIFOULING
PAINTS

HAZARDOUS MATERIALS

ONLINE DATA ACQUISITION & PROCESS SYSTEM

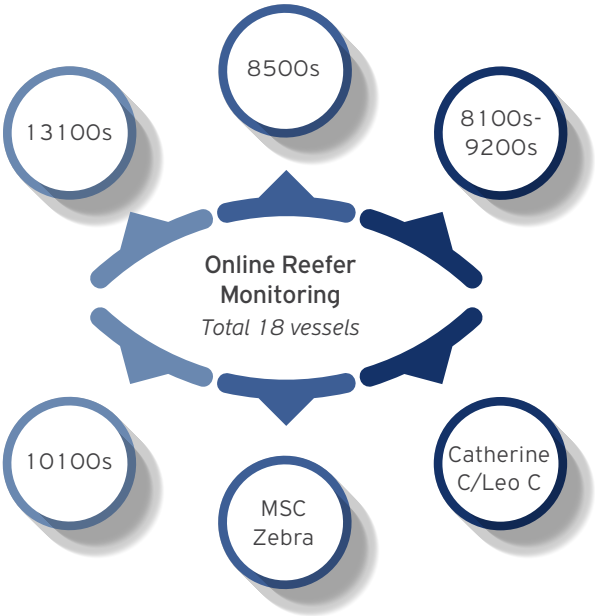
VESSELS ENROLLED DURING 2019

In 2019, the “On line” data acquisition system was installed on another vessel, which was a new acquisition for Danaos, increasing the number of vessels that are monitored through the online system to 30. The system was installed on November 2019. On-line reefer monitoring is available

Zim Luanda	4,253 TEU
CMA CGM 6500s	5 x 6,500 TEU
8500s	2 x 8,468 TEU
CMA CGM 8500s	5 x 8,530 TEU
9600s	2 x 9,580 TEU
10100s	3 x 10,100 TEU
Hyundai 13100s	3 x 13,100 TEU
MSC Zebra	2,500 TEU
Dimitra C /Performance	2 x 6,400 TEU
Catherine C / Leo C	2 x 6,200 TEU
Genoa	5,500 TEU
Colombo / Singapore	2 x 3,314 TEU
Belita	8,533 TEU

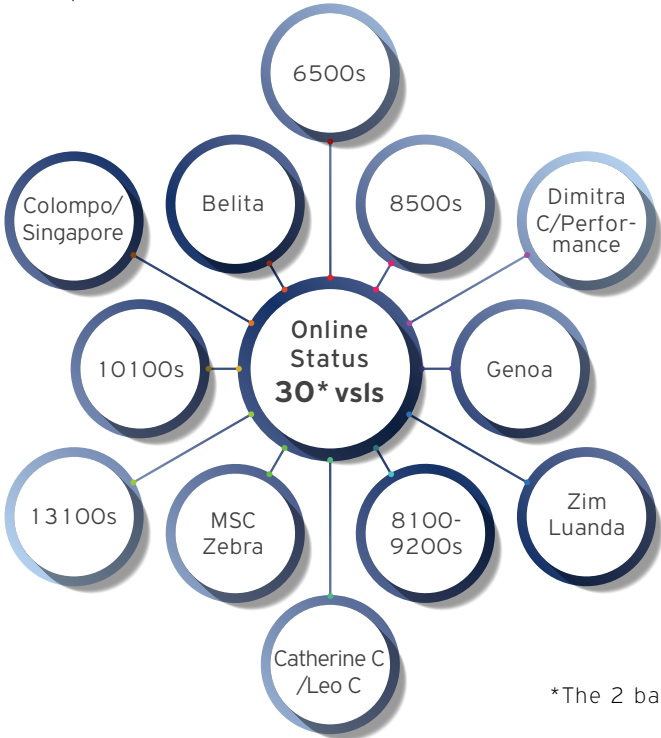


for 18 Danaos vessels. The vessels’ actual power efficiency is calculated by monitoring the load of the actual reefers. Reefers total load is either fetched from reefer panels or calculated as the total generator power output subtracting power of all other consumers in case direct reefer power measurement is not available. The above raw input combined with a number of other data processed through WAVES’ algorithms provide a reliable base for assessing the effectiveness of the energy management system onboard, ensure optimum energy use and minimization of energy losses while also trigger the implementation of corrective actions and adjustments where needed.

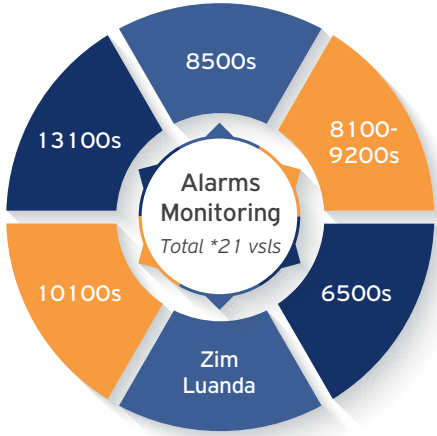
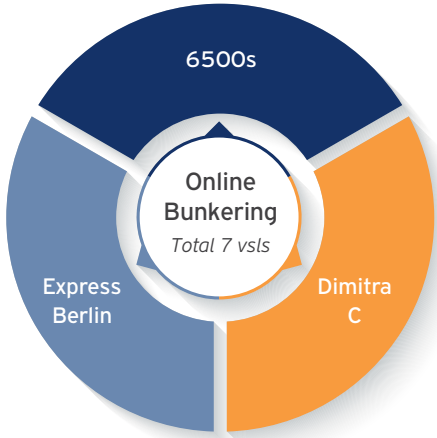


The on-line bunkering option which was first implemented on CMA CGM Rabelais has been successfully applied onboard all her sister vessels. Tanks signals have also been collected from Express Berlin and storage tank signals also from Dimitra C. Finally the alarm monitoring option is currently applied to twenty one vessels. Significant improvement has been made in the alarms received from 6,500s TEU series, and we are continuously working on further improvement and stabilization of alarms received from all vessels. According to our statistics logs which are updated on a regular basis, the system’s stability has been further improved compared with the previous year. The data loss due to equipment failure, on-line system hardware failure or communication issues between the servers, for the sum of vessels and the total number of parameters monitored within 2019 is below our target limit of 2%.

Online system status:



*The 2 bareboats not included



WAVES

2019 was a very challenging year with main focus the upcoming IMO 2020. After the first successful scrubber installation on Leo C, within April 2019, Danaos has incorporated scrubber monitoring into Waves system.

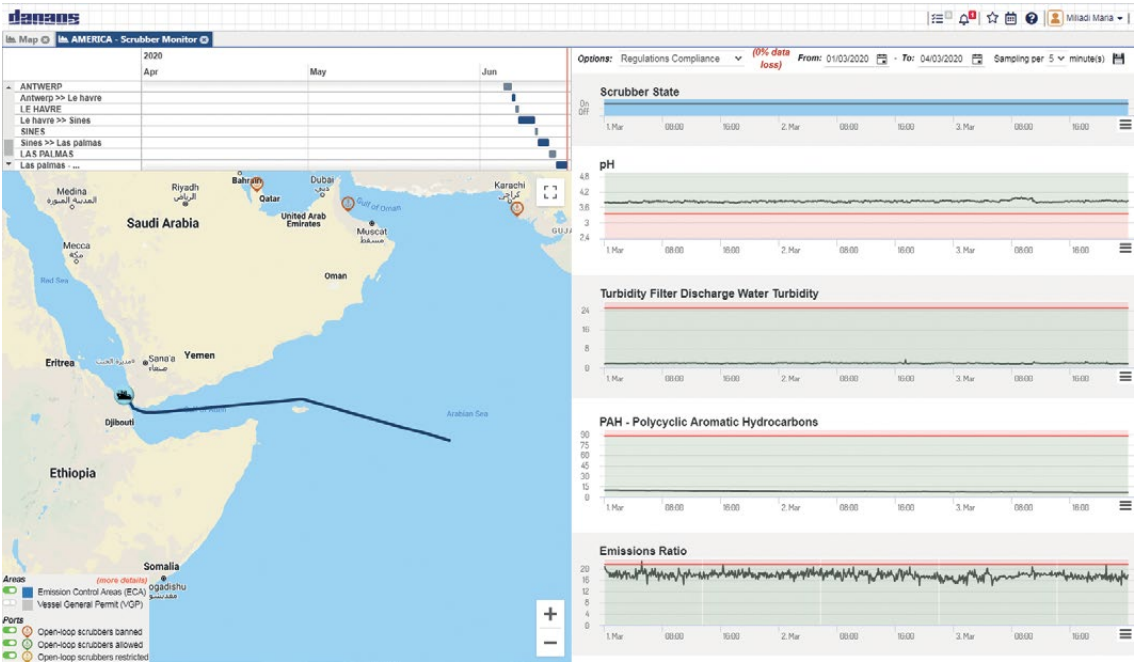


M/V Leo C, a containership of 6,422 TEU, departing the port of Hamburg

SCRUBBER MONITORING

The scrubber monitoring has been included in the Waves interactive map. Regulations compliance, operation details, technical details and alarm list are available for the user to check and monitor. Below is the main screen after entering the scrubber monitoring option and is the “Regulation

compliance”. The “Scrubber state” bar indicates the operational status of the scrubber and vessel (at sea, at port, working ok or not). Relevant emissions and washwater limits have been inserted in order for any violation to be easily identified.

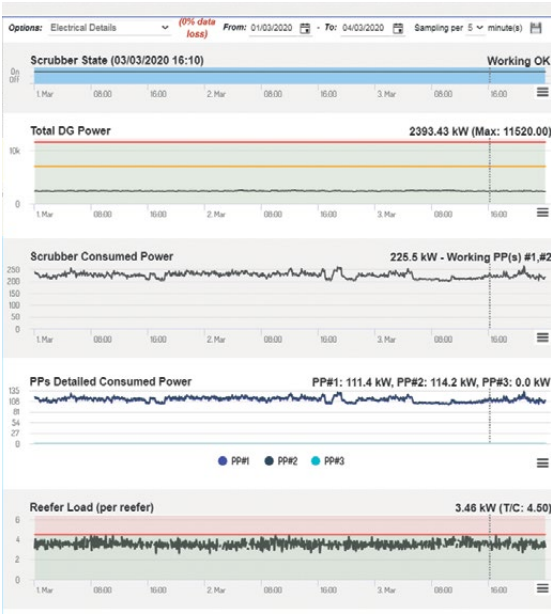


The map on the left shows the vessel's route for the examined period. There is also a note about the ports where the operation of open loop scrubbers is prohibited.



Electrical details show in detail the load of each working sea water pump and also the calculated load per reefer with its corresponding limit according to each vessel's charter party.

The last tab, “Alarm list” includes signals about the activation of some critical alarms for the scrubber operation that indicate serious damage or may result to an emergency shut down of the system.



Operational details include data about the ME and DG loads, Speed, SG load (if applicable), in order to ensure that the scrubber operates within its design limits. Moreover, in case DGs are operating partially in scrubber and there is also load at bypass, then same is depicted in this tab. Sea water flow, scrubber consumed power and sulphur of the fuel used is also included.

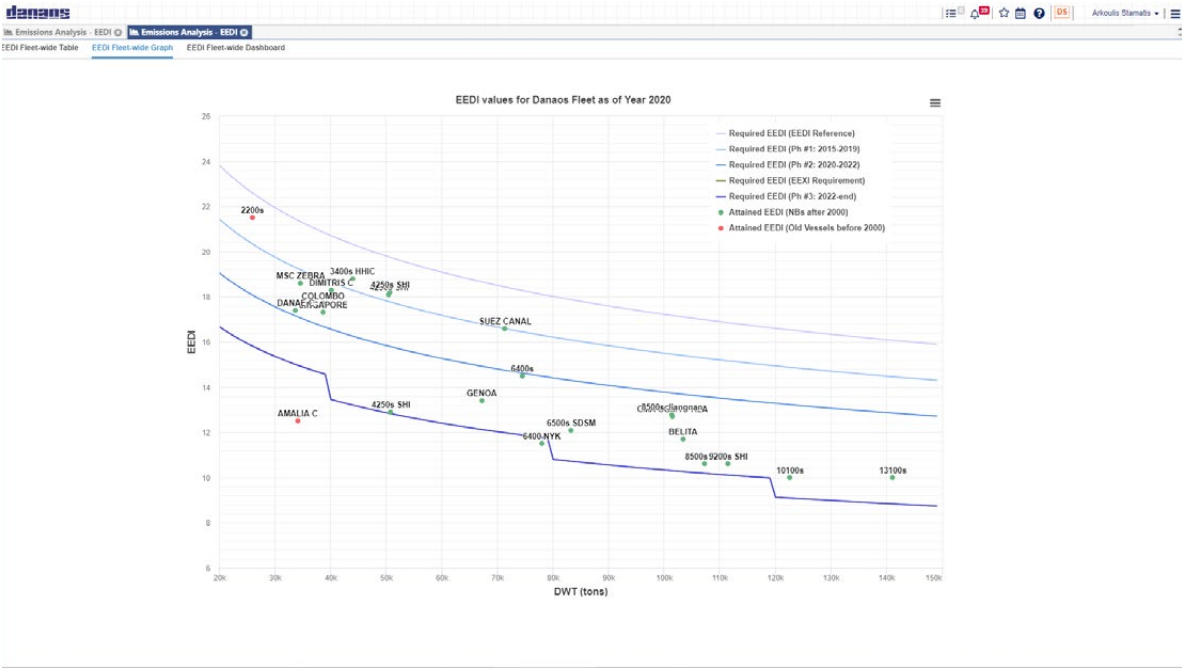
More technical data concerning the scrubber operation is also received and displayed, such as the turbidity filter inlet pressure, sea water supply pressure (upper and lower), exhaust gas pressure before & across scrubber and scrubber inlet pressure. The detailed breakdown for these parameters will provide a more detailed insight in the actual condition of the scrubber.



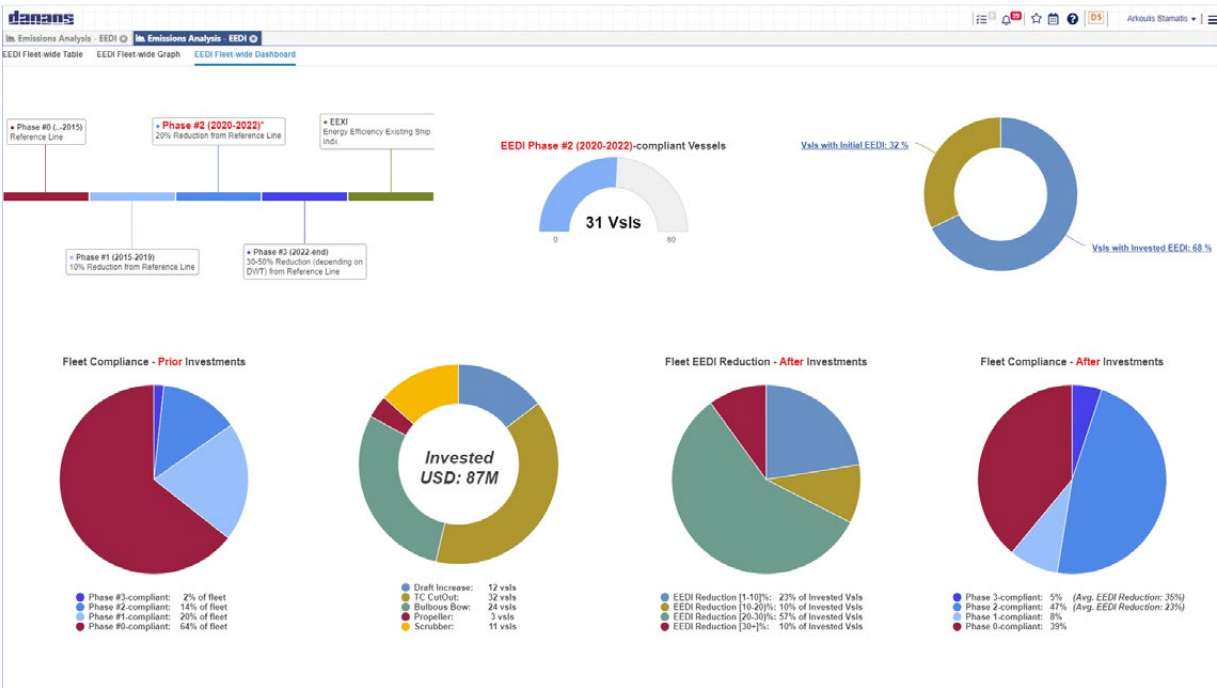
In addition, an important milestone in 2019, is the development of IMO DCS reporting in the Waves Fleet Performance platform. The IMO DCS routine has been incorporated in the MRV routine since they are both under the current emissions monitoring scheme.

WAVES is fully integrated in the Danaos managementsystem,providingpersonalized role-specific dashboards and maritime business operational intelligence, creating a true competitive advantage in ship management. The incorporated algorithms and visualization tools transform data into useful information, assisting company's employees with the decision-making process, while eliminating the reaction time. Within 2019 Danaos has managed to standardize the Charter Party format, and latest charter parties for all vessels have been inserted in Waves, going one step forward to a fully digitized company and in order for same to be available instantly.

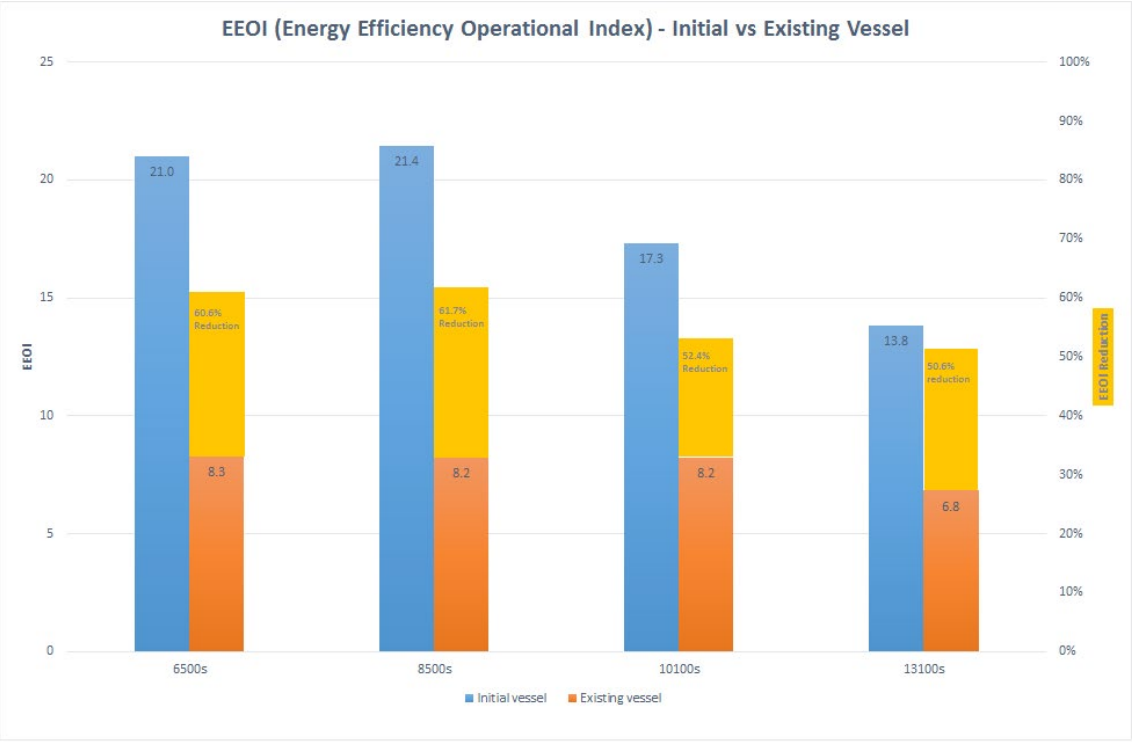
Another major routine designed and developed in late 2019 – early 2020, is the EEDI, EEXI & AER routine, in order to check where our vessels stand compared to the stricter upcoming EEDI regulations and Poseidon Principles AER limits. In an effort to evaluate the performance of the ship's energy efficiency measures, Danaos has developed the corresponding EEDI (Energy Efficiency Design Index) index for all the company's vessels regardless of the year of their construction (corresponding to the EVDI index developed by Carbon War Room and RightShip).



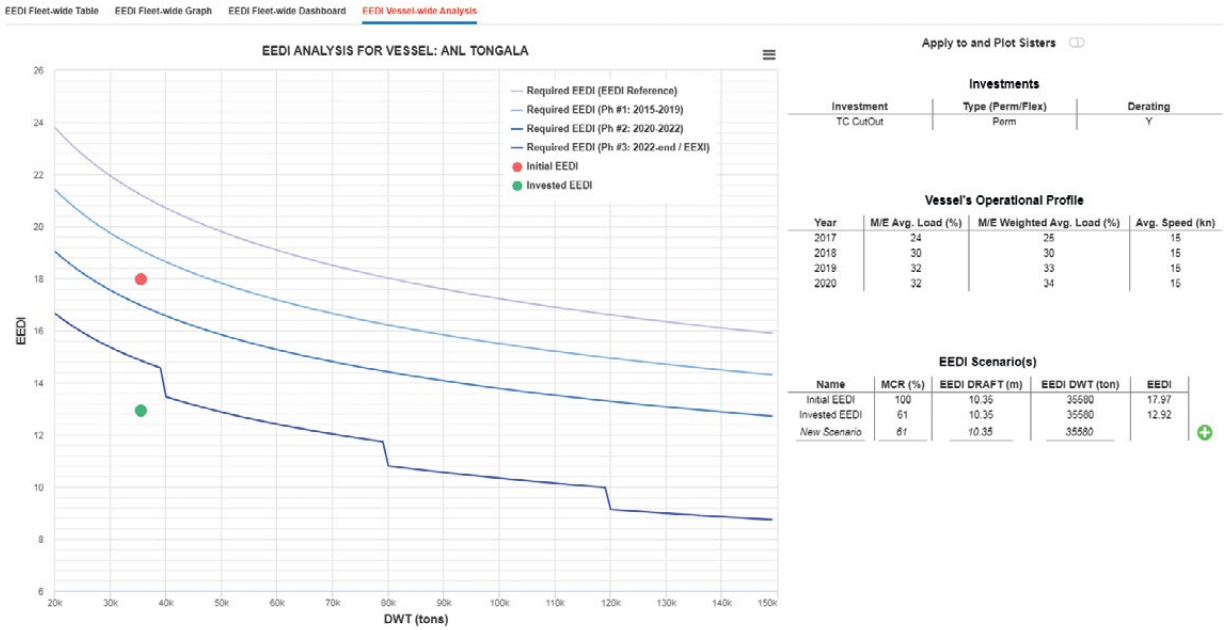
The above indicator was then calculated after optimization was completed on each ship, and its reduction coefficient was determined, which reflects the level of efficiency increase compared to that of the original design. Various compliance phases have been separated along with the various EEDI thresholds taking into account the reduction factors by IMO. At each phase, the number of compliant vessels are shown. It is noteworthy that after investing \$ 87 million, an EEDI improvement of over 20% on over 60% of the fleet was achieved, while over 50% of the fleet is in phase 2 compliance, as shown in below graph.



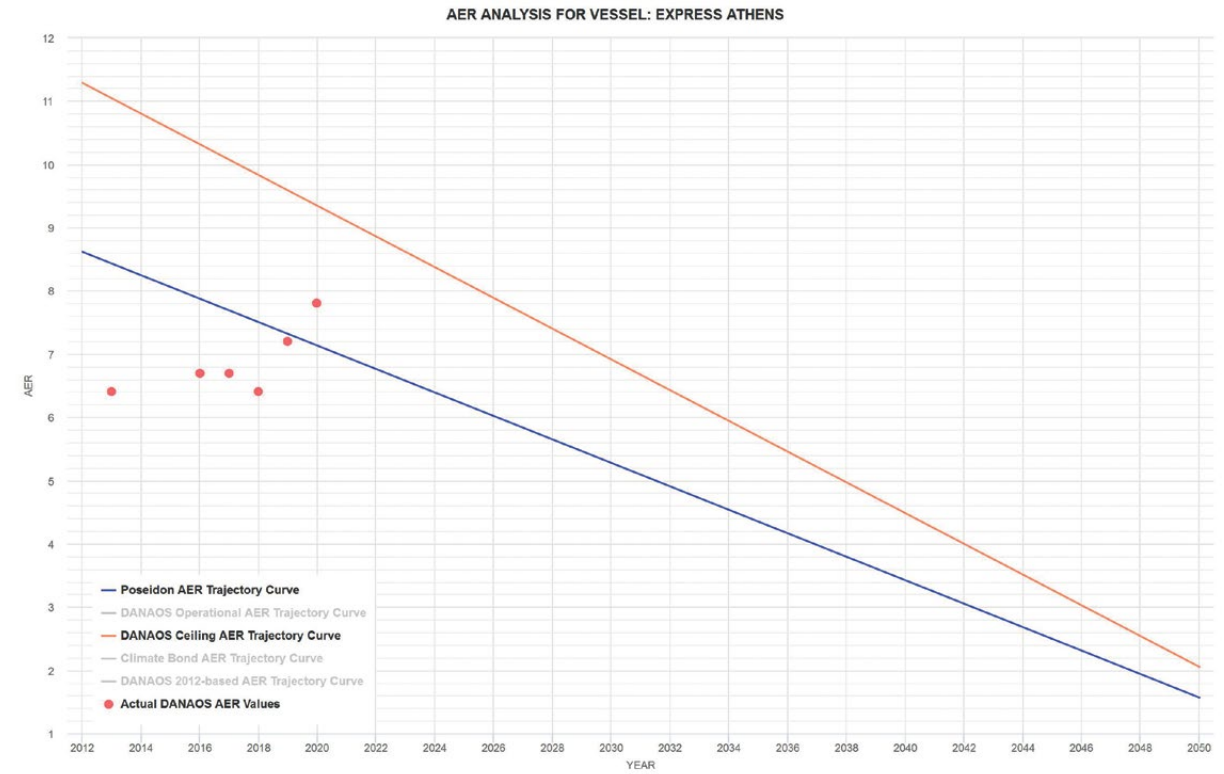
The main finding is that these compliance rates increased significantly after the investments. In the following graph, we show how the CO₂ footprint for four distinctive carrier capacity categories ranging from 6,500 to 13,000 TEUs. The blue column depicts theoretical EEOI basis on initial vessel design and consumption on a specific route. The reduction in the index is above 50% for all ship categories as a result of the speed reduction and the improvements applied on each vessel.



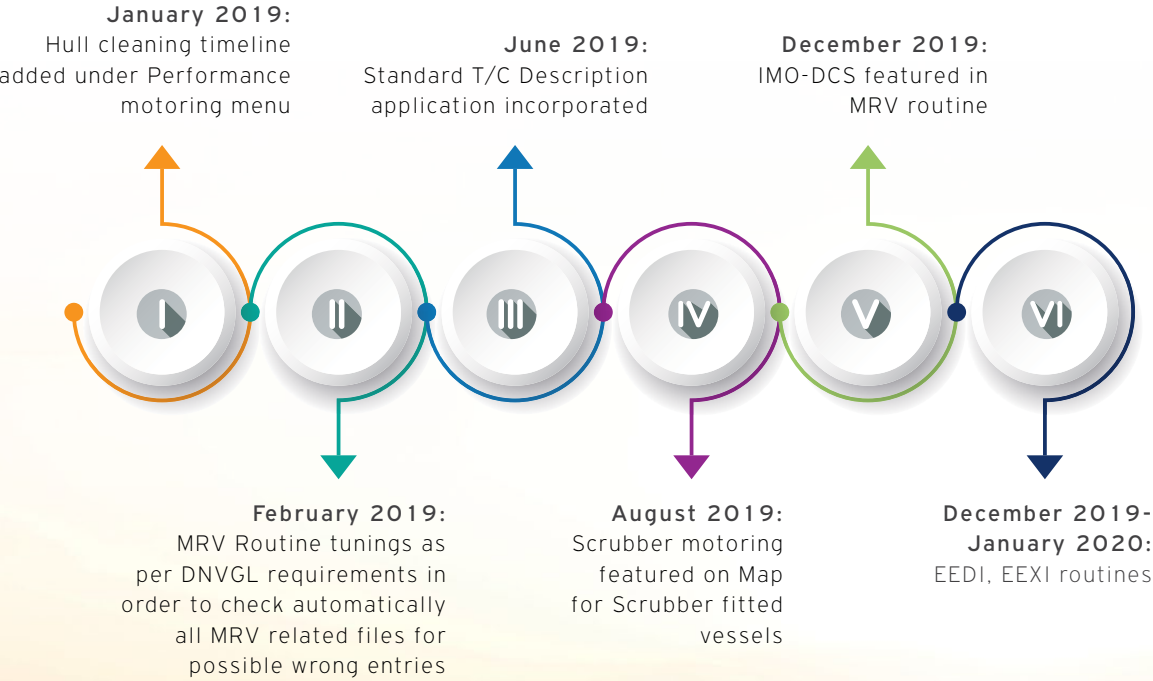
Last but not least, Danaos has developed a tool within EEDI routine in order to predict the EEDI reduction if a specific investment is applied.



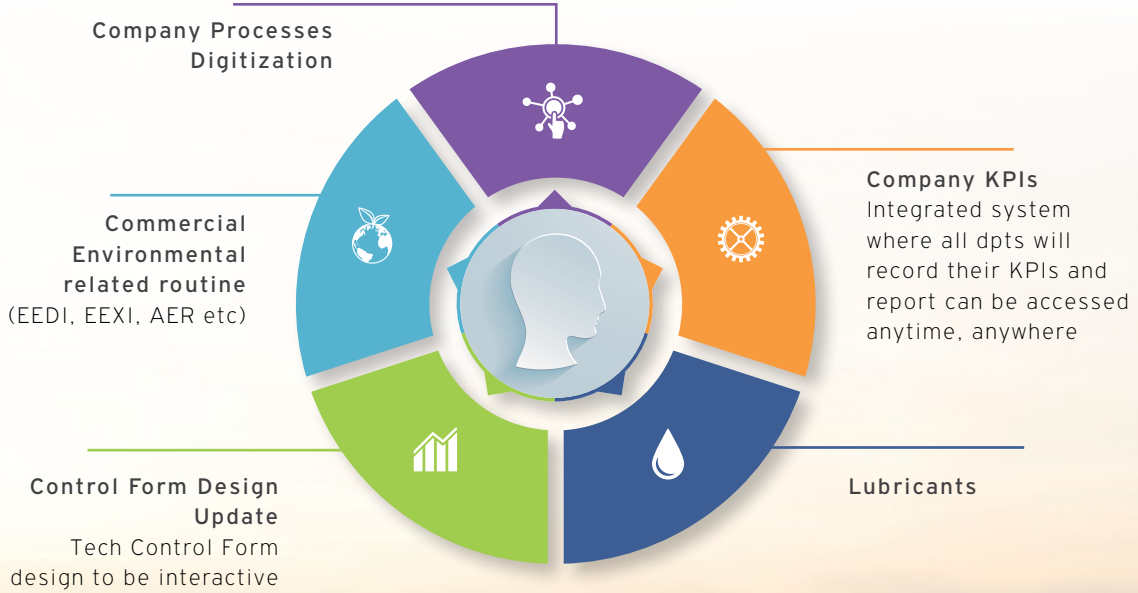
Under the same context and in order to benchmark our vessels in the Poseidon Principles, AER (Annual Efficiency Ratio) has been incorporated in Waves.



Below are WAVES' major milestones presented for the year 2019:



For 2019, DANAOS focuses on turning its processes fully digitized via its state-of-the-art WAVES architecture, and be able to become a trusted link in the chain of new era of operations. Below is an illustration of the WAVES' next steps for the year 2020.



RETROFITS & OPTIMIZATIONS

When the company's R&D department was first established, as a response to the increasing market needs and, of course, our customers' need for efficient and environmentally sound vessel operation, we placed our emphasis on the study of energy efficiency optimization methods for our vessels. This includes optimizing the vessels' design, their operating profile, as well as the way their performance is monitored. In this context, we have studied and evaluated 38 methods of optimizing the energy efficiency of vessels, which we have categorized according to the system that was optimized: propulsion system (main engine-propeller), fuel, on board energy management, reduction of hull roughness, intervention on the hull design to reduce friction or ripple resistance, or improvement of vessel operation. Having studied all these measures, we arrived at a conclusion as to whether they would be worth implementing on containerships,

by taking into account each ship's hull lines, equipment, and special features and assessing its dynamics through CFDs studies and model tests in experimental tanks. Within 2019, an optimized bow has been installed on CMA CGM Attila, CMA CGM Tancredi, CMA CGM Bianca, CMA CGM Samson and CMA CGM Melisande (early 2020). Moreover, the bow has been optimized and installed on the Pusan C, Le Havre and all 13,100 TEU vessels, and all of which have undergone scrubber modification as well, which for the Hyundai Honour and Pusan C, were completed within January and March 2020 respectively. As per Danaos' standard policy, speed tests are carried out, when the desired conditions are met after vessels' departure from the shipyard, in order to create their new reference condition and study the bulbous bow effect.

During the previous years, Danaos conducted various technical upgrades, to allow our vessels to become more flexible operationally and commercially attractive, with a key driver being to address our Charterers' key needs. The main scope, was to thoroughly examine the possibility of applying technical design improvements on all company vessels, based on the current market requirements and trends. In the above context, draft increase, M/E SFOC Optimization, as well as modifications needed for compliance with the new Panama Canal and AMSA rules were carried out. The modifications completed in our fleet during the previous year are summarized below:



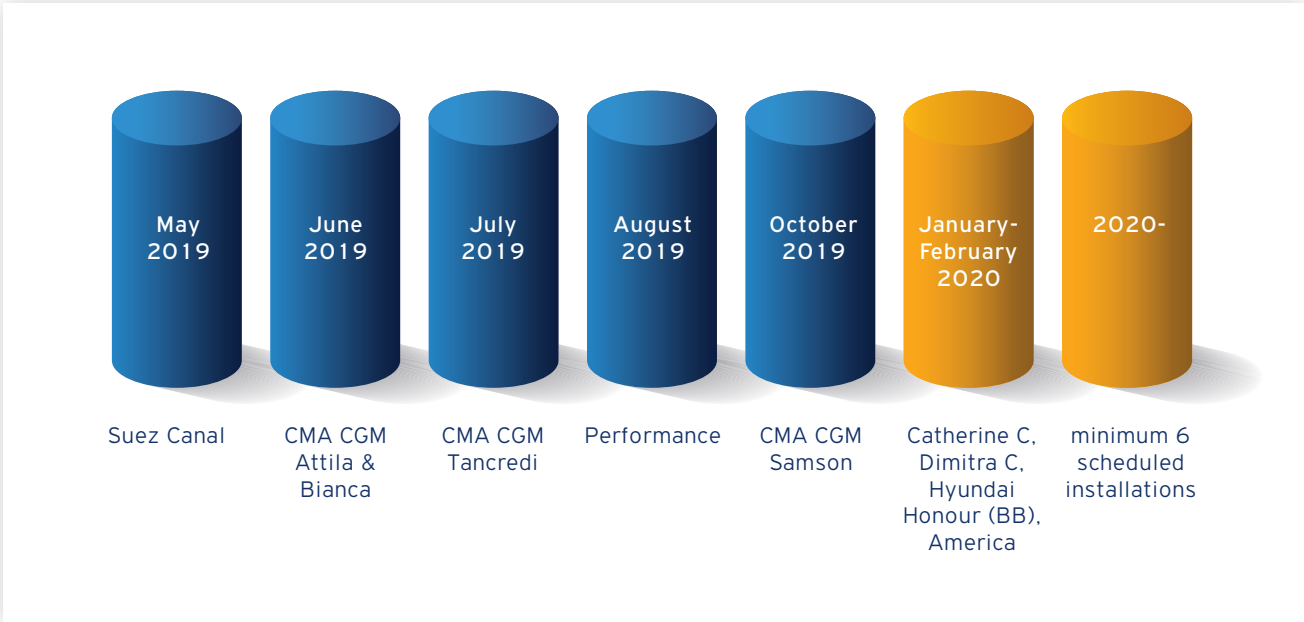
Danaos' major optimizations are summarized below:

2016		8100s BB Optimization 8100s new Kappel Propeller & PBCF 8100s Engine Derating
2017		10100s BB Optimization 10100s Low Friction Paint application 4300s Shortening
2018		6500s BB Optimization
2019- Q1 2020		8500s Jiangnan, 9600s, 13100s BB Optimization 6500s, 8100s, 9600s, 13100s Scrubber installation

Draft increase		8 x 2200s increased by 0.28m (final 10.78m)
Panama Canal Modification		1 x 5500s 4 x 6500s 1 x 8500s 2 x 9600s
M/E SFOC Optimization		2 x 8500s
AMSA Modification		3 x 6500s

WATER BALLAST TREATMENT

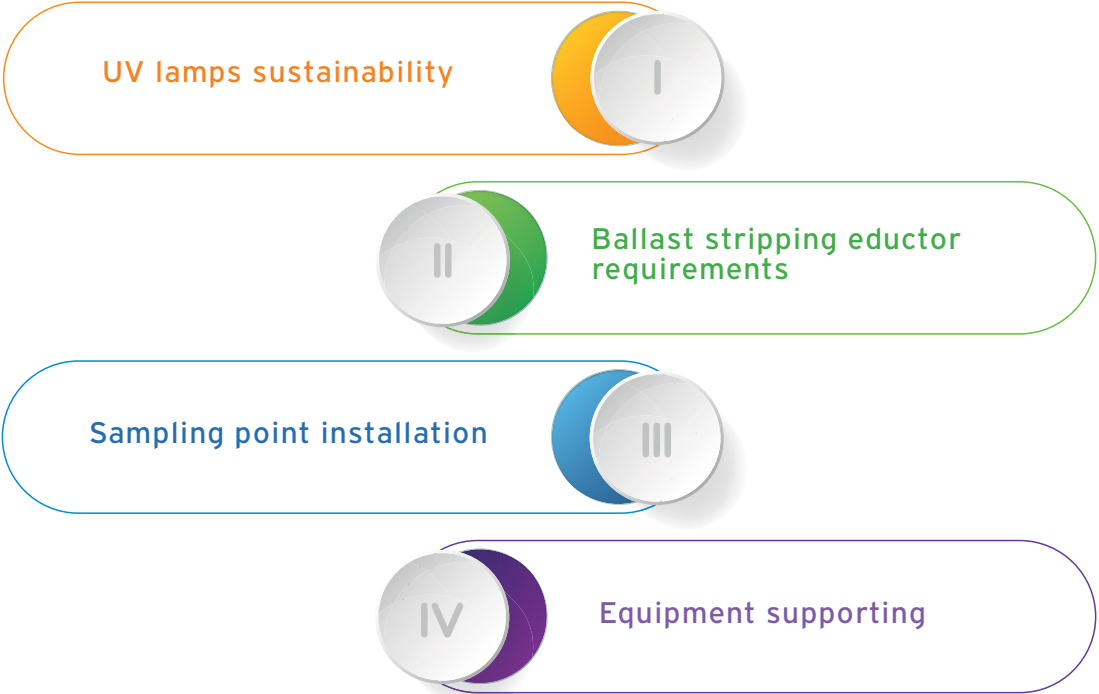
After the first successful installation onboard the Express Black Sea (December 2018) the below installations took place within 2019:



The installation onboard the Suez Canal was completed at sea, while for the rest of the vessels the installation was completed during their docking. Within 2019, Danaos has also proceeded with BWT sampling in the context of VGP requirements. The vessels that have completed the sampling are Express Black Sea, CMA CGM Attila, CMA CGM Bianca & Suez Canal. All results were satisfactory.

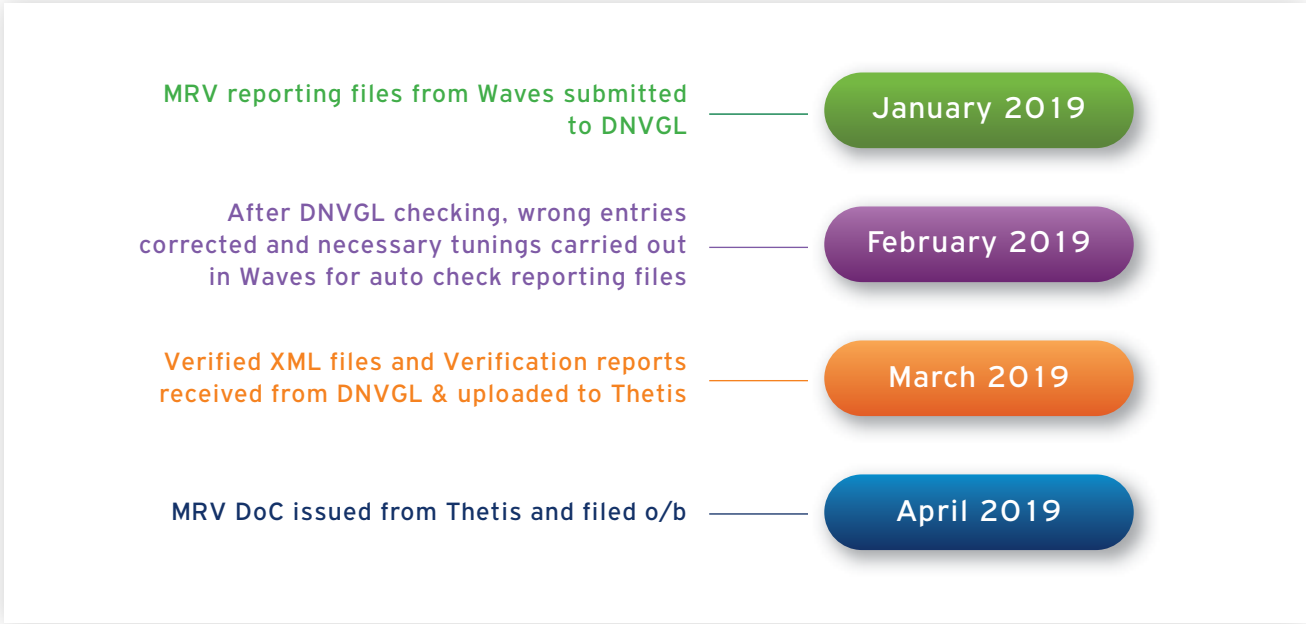


Moreover, sampling during commissioning was performed on the America within February 2020 under IMO guidelines (indicative analysis), as required by the recent circular of Cyprus Flag Administration. Since by the end of 2019 Danaos had in total 7 systems in operation, feedback has been shared between the Technical and R&D departments. The issues that were discussed and identified during installations are as follows:

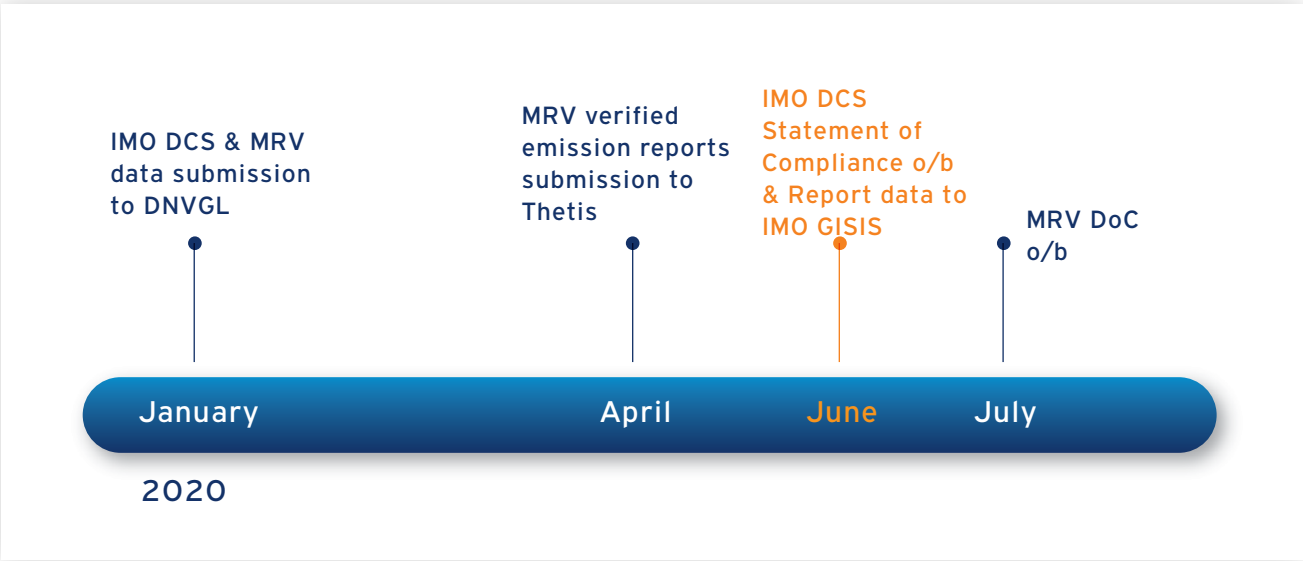
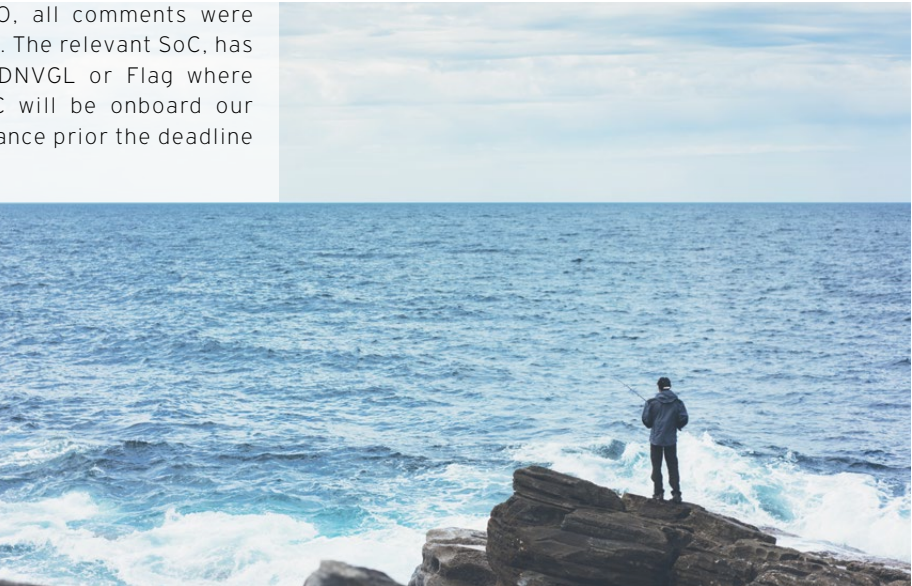


MRV & IMO DCS EMISSIONS REPORTING

MRV data submission has been successfully completed within 2019 for the 1st reporting year (2018) and all required documentation has been placed on board, well in advance prior to the deadlines set by the EU. The same plan and timeline, is followed also for the data concerning the 2nd MRV reporting year, 2019. Moreover, within 2019 some minor fine-tuning has been made to the relevant Waves routine, in order to timely identify some wrong entries in the vessels telegrams. The below graph illustrates the steps and process followed within 2019:



2019 is also the first reporting year for the IMO DCS consumption. Data have been collected for all vessels and submitted to DNVGL (verifier) within January 2020. Comments have been raised from the verifier and acknowledged by Danaos within February 2020. Towards the end of March 2020, all comments were rectified and closed. The relevant SoC, has been issued from DNVGL or Flag where applicable and DoC will be onboard our vessels, well in advance prior the deadline of 01/06/2020.



EXHAUST GAS CLEANING SYSTEMS

With the International Maritime Organization (IMO) adoption of 0.50% global sulphur cap from 3.50% on the 1st January 2020 given as the effective date, 2019 was the year when the Shipping industry weighed the most appropriate options, from a wide variety of opinions provoked by the greatest regulatory and operational challenge, in order to ensure compliance and remain commercially sustainable, while managing risks ahead of the new regulations' implementation. The limit in Sulphur Emission Control Areas (SECA) under MARPOL, remains unchanged to 0.10% effective since 1 January 2015.



Danaos R&D department, well ahead of the new global sulphur cap regulations, has studied the main streams for compliance to decide on the most appropriate approaches for operation in the view of the new IMO regulations.

As of March 1st 2020, the carriage of non-compliant fuel oil for combustion purposes for propulsion or operation onboard is banned, unless a vessel is fitted with an Exhaust gas cleaning system (also known as Scrubber), enabling it to achieve an equivalent method of compliance.

Open-loop scrubbers add seawater with naturally existing alkali to the exhaust gas, which turns sulphur oxides (SOx) to sulphates/sulphuric acid. Open-loop scrubbers return washwater to the sea. The discharged washwater must meet strict criteria, related to pH, PAHs (Polycyclic Aromatic Hydrocarbons), turbidity and nitrates.

Some coastal states and ports have implemented local regulations with more stringent requirements that restrict or completely prohibit the discharge of washwater from open-loop scrubbers or prohibit the use of scrubbers. On the other hand, according to recent studies (ref. CE Delft) open-loop scrubbers appear to have a minimal effect of seawater quality in port. The reports will be presented to IMO for future work at evaluation and harmonization of rules and guidance on the discharge of washwater from EGCS into the aquatic environment, including conditions and areas. In the context of the continuous focus on positioning our fleet, Danaos R&D department, well ahead of the new global sulphur cap regulations, has studied during the previous years the main streams for compliance to decide on the most appropriate approaches for operation in the view of the new IMO regulations, which are either to switch to an alternative fuel or to invest in exhaust gas cleaning systems for our ships and continue using high sulphur fuel. The extensive study carried out during the previous years on EGCS systems and their operation, including risk assessment, investigated among others various contributing factors to a successful

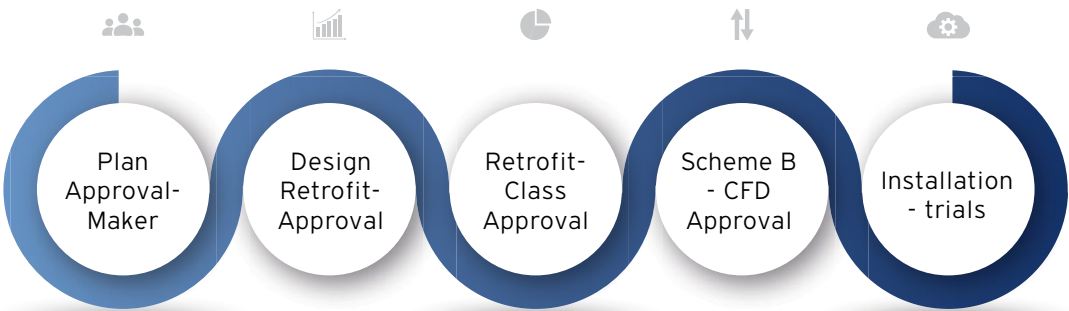


retrofit, such as cost, safety/operation, complexity/configuration, availability, and enabled Danaos to conclude to the selection of STI Korean maker as a reliable partner for the installation of Open-loop Exhaust gas cleaning systems onboard 11 Danaos vessels, sized 6,500, 8,500, 9,600 and 13,100 TEUs, during 2019 and the first quarters of 2020.



The Open-loop multi-inlet inline scrubber units were custom designed and sized to suit the application of our vessels, according to the operational conditions, the expected exhaust gas flow and temperature, as well as the operational and machinery constraints, with the minimum modifications on the funnel structure and without any cargo capacity loss whatsoever. Danaos, always being a pioneer, successfully completed within only a few months the scrubber installation onboard the 1st “pilot” 6,500 TEU container ship at the end of Q1 2019, with the rest of the vessels following by implementing important design upgrades and improvements taken into consideration from the “pilot” vessel.

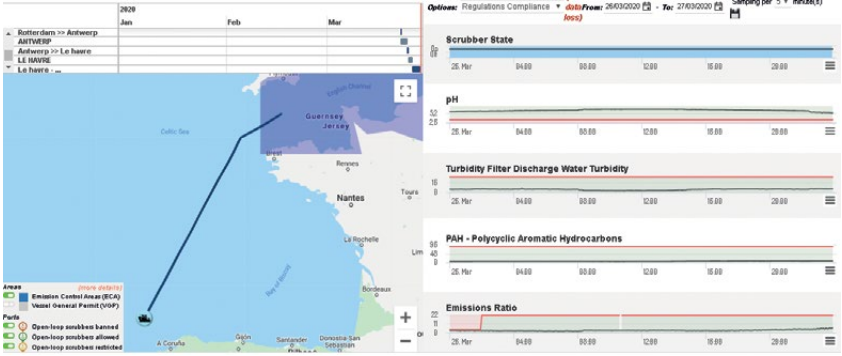
The Open-loop multi-inlet inline scrubber units were custom designed and sized to suit the application of our vessels



The various tasks of the very demanding and challenging retrofit projects included among others the plan approval with the maker to review the system’s drawings, the retrofit approval with vessels’ classification societies and clarification of certification procedure, the detailed review and approval of design Offices’ drawings and finally the cooperation with the shipyards in Korea and China, in order to ensure all the deliverables are timely received and all clarifications required for the proper installation/ fabrication are provided.

The issues experienced during the scrubber retrofit of the “pilot” vessel consisted a valuable feedback that Danaos gained and were carefully reviewed in order to be properly implemented in the following projects in terms of the necessary upgrades in design as well as the necessary developments & improvements. More specifically, the most significant upgrades implemented were related to pipe material specification, pipe size modification, improved system designs for degasification, update of CEMS sensor to withstand humidity, added dilution line to increase load in VGP areas, as well as upgrades in system’s automation.

Upon completion of scrubber systems’ installation onboard Danaos vessels, the scrubber data are collected online and sent to the Head Office. The Scrubber Monitoring is a feature that is custom designed in our Waves data analytics platform and provides the user with good insight on the scrubber operational



data almost in real time, while at the same time one is able to easily confirm compliance with regulatory requirements for all parameters.



IMO 2020: FUELS



The Shipping industry to date, had relied on specific residual and distillate fuels such as HFO, MGO/MDO, all based on ISO 8217 marine fuel quality standards. Moving forward to new Regulations and emission areas, the market urged the marine industry to rely also on another range of fuels called ULSFO with 0.1%S percentage and while reaching 1st January 2020, that global sulphur limit on marine

Sulphur became an important factor for the industry and new methods had to be developed for increased blending activities to meet required sulfur percentage in fuel.

fuels be reduced from 3.5% to 0.5%, one more fuel type called VLSFO came under review.

Enabling a successful transition to 2020, increased demands for both the detailed product knowledge along with the proper handling instructions

and the on-board operational aspects were required. Introducing VLSFO, resulted in a wider range of fuel formulations across the industry. Initially, the controlling parameters after blending of different fuels have been the viscosity and the density. Later on, sulphur became an important factor for the industry and new methods had to be developed for increased blending activities to meet required sulfur percentage. There are several VLSFO production methods for which the vessel operator has no information and the correlation of method to fuel's properties has not yet been established: Straight run residues, hydrocracked residues, thermally cracked residues, catalytically

cracked residues, hydrocracker bottoms, straight run distillates, thermally run distillates, etc.

Depending on the production method that is a result of the manufacturing route and blending component availability, VSLFO can be predominantly aromatic or paraffinic in nature and hence having properties mainly of one or the other. These properties affect the stability and compatibility, have impact on the ignition properties and differentiate on the pour point value.



Danaos established a project whose main purpose was to further assess these blended fuels and understand how they should be treated by our onboard members from bunkering to burning. This effort was accomplished by analyzing all bunkered VSLFO samples –approx. 130 samples in total-since 2019 with specific additional tests, discussed with the appointed laboratory and thus gaining the advantage of better familiarization with the product itself. The benefit that came along with this project, was the ability to create statistics for the first months of VLSFO bunkering in terms of cold flow properties, wax formation, etc. that exceeds the task of ISO 8217 standards. Afterwards, relevant decisions were taken on the additional tests to be conducted on each VLSFO sample that shall be followed by all the Danaos Fleet.

LOW FRICTION ANTIFOULING PAINTS

The Shipping industry is recognized as more energy efficient than many forms of transport, but the increasing regulations on emissions and increasing fuel prices, continue to drive the need for viable means of energy saving and reducing operational costs. One of the ways to achieve this, is through the use of low friction anti-fouling coatings, which improve the energy efficiency of ships, by reducing hull roughness and frictional drag.

Low friction, anti-fouling coating though is a confusing terminology, mainly linked to the highest rated Paint Makers' silyl /copper acrylate anti-fouling coatings, providing a longer idling period. Furthermore, low friction paints are said to contribute to the reduction of carbon footprint.

Danaos, being in cooperation with her major partners, has initiated the study and being a pioneer, moved to the application of low friction A/F paints since 2017 and till today has completed 11 projects, while 4 projects are ongoing. The goal for the forthcoming years is the application of low-friction paints to the entire fleet that is going to be drydocked.



HAZARDOUS MATERIALS

Danaos, acting proactively, in order to comply with the EU Ship Recycling Regulation 1257/2013 and the Hong Kong International Convention (2009), has since 2017, trained its own Quality Control Engineers, as Hazmat Experts [approved by two Classification Societies: KR & DNVGL]. This was done, in order to properly and promptly monitor, the performed jobs, ranging from document review, to an onboard Survey. Danaos' Quality Control Engineers have tested and prepared Inventories of Hazardous Materials for 61% of the entire Fleet, whilst only 46% of the Fleet fly EU/EEA flags

Danaos' Quality Control Engineers have tested and prepared Inventories of Hazardous Materials for 61% of the entire Fleet, whilst only 46% of the Fleet fly EU/EEA flags

International Inventory of Hazardous Materials. The project has been carefully set up to enable all concerned parties to realize that it is highly beneficial to embark on the new path of taking care of ourselves and our environment without diverging from the goals of profit and progress. The impact of EU regulation and HKC to humans and the environment is meaningful and sustainable. Thus, Danaos Shipping promotes a road to the establishment of proper measurements for this task, by issuing internal procedures, informing Crew & office personnel accordingly and ensuring that required actions are taken at all steps. Danaos' new-building vessels carried a Green-Passport certificate and/or IHM SoC at the time of building that will be reviewed and re-approved in order to



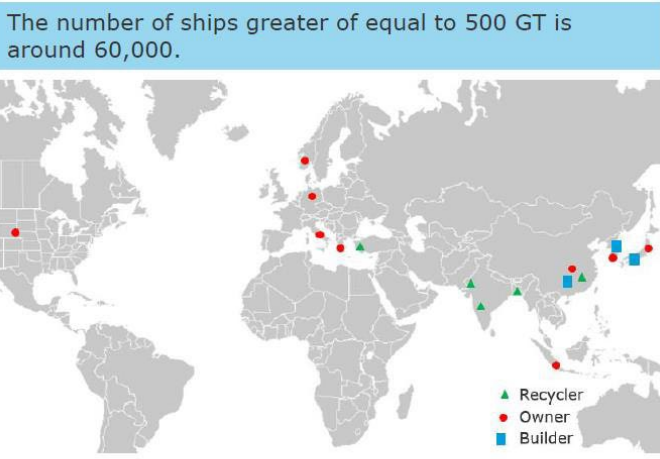
comply to existing Regulations. For the existing ships, Danaos has achieved proper records and maintenance but is not limited to doing just that. We will continue collaborating with our suppliers (stores, machineries, paints, etc.) for the recording of possible hazardous materials and compliance with the regulations. When it comes to the demolition of ships, the dangerous practices and pollution are a fact. Cutting apart big steel structures is a complex and hazardous business, not to mention the machinery that a ship might be equipped with or the paints that may have

been applied, and even nowadays the minimum precautions are taken. It is well understood that the beaching methods during demolition, make it difficult to ensure safety and properly manage pollutants. Nevertheless, part of her management of hazardous waste, is the safe recycling of our vessels and Danaos is committed to this task by selecting recycling facilities which embody safer practices.



Country/ Region	Current Fleet, number						
	Oil Tanker	Bulk- carrier	Gen- Cargo	Speci- alised Cargo	Non Cargo	Total	m.GT
1 Greece	1,423	2,335	688	465	675	5,586	230.5
2 China P.R.	1,287	2,741	2,377	761	2,279	9,445	191.9
3 Japan	901	1,855	2,334	1,590	1,707	8,397	174.6
4 Germany	137	373	1,932	213	471	3,126	70.6
5 United States	272	258	339	172	4,116	5,157	62.7
6 Norway	235	338	527	570	1,245	2,915	60.2
7 South Korea	330	374	646	635	811	2,796	57.6
8 Singapore	792	241	503	417	1,803	3,756	46.6
9 Italy	305	165	393	151	983	1,997	44.2
10 Denmark	200	60	468	123	667	1,518	38.8
Total Top-10	5,682	8,740	10,207	5,097	14,757	44,683	978.1
Share of World Total	53%	73%	42%	60%	35%	46%	70%

Major Shipbuilders	No., end:	
	2018	Nov*
China P.R.	564	508
South Korea	184	215
Japan	328	362
Philippines	29	23
Vietnam	28	25
Taiwan	12	4
India	5	2
Singapore	3	2
Other Asia	39	42
TOTAL ASIA	1,192	1,183



Source: Clarkson, World fleet & shipyard monitor, No. 12.19, above 100 GT

OUR ENVIRONMENTAL PERFORMANCE

We Developed Our Environmental
Indexes As Monitoring Tools Of Our
Fleet Environmental Performance
And As A Means To Evaluate
The Effectiveness Of Our Energy
Efficiency Improvement Measures

DANAOS FLEET EMISSIONS

OUR EMISSIONS

Every year, we calculate the emissions of our entire Fleet, aspiring to be fully transparent on the parameters that can influence our efforts towards a more energy efficient management. We use those calculations as indicators of our environmental performance and share them with our clients, upon their request, in order for them to evaluate their fleet's environmental footprint. All the formulae used for the calculation of our emission KPIs are in line with the ones used by the KPI platform: <https://www.shipping-kpi.org/>.

We adopted the above approach, in order to use the same reference tool as that of our charterers, so as to be fully aligned with them, regarding emissions calculations.

CO₂ EMISSIONS

References: IMO MEPC/Circ.471: Interim Guidelines for voluntary ship CO₂ emission indexing for use in trials
CO₂ emissions in tons are calculated for each voyage of each vessel and then summed up for all voyages of each vessel. They are then summed up for all vessels accordingly. The total CO₂ emissions for the Danaos fleet are produced as per the below formula:

$$\sum_v \sum_i \sum_j FC_{ijv} \times C_{Fj}$$

Where:

- FC_{ij} is the mass of consumed fuel j at voyage i (metric tons) for the vessel v,
- C_{Fj} is a non-dimensional conversion factor between fuel j consumption, measured in grams and CO₂ emission also measured in grams based on carbon content (as per the update of the IMO 2000 study (Buhaug et al,2008))

EEOI (in gr/tons*miles) for each vessel is defined as the ratio of mass of CO₂ emitted per unit of transport work:

$$EEOI = \frac{\sum_{i=1}^n \sum_{j=1}^k (FC_{ij} \times C_{Fj})}{\sum_{i=1}^n (m_{cargo,i} \times D_i)} \times 10^6$$

Where:

- j is the fuel type
- i is the voyage number
- FC_{i,j} is the mass of consumed fuel j during voyage i (metric tons)
- C_{Fj} is a non-dimensional conversion factor between fuel j consumption, measured in grams and CO₂ emission also measured in grams based on carbon content (as per the update of the IMO 2000 study (Buhaug et al,2008)):

Diesel/Gasoil:	3.20600
Light Fuel Oil:	3.15104
Heavy Fuel Oil:	3.11440
- mcargo,i is the carried cargo mass during the voyage i
- Di is the distance in nautical miles corresponding to the voyage i.

The average EEOI of all vessels produces fleet average EEOI.





SO₂ EMISSIONS

References: “An Online Ship Emissions Calculator as a Decision-Making Aid and Policy Evaluation Tool”, C.A Kontovas & H.N Psaraftis, Laboratory for Maritime Transport, National Technical University of Athens

SO₂ emissions depend on the type of fuel and more specifically on the sulphur content of the fuel. One has to multiply total bunker consumption (in tonnes per day) by the percentage of sulphur present in the fuel (for instance, 3%, 1.5%, 0.5%,

or other) and subsequently by a factor of 0.02 to compute SO₂ emissions (in tonnes per day). The 0.02 SO₂ factor is exact and comes from the chemical reaction of sulphur and oxygen to produce SO₂.

As far as the SO₂ index is concerned, the following expression found in the literature that gives the equivalent sulphur content per ton-nautical mile has been used for calculating SO₂I for each vessel and the average has been produced giving the SO₂I (in gr/tons*miles) for the whole fleet:

$$SO_2I = \frac{\sum_{i=1}^n \sum_{x=1}^k (20 \times FC_{i,x} \times S_{ix})}{\sum_{i=1}^n (m_{cargo,i} \times D_i)} \times 10^3$$

Where:

- FC_{i,x}, is the mass of consumed fuel x during voyage i (metric tons)
- m_{cargo,i}, is the carried cargo mass during the voyage i
- D_i, is the distance in nautical miles corresponding to the voyage i and
- S_{i,x}, is the weighted average of % sulphur content of fuel type x calculated by the formula:

$$S_x = \frac{\sum_{j=1}^n (A_{x,j} \times B_{x,j})}{\sum_{j=1}^n (A_{x,j})}$$

Where:

- x, is the fuel type (e.g. HFO, LSFO, MDO etc.) received by the vessel
- n, is the number of bunkering operations in the reporting period
- S_x, is the weighted average of % sulphur content of fuel type x
- A_{x,j}, is the quantity of fuel of type x received during bunkering operation
- B_{x,j}, is the sulphur content of fuel type x received during bunkering operation

NO_x EMISSIONS

References: The Norwegian Toll and Avgiftsdirektoratet (The Norwegian Customs and Tax department). (Document only available in Norwegian).
NOx emissions based on the NOx emission

factor equal to 0.100 (ton of NOx/ ton of fuel) for slow speed diesel engines and 0.07 (ton of NOx/ton of fuel) for medium speed diesel engines.
The NOxI emissions index (in gr/ tons*miles) for a voyage is calculated based on the below formula:

$$\frac{\sum_{i=1}^n (FC_{i,ME} \times C_{FME} + FC_{i,DG} \times C_{FDG})}{\sum_{i=1}^n (m_{cargo,i} \times D_i)} \times 10^6$$

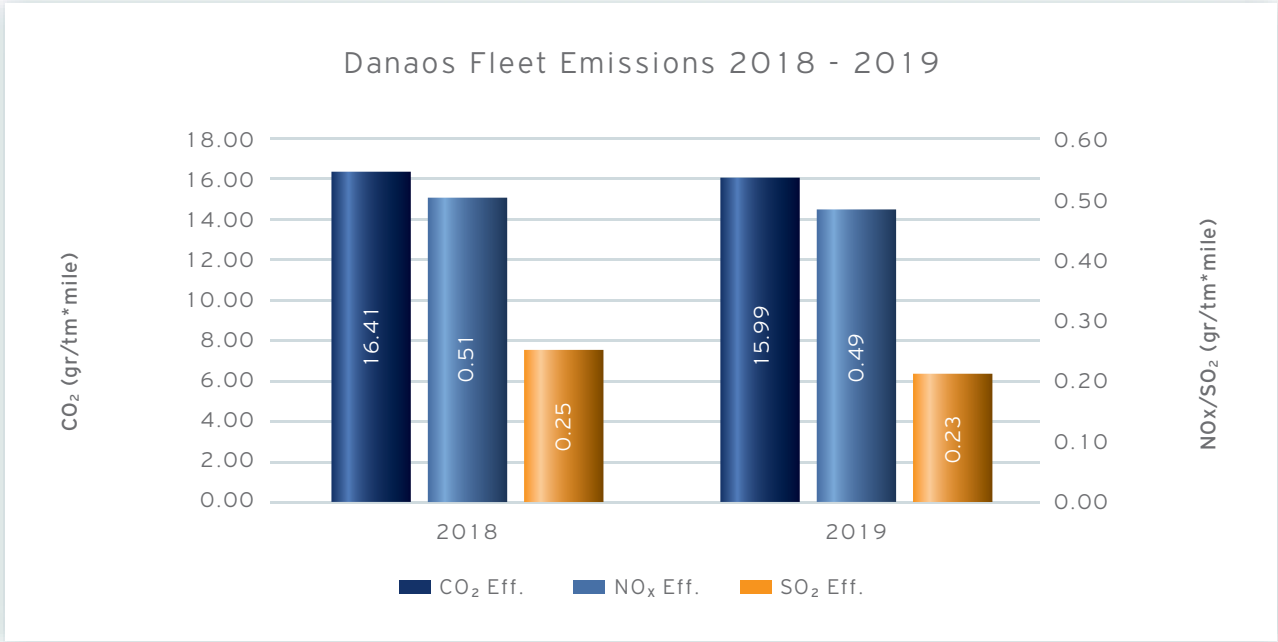
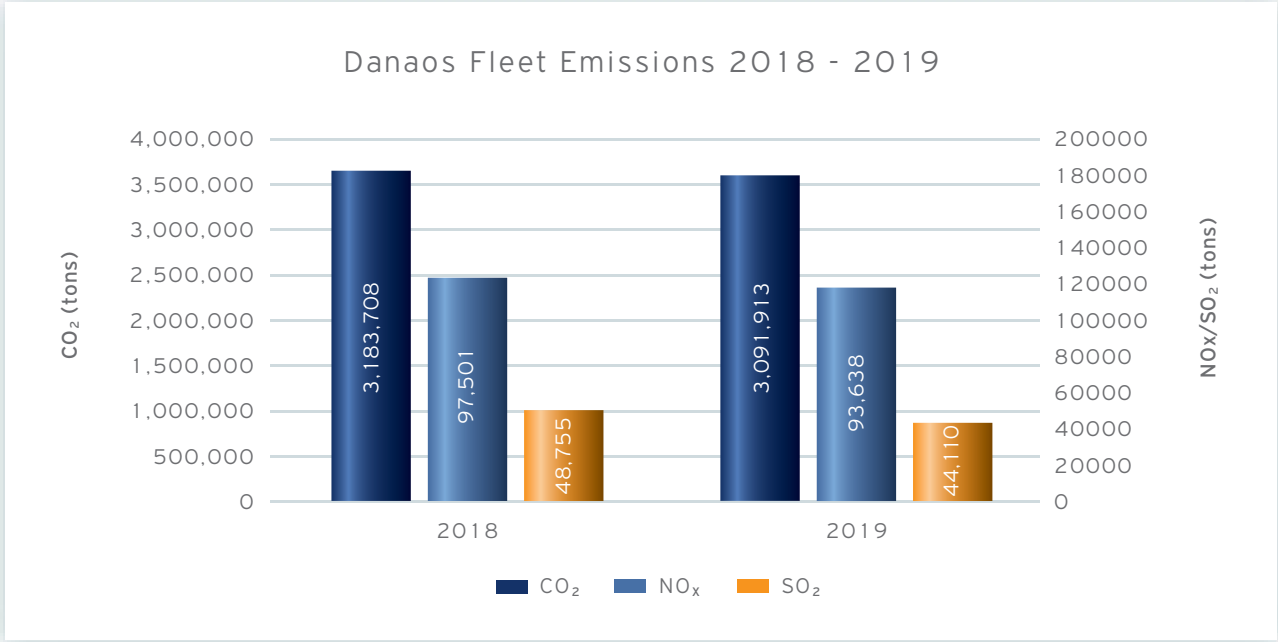
Where:

- i is the voyage number,
- FC_{i,ME}, is the mass of fuel consumed in Main Engine during voyage i (metric tons)
- FC_{i,DG}, is the mass of fuel consumed in auxiliary engine during voyage i (metric tons)
- C_F, is a conversion factor between fuel consumption, measured in metric tons and NO_x emission also measured in metric tons:
 - 1. Slow speed engines: 0.1 mt per metric ton of fuel used
 - 2. Medium speed engines: 0.07 mt per metric ton of fuel used
- m_{cargo,i}, is the carried cargo mass during the voyage i and
- D_i, is the distance in nautical miles corresponding to the voyage i

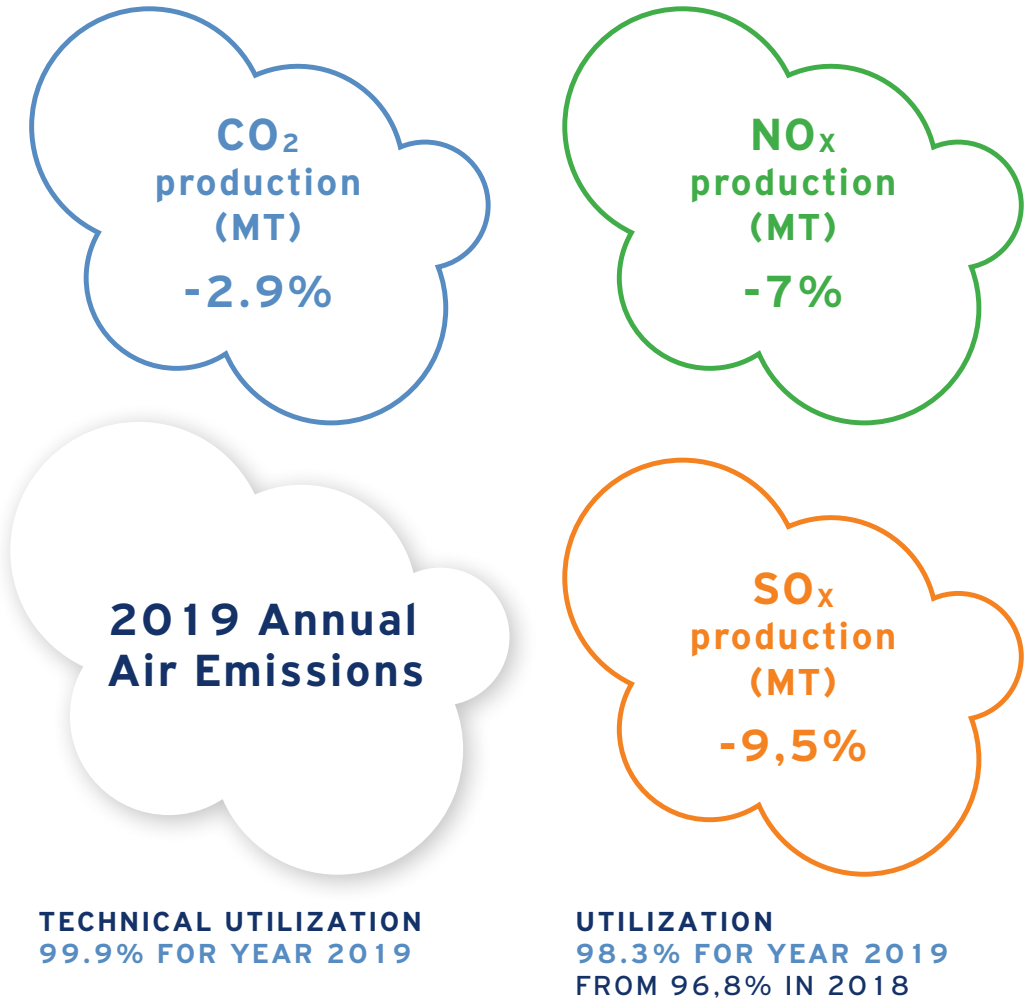


OUR EMISSION KPIs SUMMARY

The below emissions figures and efficiency factors correspond to the total of our operating Fleet during 2019.



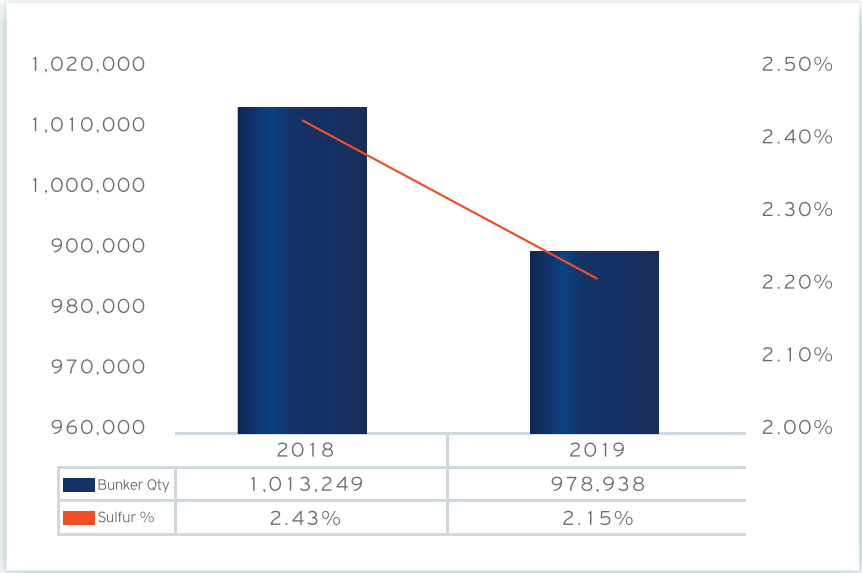
As shown in the above graph, the company's environmental footprint was improved compared to that of the previous year. Additionally, the total number of produced emissions for 2019 (CO₂, NO_x, SO₂) is by a percentage of 2.9%, 4% & 9.5% respectively lower compared to 2018. Within 2019, the Danaos vessels' operating days have increased and idling periods significantly reduced. Ultra super slow steaming activity has increased, as a result of the reduction of the average operating speed, while the draft profile did not differentiate significantly. To this respect consumption and CO₂ emitted have been accordingly reduced. The tn*miles index on the other hand remained almost steady compared to that of the previous year, as a result, the carbon intensity for 2019 compared to 2018 has improved.



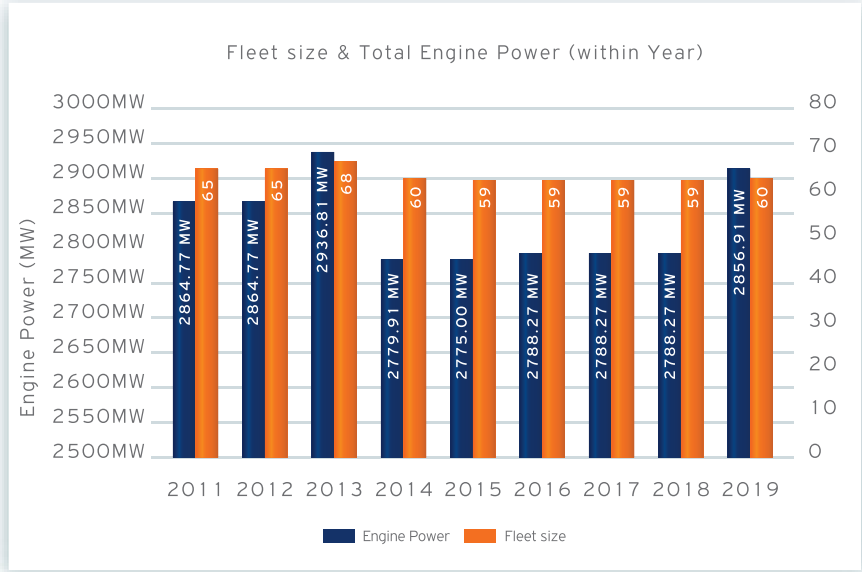
The effective fleet utilization of the fleet under employment was 98.3% for the year 2018, while the utilization percentage from a technical aspect remains impressive at the level of 99.9%! The above means that the stoppages due to technical reasons account for only 0.1% of the total operating days. The above percentages are considered among the most competitive in the shipping market.

OUR BUNKERS

The bar graph below shows our bunkered quantities and quality data for the years 2018 and 2019 concerning our operable fleet:

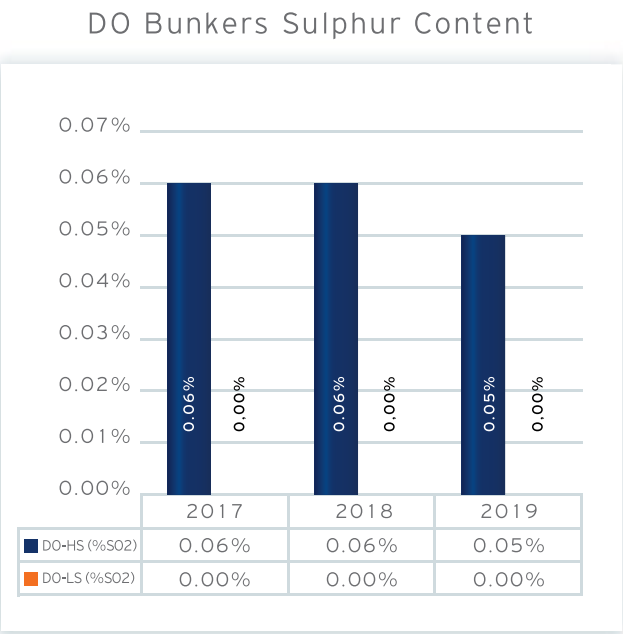
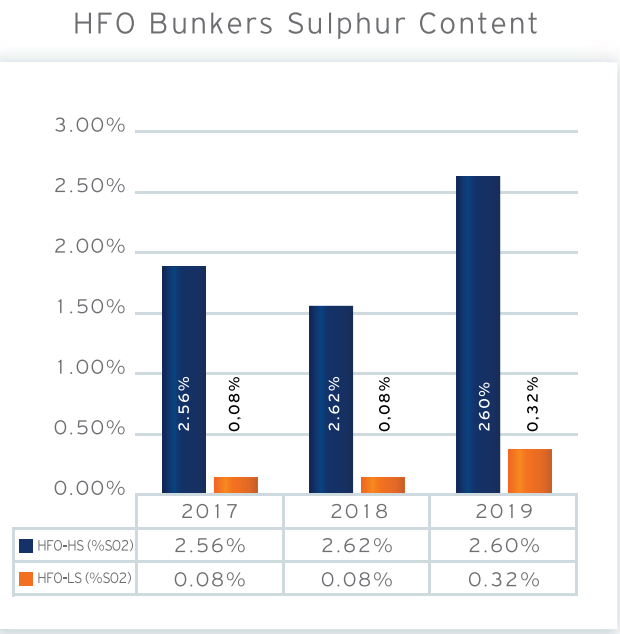
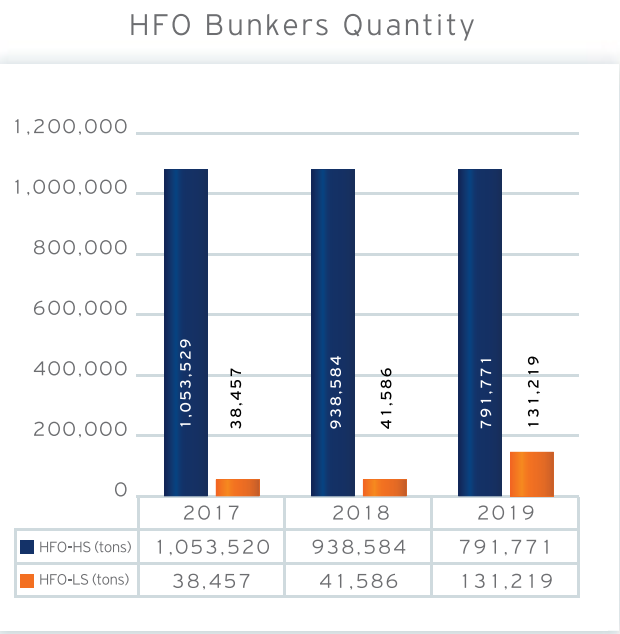


The fuel quantity delivered in 2019 based on our bunker delivery notes, presents a decrease of 3.4% compared to that of 2018. The above is in line with the low fuel consumption of the fleet as explained above. If we wish to make a qualitative analysis of the results based on the detailed graphs of bunkered quantities per fuel grade apposed here below, we see that the low sulphur fuel oil quantity bunkered is constantly increasing replacing both HFO and MGO quantities. This is attributed to the IMO 2020 sulfur regulations since all vessels were supplied with VLSFO and HSHFO applied only for EGCS fitted vessels. As a result the weighted average sulfur was significantly reduced.



Fleet size and engine power within each year (including the four Danaos Bareboats).

Below is the break-down of the bunkered quantities and the corresponding weighted average sulphur content for each grade.



ENERGY EFFICIENCY OPERATING INDEX (EEOI)

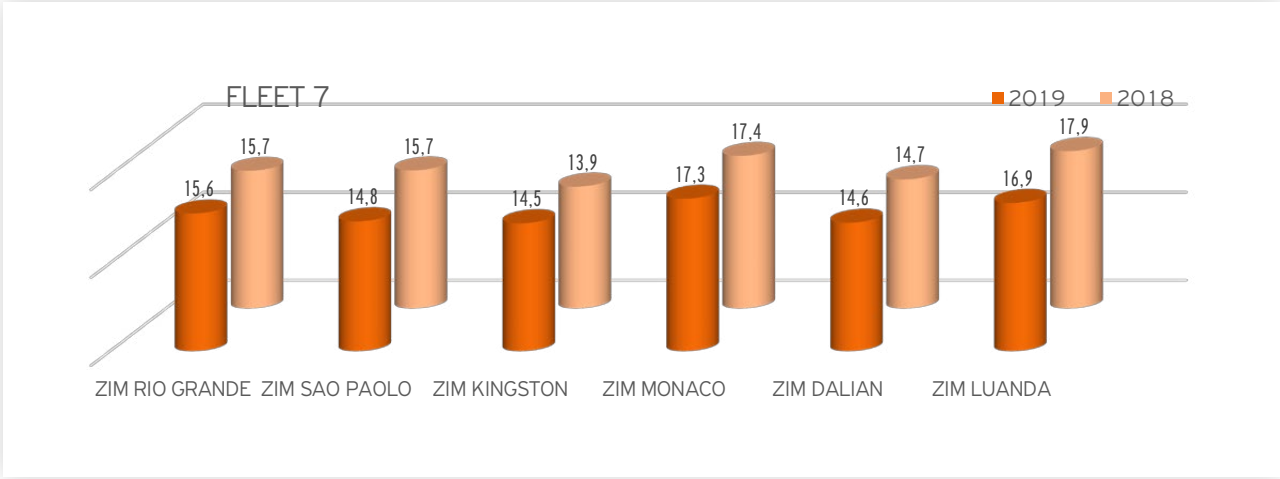
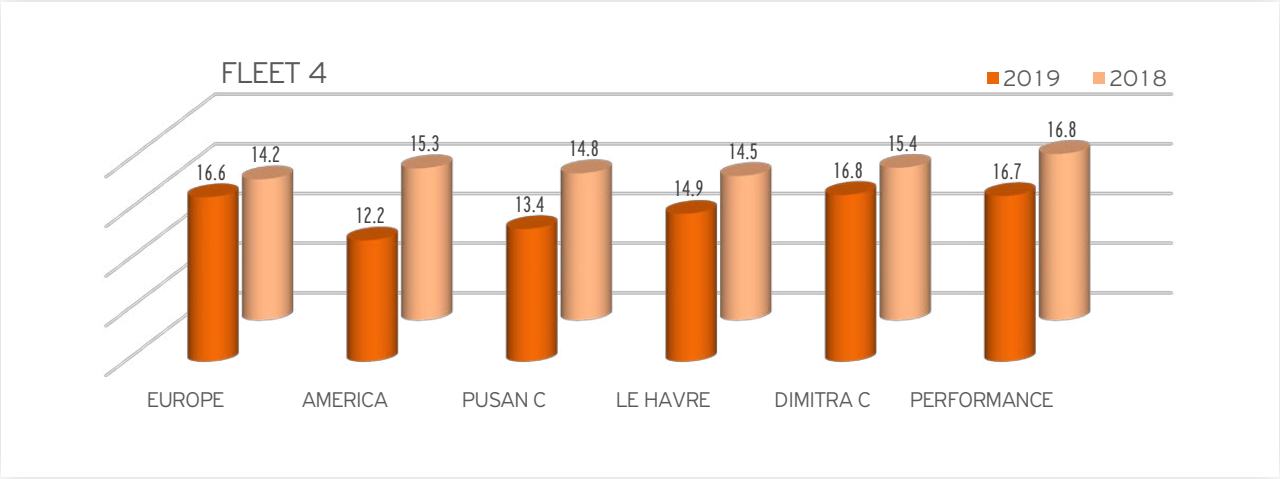
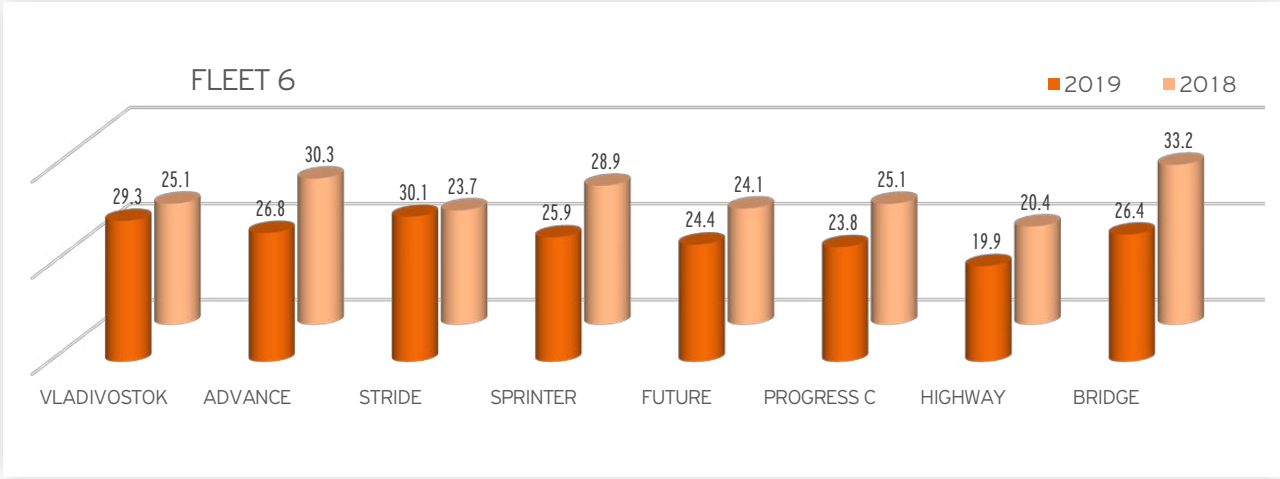
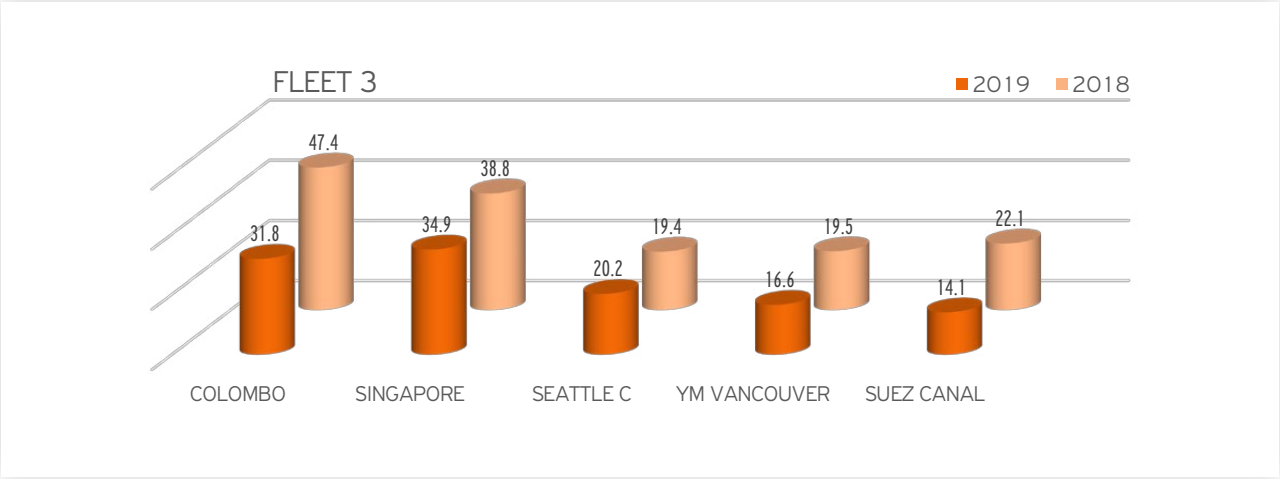
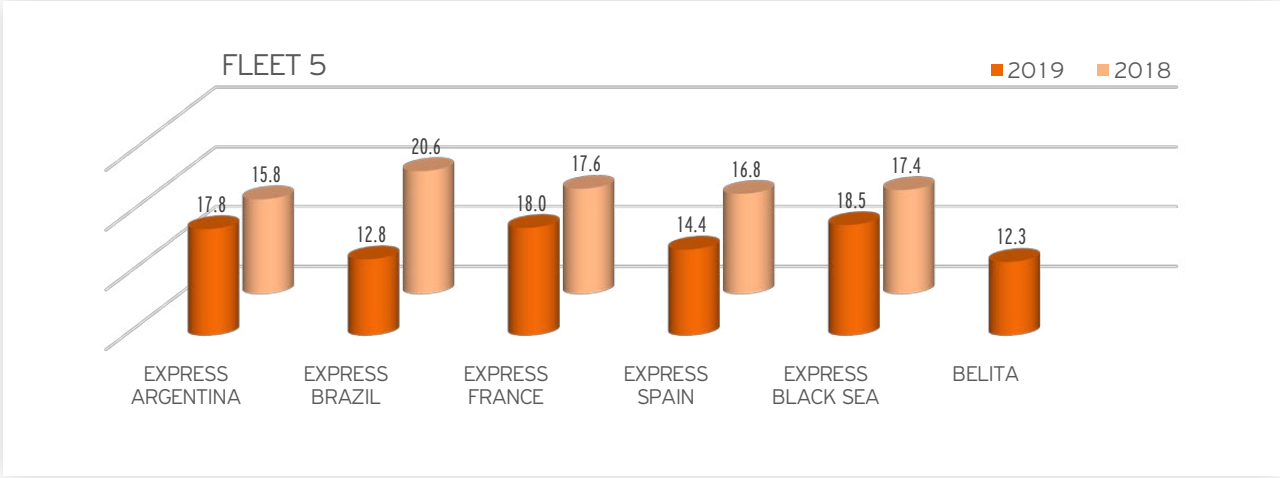
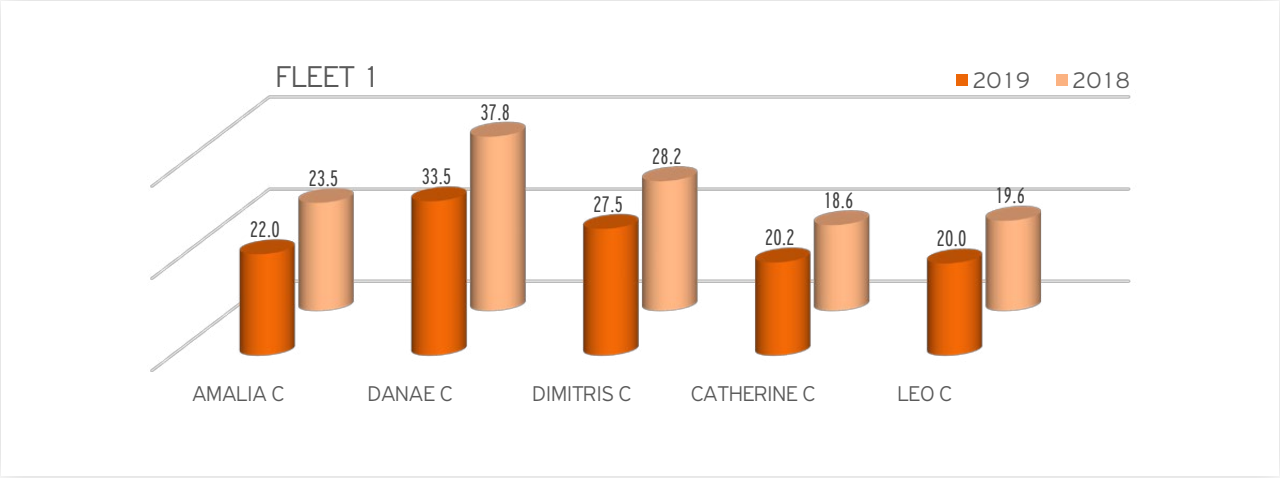
Developed by the IMO as per MEPC.1 Circ.684, the EEOI index calculates the amount of CO₂ emitted per ton/unit/TEU of cargo transported per nautical mile. CO₂ output per cargo can be used as an indicator of a vessel's fuel efficiency. This only reports CO₂ emission as a result of fuel combustion. Industry standardization and verification of CO₂ data is a prerequisite in order to enable fair, reliable measurements of CO₂ performance and to enable CO₂ benchmarking with competition. Danaos has achieved significant

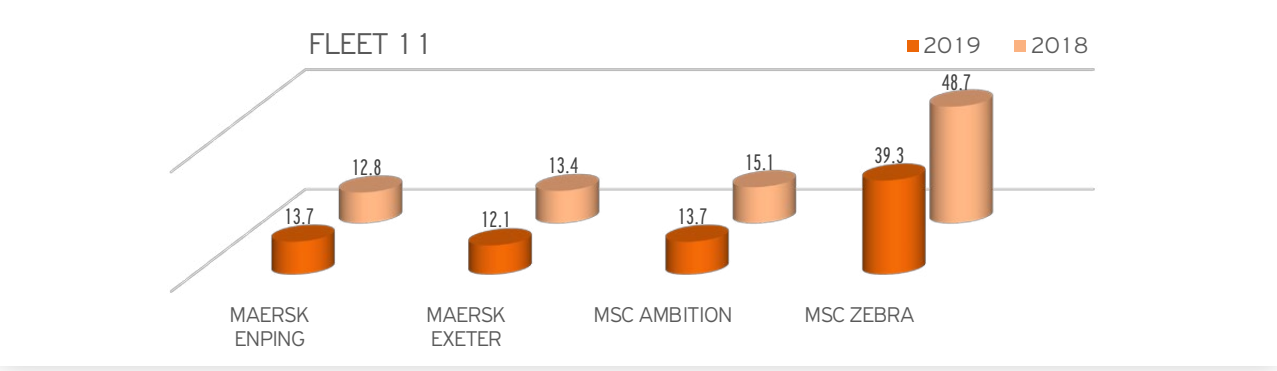
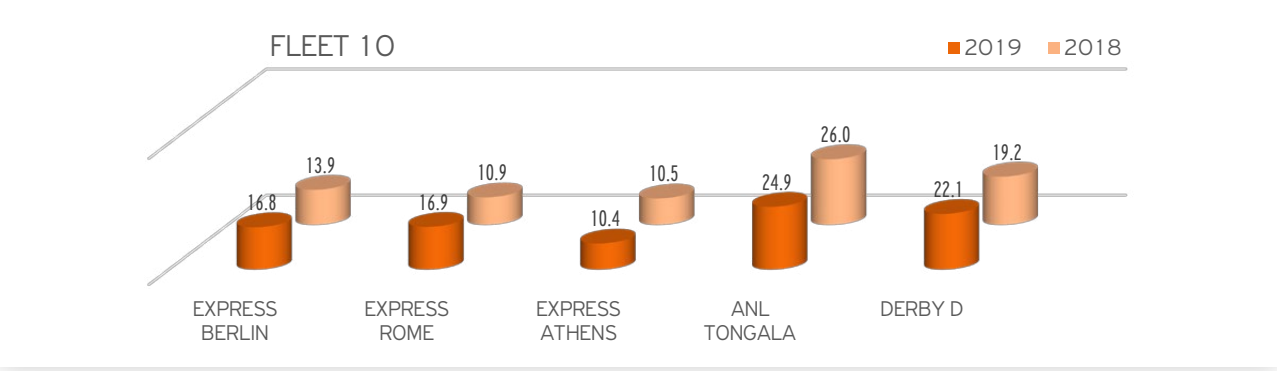
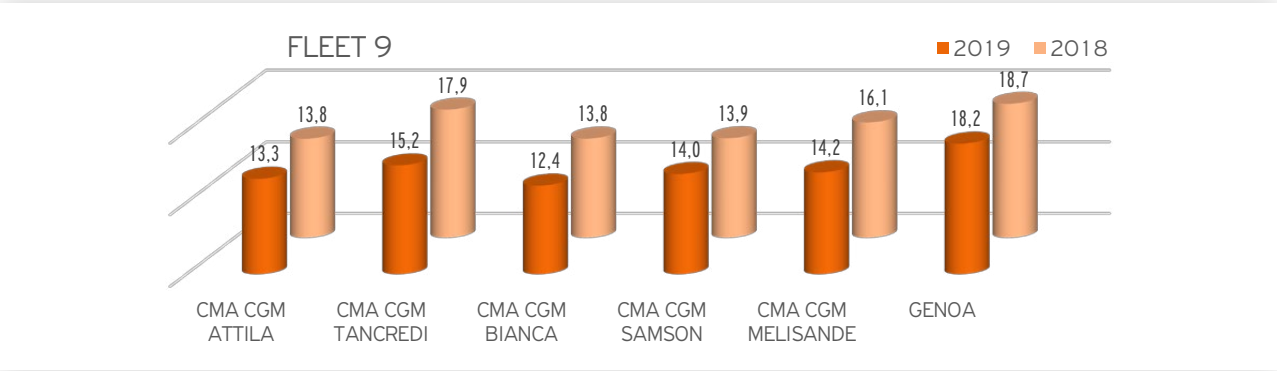
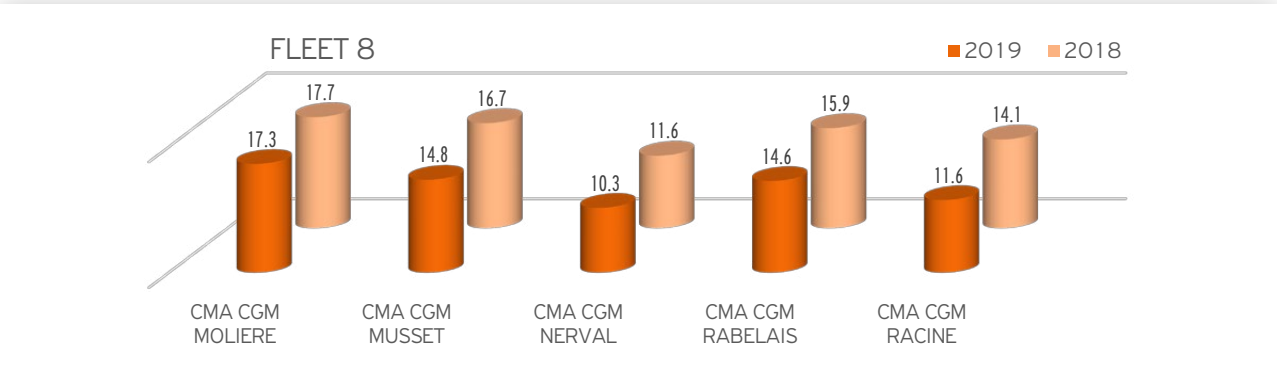
improvement in CO₂ emissions production since 2012, mainly due to the consistent efforts in improving vessels energy efficiency and reducing fuel costs. The above improvements have been driven by the results of a thorough technical research initiated in 2008 and have been realized within a controlled and structured framework, without compromising the vessels' safety and utilization. In the below graph, the Danaos fleet EEOI average for the years 2017, 2018 & 2019 can be seen.

EEOI average for active Danaos Fleet



In the below graphs the EEOI figures for all company vessels are depicted.





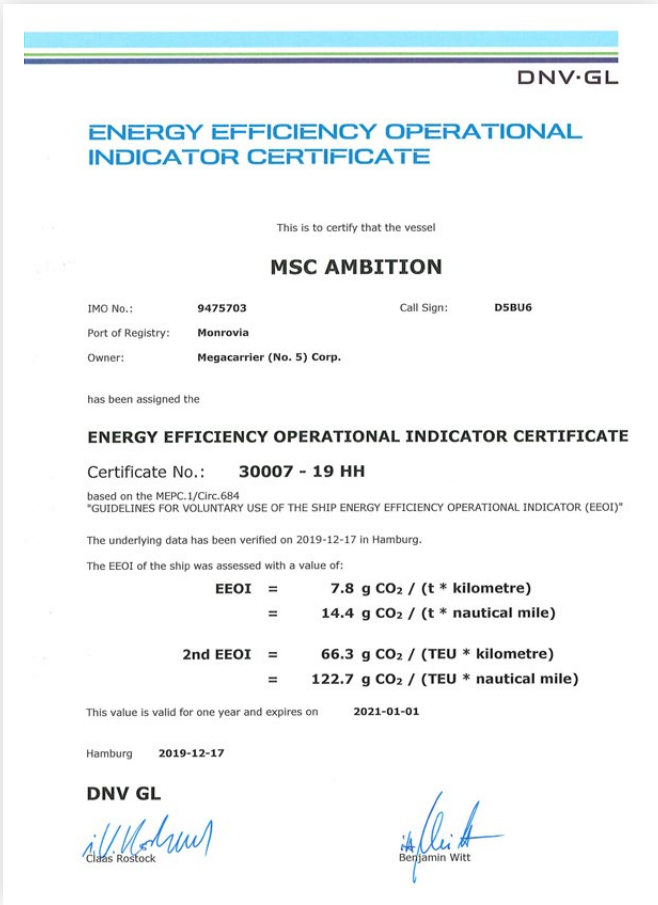
EEOI FOR THE DANAOS FLEET (YEARS 2018-2019)

The average EEOI has been reduced by 2.6% for 2019. This is mainly attributed to the fact that speed has been slightly decreased, while the weighted average draft has been almost stable, leading to less fuel consumption, whilst the ton*miles index remained almost stable for 2019. As a general observation, the operation in lighter drafts slightly increased in 2019 compared to 2018. The fleet's average energy efficiency footprint was improved when compared to the previous year, mainly due to more cargo carried with lower speed. Within 2019, a total of 5 vessels were drydocked, 4 of which have optimized their bow, contributing significantly to the improved performance and consumption. At the end of 2019, another 4 vessels have entered a shipyard in order to proceed with drydock and retrofits.

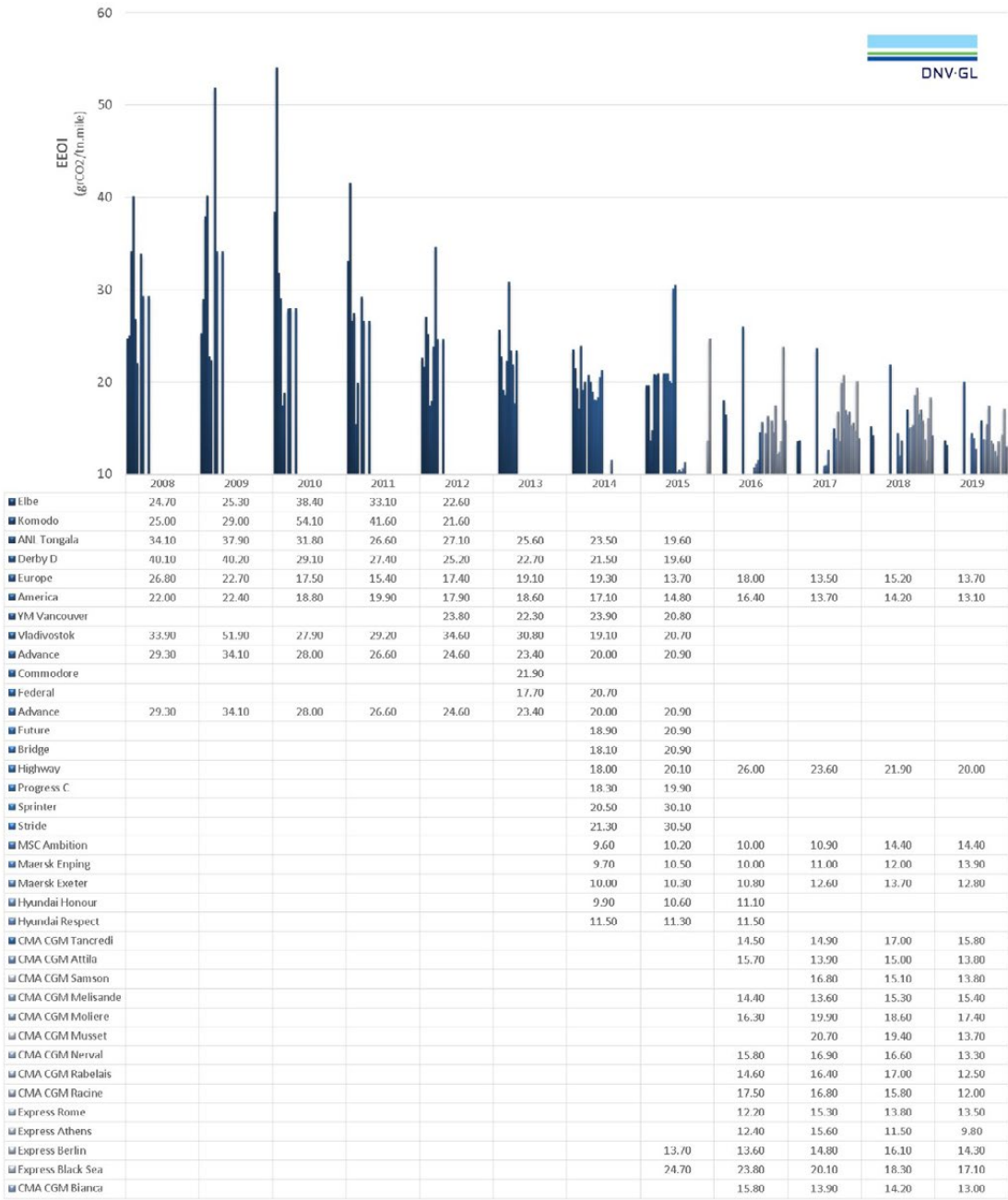
When it comes to each vessel's individual assessment, mixing trends have been observed either upward or downward. Detailed performance analysis and comparison between 2018 & 2019 is completed for each of the company's vessels within the first quarter of every year and results are updated in the SEEMP manual.

We also incorporated, a calculation tool, to measure EEOI through the vessels' daily telegrams in our Danaos Enterprise software back in 2008. Since 2008, we have voluntarily enrolled nine (9) of our vessels in the DNV-GL "CO₂ Index" project, monitoring their performance and CO₂ emissions. Within 2014, we have registered another ten (10) vessels from the Danaos fleet in the project, while the same was done in 2015, raising the total number of enrolled vessels to nineteen (19). At the end of 2016 we count twenty (20) vessels having an Energy Efficiency Operational Indicator Certificate issued by DNVGL. Within 2017 two of our 13100s that were enrolled in the scheme, were chartered as bareboats, and thereafter were replaced by another two vessels of the Danaos fleet that have been registered accordingly,

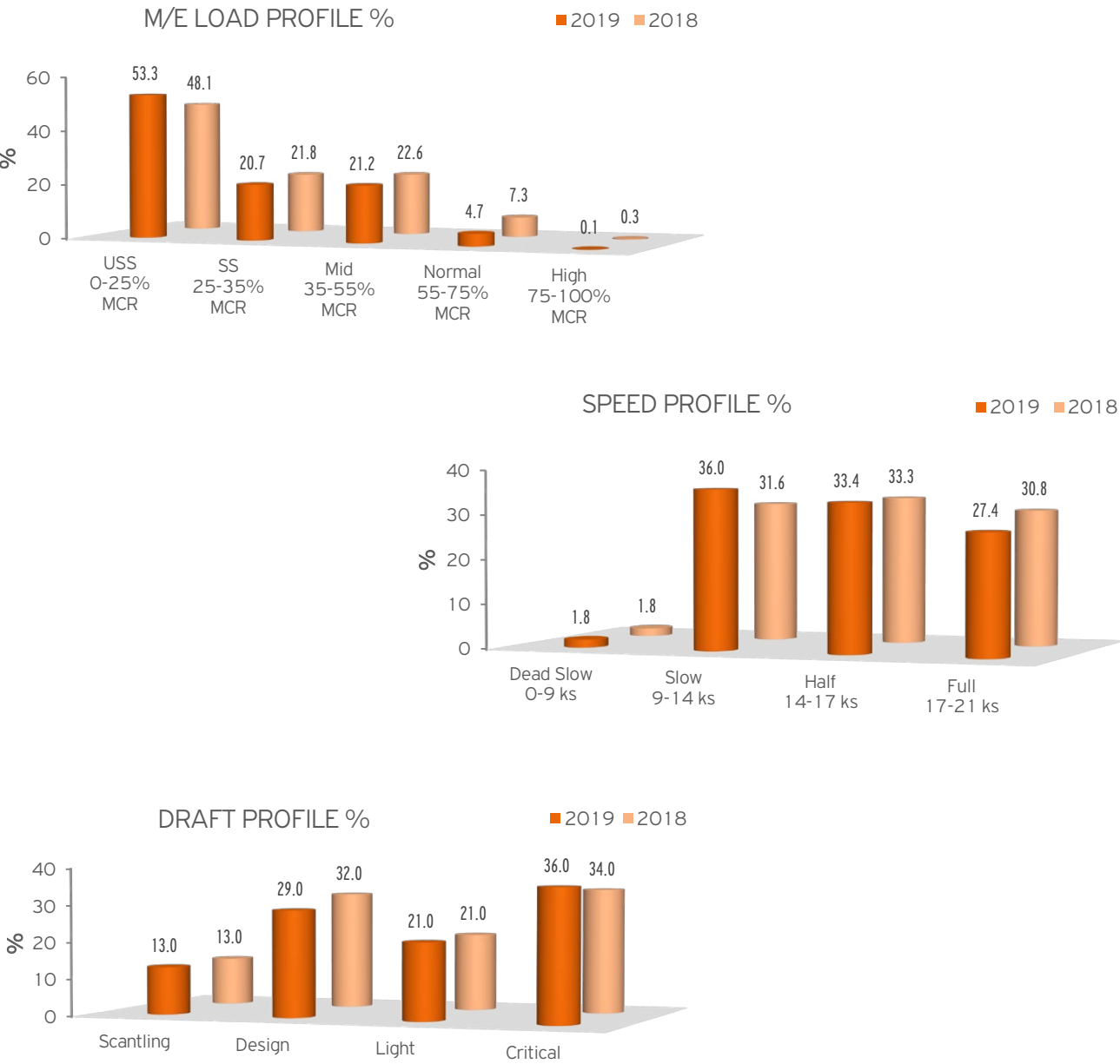
receiving EEOI certification. As a result, the total number of the vessels participating in the scheme remains unchanged for both years 2017, 2018 & 2019. EEOI certificates are renewed within the first quarter of every year, where specific sets of data are sent to DNVGL, evaluated and discussed with Danaos in order to produce the EEOI values.



DANAOS CERTIFIED CO₂ INDEX
BY DNV-GL FOR YEARS 2008-2019



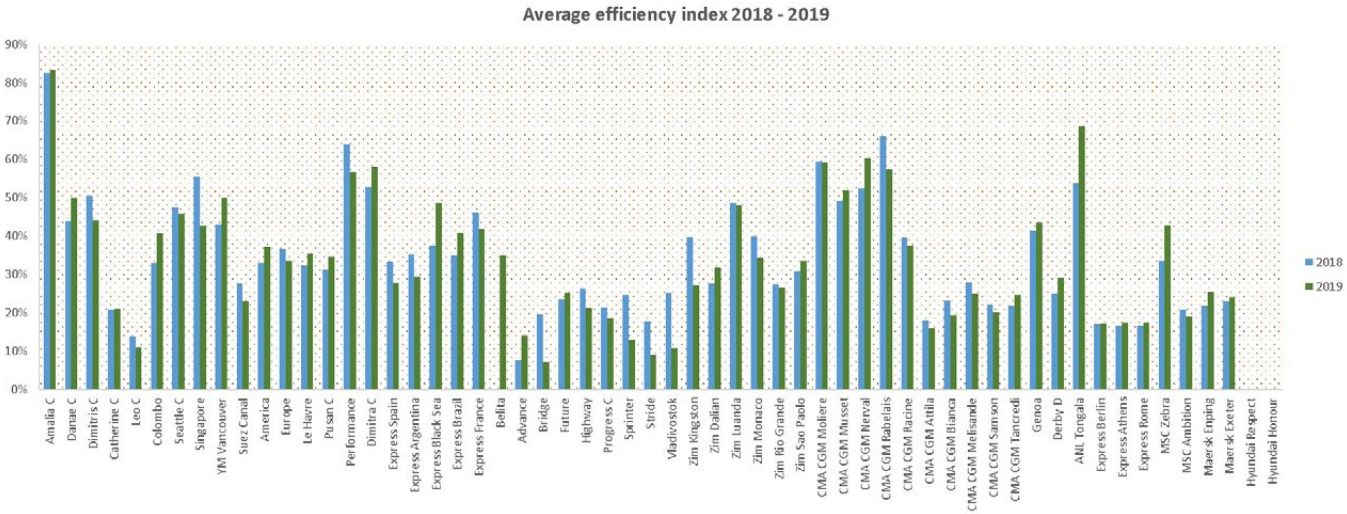
OUR FLEET’S OPERATIONAL PROFILE
(2018 VS 2019)



The above figures indicate, that the ultra-super slow steaming (USS) activity has been slightly increased within 2019, which is justified by the reduction in the weighted average speed and draft profile. Operation in design draft range has decreased in 2019, while operation in critical draft has been increased.

DANAOS ENERGY EFFICIENCY INDEX

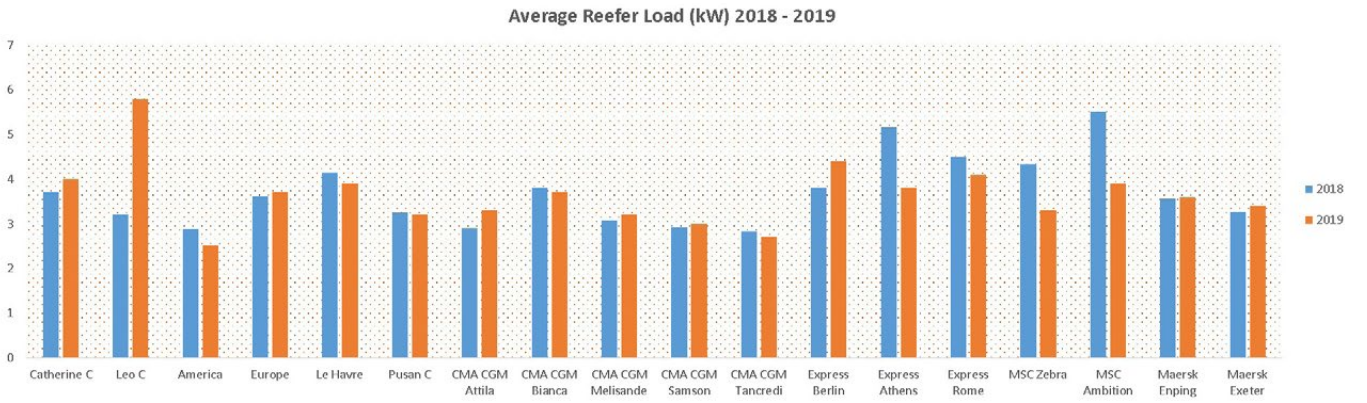
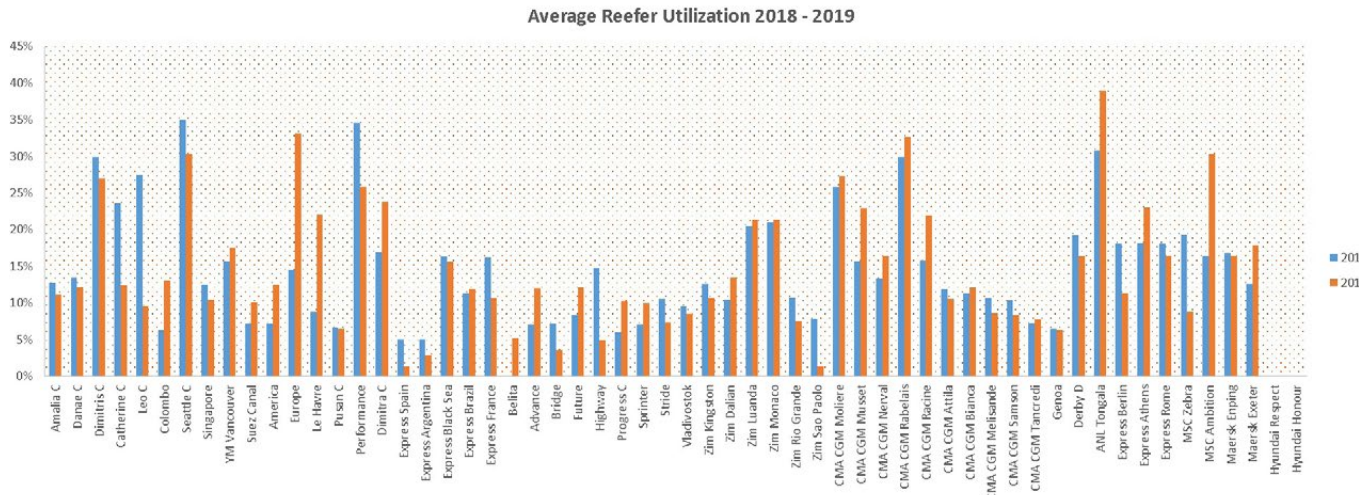
Danaos has designed energy management algorithms, which are incorporated in our WAVES analytics platform, in order to achieve a close monitoring of vessels' energy performance. The efficiency index, designed by our R&D department, contains the metrics of quantifying the implementation of energy efficient measures and instructed practices onboard, as well as the metrics for assessing the embedding of energy awareness of Danaos' personnel onboard. The indicator in question is considered as the barometer of the company's' policy assimilation and provides a good assessment tool for identifying areas offered for further improvement. For the years 2018 and 2019, the average energy efficiency index, as calculated through Waves, for all company vessels, is apposed here below.



The average efficiency index for 2019 was 33.7% .The above, is an indicator of optimum energy use onboard our vessels as a result of the embedded environmental awareness of our crew and their continuous efforts to adopt the “save energy on board” message whose implementation ways and areas of application are presented and

explained thoroughly during in-house training. Each vessel depending on whether the reefer load is received through online systems has a separate target. All vessels in the Danaos fleet have achieved their energy targets.

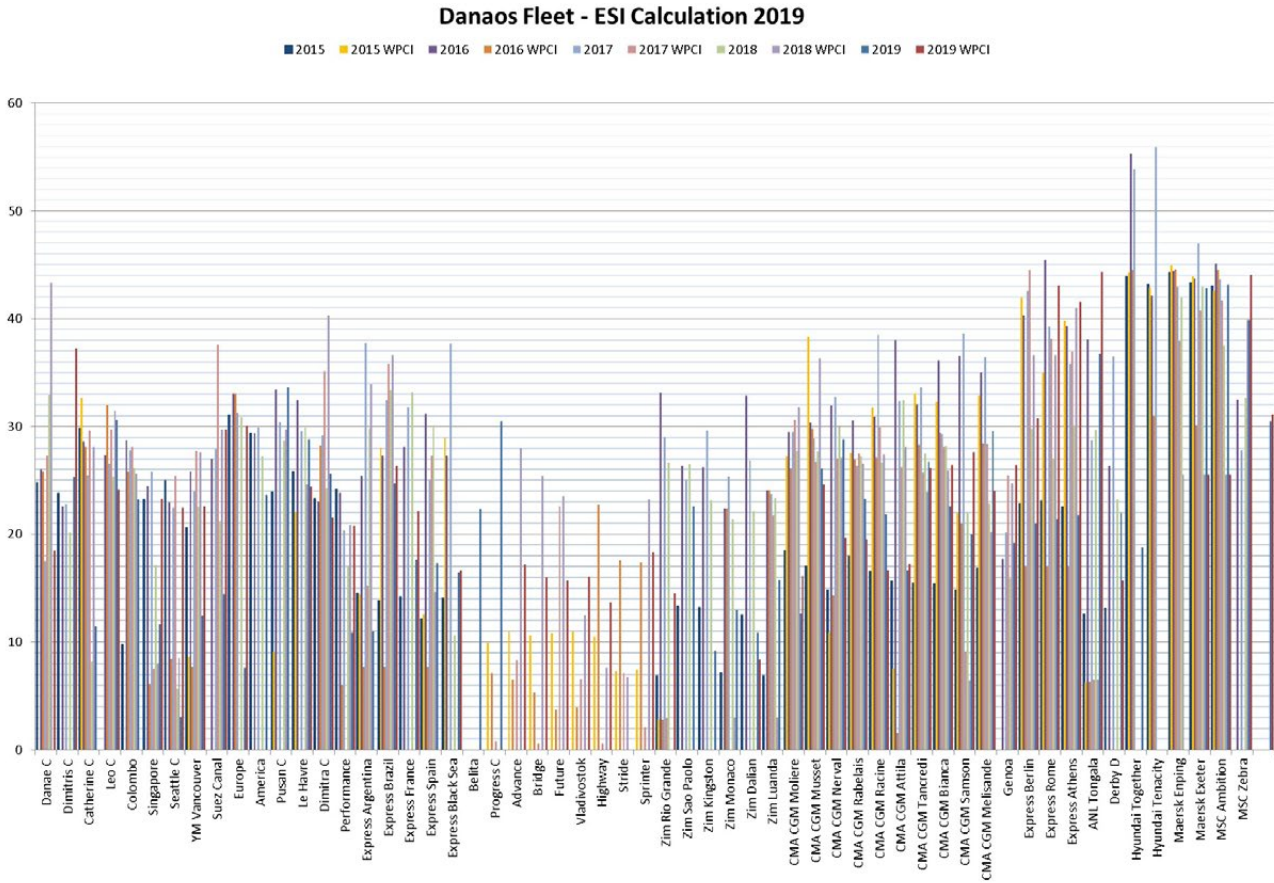
The average reefer utilization for 2019 was 14.7% and remained steady compared to the previous year. The graphs of average reefer load and average reefer utilization for all company vessels are presented here below.



ENVIRONMENTAL SHIPPING INDEX (ESI)

Danaos was enrolled, on a voluntary basis, in the Environmental Ship Index (ESI) system, which is developed by the World Port Climate Initiative (WPCI) (<http://esi.wpci.nl/Public/Home>).

So far, 45 of our vessels have been officially enrolled on the WPCI ESI data base, (excluding the 2 bareboat chartered), either by our charterers or directly by Danaos. However, ESI has been calculated for all our Fleet vessels built after 2000 (having a NOx technical file) as it is considered an extra tool for evaluating our vessels’ environmental performance and an instrument for contributing to our clients’ sustainability policy. Below you can find the relevant graph containing all ESI scores for the past 5 years, from 2015 to 2019.



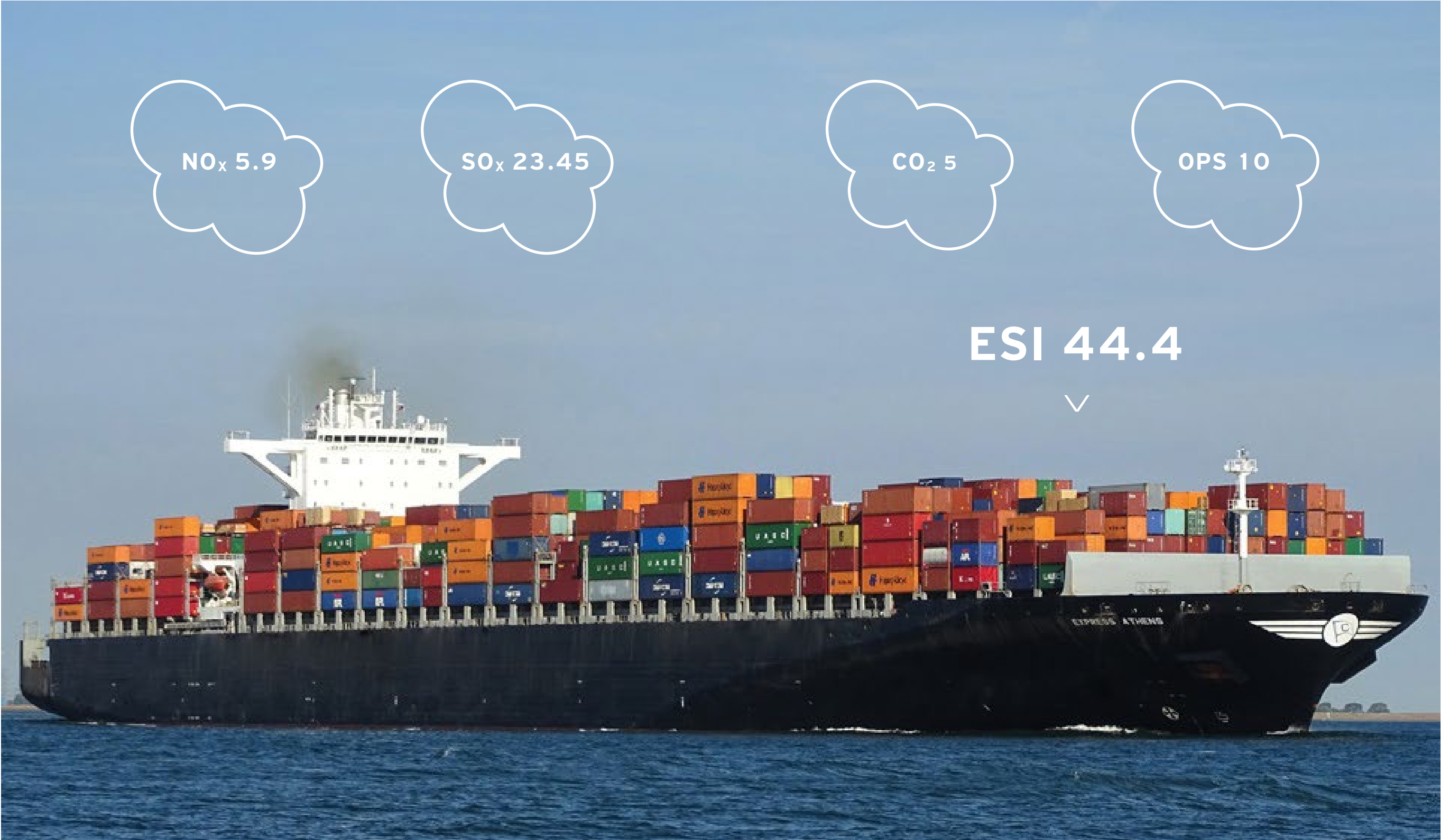
This project is a voluntary system designed to improve the environmental performance of sea going vessels and an instrument to visualize the environmental performance of ships regarding air pollutants and CO₂. It takes the NOx and SOx emissions directly into account and rewards documentation and management of energy efficiency, like EEOI, AMP installations and SOx Scrubber installations. Any vessel can be enrolled either from her manager/owner or charterer.


Her consumption, distance and bunkering data should be updated in their database every six months when the new ESI values are calculated and relevant certificates are produced. The ESI scores for a total of 47 vessels (equipped with a NOx technical file) have been calculated by the Danaos R&D department based on the data available for the corresponding years (from 1/1-31/12) and are depicted in the graph above. The differences observed in some cases between Danaos’ calculated ESI values and the ones in the WPCI web site, are owed to the different period that the calculation takes place.

Score Validity	2017	Score Validity	2018	Score Validity	2019	Score Validity
01/01/2017 - 30/06/2017	Maersk Enping	01/01/2018 - 30/06/2018	Danae C	01/10/2018 - 31/03/2019	Amalia C	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	Maersk Exeter	01/01/2018 - 30/06/2018	Amalia C	01/10/2018 - 31/03/2019	Danae C	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	MSC Ambition	01/01/2018 - 30/06/2018	Catherine C	01/10/2018 - 31/03/2019	Catherine C	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	Progress C	01/10/2018 - 31/03/2018	Leo C	01/10/2018 - 31/03/2019	Colombo	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	Advance	01/10/2018 - 31/03/2018	Colombo	01/10/2018 - 31/03/2019	Singapore	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Bridge	01/10/2018 - 31/03/2018	Singapore	01/10/2018 - 31/03/2019	Seattle C	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Future	01/10/2018 - 31/03/2018	YM Seattle	01/10/2018 - 31/03/2019	YM Vancouver	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Vladivostok	01/10/2018 - 31/03/2018	YM Vancouver	01/10/2018 - 31/03/2019	Suez Canal	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Highway	01/10/2018 - 31/03/2018	Suez Canal	01/01/2019 - 30/06/2019	Pusan C	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Stride	01/10/2018 - 31/03/2018	Pusan C	01/01/2019 - 30/06/2019	Le Havre	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Sprinter	01/10/2018 - 31/03/2018	Le Havre	01/10/2018 - 31/03/2019	Dimitra C	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Express Spain	01/01/2018 - 30/06/2018	Dimitra C	01/10/2018 - 31/03/2019	Express Argentina	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Express Argentina	01/01/2018 - 30/06/2018	Performance	01/10/2018 - 31/03/2019	Express Brazil	01/01/2020 - 30/06/2020
01/01/2017 - 30/06/2017	Express Brazil	01/01/2018 - 30/06/2018	Express Argentina	01/01/2019 - 30/06/2019	Express Spain	01/01/2020 - 30/06/2020
01/01/2017 - 30/06/2017	Express Athens	01/01/2018 - 30/06/2018	Express Brazil	01/10/2018 - 31/03/2019	Vladivostok	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	Express Berlin	01/01/2018 - 30/06/2018	Express Spain	01/01/2019 - 30/06/2019	Advance	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	Express Rome	01/01/2018 - 30/06/2018	Zim Monaco	01/10/2018 - 31/03/2019	Stride	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Attila	01/01/2018 - 30/06/2018	Zim Luanda	01/10/2018 - 31/03/2019	Sprinter	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Bianca	01/01/2018 - 30/06/2018	CMA CGM Moliere	01/10/2018 - 31/03/2019	Future	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Samson	01/01/2018 - 30/06/2018	CMA CGM Musset	01/10/2018 - 31/03/2019	Highway	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Tancredi	01/01/2018 - 30/06/2018	CMA CGM Nerval	01/10/2018 - 31/03/2019	Bridge	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Melisande	01/01/2018 - 30/06/2018	CMA CGM Rabelais	01/10/2018 - 31/03/2019	Zim Monaco	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Moliere	01/10/2018 - 31/03/2018	CMA CGM Racine	01/10/2018 - 31/03/2019	Zim Luanda	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	CMA CGM Musset	01/10/2018 - 31/03/2018	CMA CGM Attila	01/01/2019 - 30/06/2019	CMA CGM Moliere	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	CMA CGM Nerval	01/10/2018 - 31/03/2018	CMA CGM Tancredi	01/01/2019 - 30/06/2019	CMA CGM Musset	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	CMA CGM Rabelais	01/10/2018 - 31/03/2018	CMA CGM Bianca	01/01/2019 - 30/06/2019	CMA CGM Nerval	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	CMA CGM Racine	01/10/2018 - 31/03/2018	CMA CGM Samson	01/01/2019 - 30/06/2019	CMA CGM Rabelais	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Danae C	01/10/2018 - 31/03/2018	CMA CGM Melisande	01/01/2019 - 30/06/2019	CMA CGM Racine	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	Lodestar	01/10/2018 - 31/03/2018	Genoa	01/01/2019 - 30/06/2019	CMA CGM Attila	01/04/2020 - 30/09/2020
01/10/2016 - 31/03/2017	NYK Leo	01/10/2018 - 31/03/2018	Express Berlin	01/01/2019 - 30/06/2019	CMA CGM Tancredi	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Amalia C	01/10/2018 - 31/03/2018	Express Rome	01/01/2019 - 30/06/2019	CMA CGM Bianca	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	YM Seattle	01/10/2018 - 31/03/2018	Express Athens	01/01/2019 - 30/06/2019	CMA CGM Samson	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	YM Vancouver	01/10/2018 - 31/03/2018	ANL Tongala	01/10/2018 - 31/03/2019	CMA CGM Melisande	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Priority	01/01/2018 - 31/03/2018	Maersk Enping	01/01/2019 - 30/06/2019	Genoa	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Genoa	01/01/2018 - 30/06/2018	Maersk Exeter	01/01/2019 - 30/06/2019	Express Berlin	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Zim Luanda	01/10/2018 - 31/03/2018	MSC Ambition	01/01/2019 - 30/06/2019	Express Rome	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	Zim Rio Grande	01/10/2018 - 31/03/2018	MSC Zebra	01/01/2019 - 30/06/2019	Express Athens	01/01/2020 - 30/06/2020
01/10/2016 - 31/03/2017	ANL Tongala	01/10/2018 - 31/03/2018	Bridge	01/10/2018 - 31/03/2019	ANL Tongala	01/04/2020 - 30/09/2020
01/01/2017 - 30/06/2017	Suez Canal	01/01/2018 - 30/06/2018	Advance	01/10/2018 - 31/03/2019	Maersk Enping	01/01/2020 - 30/06/2020
	Colombo	01/10/2018 - 31/03/2018	Future	01/10/2018 - 31/03/2019	Maersk Exeter	01/01/2020 - 30/06/2020
	Singapore	01/10/2018 - 31/03/2018	Vladivostok	01/10/2018 - 31/03/2019	MSC Ambition	01/01/2020 - 30/06/2020
			Highway	01/10/2018 - 31/03/2019	MSC Zebra	01/01/2020 - 30/06/2020
			Stride	01/10/2018 - 31/03/2019		
			Sprinter	01/10/2018 - 31/03/2019		

PM is indirectly included because of its strong relationship to SOx. Vessels with ESI indexes above a certain score (varying from port to port) are eligible to be granted, as a reward, a discount on port dues in more than 20 major ports worldwide. Vessels calling ECA areas therefore burning MGO or 0.1% ULSFO are highly rewarded, gaining high scores. Contrary to the above, the vessels calling non-ECA areas, are not likely to achieve a high score. The below table with ESI scores refer to the 42 vessels subscribed in the WPCI and their score is according to the WPCI web site and depending on the vessel, are valid for the mentioned period.

Express Athens has an ESI score of 44.4, which is the highest among Danaos’ registered vessels according to WPCI’s website.





*“We shall require a substantially new manner
of thinking if mankind is to survive”*

Albert Einstein

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