



ESL Shipping

# SUSTAINABILITY REPORT 2021

# QUICK FACTS

**NET SALES**  
million EUR

191.4  
+29%

**NET PROFIT**  
million EUR

26.8  
+252%

**CARGO VOLUME**  
million tons

14.8  
+10%

**PERSONNEL**  
sea and shore

355  
+0%

**DISTANCE SAILED**  
million nautical miles

2.0  
+11%

**TONNAGE**  
deadweight tons

473K  
+2%

# MANAGEMENT TEAM



**Mikki Koskinen**  
Managing Director



**Janne Eklöf**  
Technical Director



**Mikko Rausti**  
Director, Sea Personnel &  
External Ship Management



**Frida Rowland**  
Business Unit Director  
AtoB@C Shipping



**Petter Ruda**  
Chief Financial Officer



**Toni Rönnerberg**  
Commercial Director



**Kirsi Ylärinne**  
Operations Director

## FOREWORD

# THE BIG WHEEL KEEPS ON TURNING

In this sustainability report, we are happy to once again share information regarding our recent developments in ESG matters. A great deal of work has been completed, but as we learn more, new tasks emerge that require our further attention.

Currently, a large number of new environmental regulations concerning emissions from the shipping industry are in the final stages of preparation. Both the International Maritime Organization (IMO) and the European Union are expected to finalise their detailed emission reduction regulations in 2022. It is a pity that not all initiatives seem to be aligned and we are likely to see the creation of unforeseen regulation abbreviation jungle instead of a globally level playing field which reduces emissions.

Don't get me wrong, since we absolutely are in favour of emission reduction and see the benefit in putting a price tag on shipping emissions. However, multi-layer regulations and geographical differences do not necessarily result in the reduction of emissions and increases in global transport efficiency.

We should not create such regulations or market-based measures for emission reduction, that may lead to the development of two-tier freight markets or the exclusion of a large proportion of shipping emissions. This is exactly what we would get by putting the threshold at the 5,000 GT vessel size; market distortion and carbon leakage. Everyone in the shipping industry should be in the same boat.

Regulating bodies should not forget about the geographical aspect either, taking into account our northern location. Despite the good and professional work of our government representatives at IMO, we are very concerned about how ice trading will

be taken into account when defining the carbon intensity of shipping.

As one of the leading developers of sustainable shipping solutions, our position remains strong moving forward. With great respect, I wish to thank all our employees onboard and ashore, and all our clients across the continents, for your great, resilient work and support throughout these uncertain times.

Sincerely,

Mikki Koskinen

Managing Director



# ABOUT THE COMPANY

We are the leading carrier of dry bulk and product cargoes in the Baltic Sea region. We mainly operate in contract traffic securing product and raw material transports to several industries around the year.

ESL Shipping is the leading carrier of dry bulk cargoes in the Baltic region. The group's competitive edge is based on its ability to sustainably secure product and raw material transportation for industries and energy production all year around, even in difficult weather conditions.

Our vessels mainly operate in contract traffic in the Baltic Sea and in Northern Europe, and also perform loading and unloading operations at sea as a special service. Transportation operations in the Baltic Sea and the North Sea are mainly based on long-term customer agreements and established customer relationships.

The group operates under three brands: parent company ESL Shipping, which operates the fleet of 9,000-56,000 dwt vessels while Swedish subsidiary AtoB@C Shipping operates 3,000-6,000 dwt vessels, offering port towing and related services at the Port of Raähe with tugboat Charlie. The third subsidiary is NSG Norra Skeppningsgruppen, a port agency and logistics service provider located in Oxelösund and Norrköping, Sweden.

ESL Shipping Ltd has been in business for more than 70 years and is a subsidiary of Aspo Plc.

At the end of 2021, the group's fleet consisted of 51 vessels with a total capacity of 473,000 dwt. Of the vessels, 24 are wholly-owned (75% of the tonnage), two are minority-owned (2%) and the remaining 24 are time-chartered (23%). After the reporting period, ESL Shipping has sold barge Espä and delivered two time chartered vessels back to their owners.

The time chartered vessels are managed by their respective owners. Therefore, this report concentrates on our owned fleet for which we have total control. For time chartered vessels we mainly control emissions and commercial decisions.

ESL Shipping is actively investigating different opportunities to have a broader presence in growing markets in the Arctic areas. During 2021, AtoB@C Shipping established a subsidiary in Cyprus.

## WE SUPPORT



We acknowledge that our parent company Aspo Plc participates in the UN Global Compact, and we support the Ten Principles and advancement of the Sustainable Development Goals as well as broader UN goals. We consolidate our support for this initiative fully under our parent's commitment. Therefore, we do not participate in UN Global Compact activities nor do we participate in activities of a Global Compact Local Network.

355

PERSONNEL

5

OFFICES

1949

FOUNDED





## ABOUT COMPANY

# SERVICES & FLEET

ESL Shipping's vessels are especially designed to operate in the demanding conditions of the Baltic Sea. Our fleet is interchangeable as we operate several vessels of similar size and type.

### DRY BULK SHIPMENTS

We are specialised in dry bulk shipments such as iron ore, pellets and limestone as well as fertilizers, grain and dry biofuels, such as wood pellets. Our large fleet of vessels between 3,000 and 56,000 dwt gives customers the possibility to choose the most suitable vessel size for each shipment.

### LOADING AND UNLOADING AT SEA

ESL Shipping's vessels of 13,000-56,000 dwt are equipped with their own cranes and have been designed so that they can work beside another ship, even in challenging conditions. They are equipped with sufficiently tall and long-armed cranes to operate effectively and safely.

### SUSTAINABLE SOLUTIONS

We have proven skills to build eco-friendly vessels together with a customer. Our vessels are able to run on renewable diesel, Viikki and Haaga on liquefied biogas. We also offer Virtual Arrival, which strives to optimise the vessel's speed during the passage which minimise the waiting time at the anchorage thus reducing emissions.

### PROJECT CARGO

With the support of our own supercargo personnel, our well-fitted vessels are the perfect fit for project shipments. In addition to hold cargo, some of our vessels are capable to take cargo to the deck.

### SHIPMENTS IN ARCTIC AREAS

The whole ESL Shipping fleet is ice-strengthened, enabling smooth operations even in difficult icy conditions both in the Baltic Sea and other areas such as the Canadian Arctic. Only a small proportion of the world's shipping companies are capable of working in Arctic areas.

### LINER SERVICE FROM RAAHE

From Raahе, AtoB@C Shipping offers frequent liner service with 3,000-6,000 dwt vessels to several ports in the southern Baltic Sea and to Antwerp, Hull and Pasajes.

51

VESSELS

24

OWNED

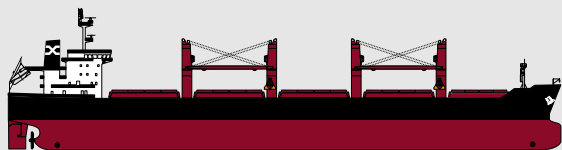
473K

TOTAL DWT

## OPERATED BY ESL SHIPPING

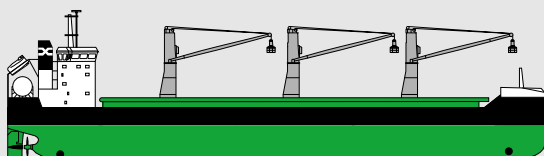
### ARKADIA CLASS

2 x 56,000 dwt / Ice class 1A



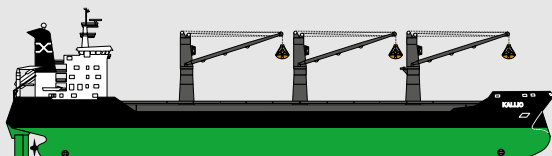
### VIIKKI CLASS

2 x 25,600 dwt / Ice class 1A



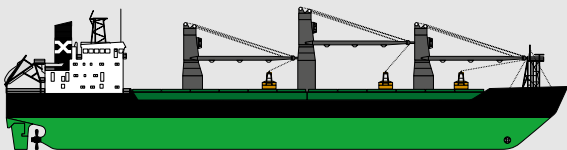
### EIRA CLASS

3 x 20,000 dwt / Ice class 1A Super



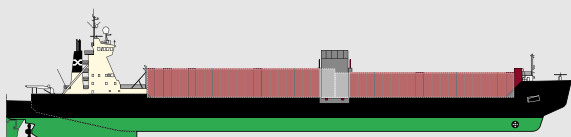
### PASILA CLASS

2 x 13,000 dwt / Ice class 1A Super



### PUSHERS & BARGES

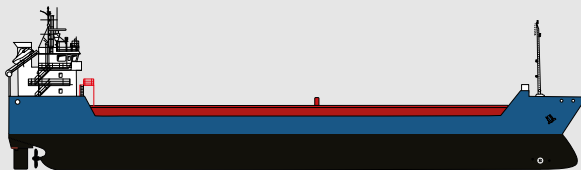
2 x pusher, 4 x 13,500 dwt barge, 1 x 9,000 dwt barge  
Ice class 1A Super



## OPERATED BY ATOB@C SHIPPING

### 6000 DWT CLASS

3 x 6,000 dwt / Ice class 1A



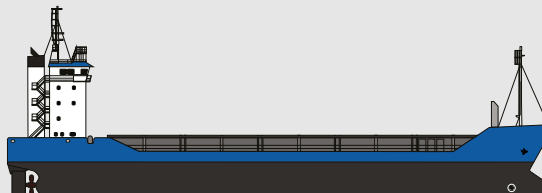
### 5000 DWT CLASS

10 x 5,000 dwt / Ice class 1A



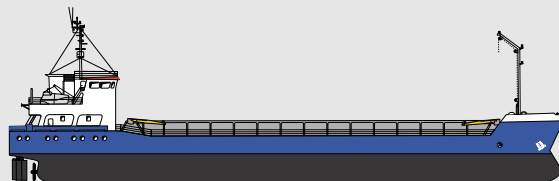
### 4000 DWT CLASS

16 x 4,000 dwt / Ice class 1A



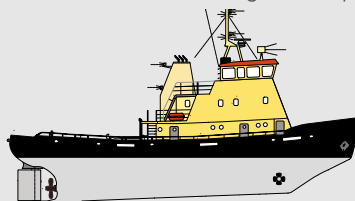
### 3000 DWT CLASS

5 x 3,000 dwt / Ice class 1A/1B



### TUG BOAT Charlie

Provides harbour towage in the port of Raahé









## ENVIRONMENTAL RESPONSIBILITY

# OUR TARGET IS NET ZERO EMISSIONS BY 2050

Growing our business while lowering the pressure on the environment is our key focus in the coming decades.

In December 2021, we published our first ESG targets demonstrating our ambition to be the industry forerunner in sustainability. Our goal is to be a pioneer in technological solutions, sustainability and quality of service. Sustainability and reducing our footprint has been in the core of our business and we have openly reported our progress in the annual sustainability report published since 2017.

Strategy work was conducted together with consultancy firm Deloitte. An important part of the process was to collect data from our stakeholders and ensure, that we focus on issues relevant to our stakeholders. As a result of stakeholder survey and interviews, we were able to determine material topics and areas that our stakeholders felt important.

As a shipping company currently operating around 50 vessels, we recognise that the most important area for us is emissions to the air and sea. Consequently, our most important commitments are 50% lower carbon intensity per ton-mile by 2030 and net zero CO<sub>2</sub> emission operations by 2050.

### OUR ROADMAP TOWARDS FOSSIL-FREE SHIPPING

Firstly, we need best available ship design and power train capable of shifting to drop-in fossil free fuels when they are available. Prime examples of this are the recent order of six 5,350 dwt hybrid coasters equipped with battery packs and shore power connection (see page 13-14) as well as the world's first LNG-powered bulk carriers Viikki and Haaga.

Secondly, we need to build industrial scale availability of renewable fuels in partnership with leading Scandinavian suppliers. Therefore, we are participating in projects aimed at industrial scale production of hydrogen based e-fuels in second half of the decade.

Thirdly, we need customers who share a common future vision for low emission shipping. Here we have worked for example with SSAB to introduce Viikki and Haaga which almost halved emissions between Luleå, Oxelösund and Raähe.

While reducing environmental footprint remains the most significant area for our ESG work, we are equally committed to improve the experience for people in our value chain. This includes both taking care of our employee's wellbeing and safety as well as maintaining and improving customer experience.

In 2022, we will continue developing our sustainability program and reporting tools for both internal and external use. As a way to engage the whole personnel to the work for the common goals, ESG-targets become a part of our incentive system from 2022 onwards.

### OUR KEY ESG TARGETS AND SDGS

We are committed to United Nations Sustainable Development Goals (SDGs). Based on our strategy work and our targets, we have determined the most relevant SDGs where we can contribute.



We provide a safe and healthy place to work  
Our primary focus is safety of our people



We treat everyone equally  
We conduct ethically in line with applicable law and standards and expect the same from our counterparties



-50% of CO<sub>2</sub> by 2030,  
Net zero operations by 2050



We work with the ports to minimise the amount of grey water and hold washing water to the sea



We provide first-class service to our customers

## ENVIRONMENTAL RESPONSIBILITY

# ENERGY EFFICIENCY IS IMPROVING STEP BY STEP

Virtual Arrival changes the traditional way of working and provides an opportunity to reduce emissions.

Due to the fast turnaround in the market from very low activity to almost overheating, we were not able to reach our target of reducing emissions from 2019 to 2021. However, emissions remained at the same level as in 2019 before the pandemic. Distance sailed increased by 3.8% but total emissions only 1.7%. After a very difficult 2020, year 2021 consisted of high market activity and lack of available capacity. These factors resulted in higher sailing speeds and therefore higher consumption than expected in the beginning of the year.

One important initiative to change the present way of working and to reduce GHG emissions is Virtual Arrival. The first trial started in July in cooperation with SSAB and the Port of Oxelösund. So far, the results have been positive and Virtual Arrival has decreased emissions by 18% per voyage where Virtual Arrival has been applied. On AtoB@C Shipping's side, the concept has been trialled with one core customer and the aim is to engage more customers with the concept and to make it a routine practice.

In Northern Europe, there continues to be considerable growth in interest among customers for environmentally friendly maritime transport that produces as low carbon emissions as possible. In addition to ESL Shipping's investments in new highly environmentally friendly vessels (see page 13-14), the shipping company is preparing long-term cooperation with leading energy suppliers to provide sea transportation with even lower carbon emissions, and even fossil-free transportation, in the future.

During 2022, three larger and four smaller vessel units will be docked for approximately one hundred days. After these dockages, all vessels owned by ESL Shipping will be equipped with ballast water treatment systems that meet new environmental regulations.

## MINIMAL METHANE SLIP FROM VIKKI AND HAAGA

Methane slip from LNG-engines has been in the headlines of Finnish press as the global warming potential of methane is 25 times higher than that of carbon dioxide.

LNG is an important intermediate fuel in the journey towards zero emission shipping as it reduces CO<sub>2</sub>-emissions by 21-28% compared to conventional marine fuels. In addition, it has virtually no sulphur oxide or particulate matter (PM) emissions and significantly lower nitrogen oxide emissions compared to fuel oils.

Our LNG-powered vessels Viikki and Haaga are equipped with high-pressure 2-stroke main engines manufactured by STX MAN. The operational principle of the engine is based on a diesel process meaning that the high-pressure gas is injected into a cylinder after the ignition with the pilot fuel. This enables minimal methane slip which was one of the key factors when choosing the main engine for the vessel.

The minimal methane slip of Viikki and Haaga has been confirmed in two separate studies:

The Finnish Meteorological Institute<sup>1</sup> has investigated in

methane slip on the island of Utö by measuring the methane content in the air. According to the measurements, low-pressure engines, widely used in LNG ships, released a lot of methane into the air, as given in this type of engine some of the methane remains unburned. An exception was made by Viikki and Haaga, as these ships have high-pressure 2-stroke main engine, which are rather rare on ships.

In the autumn of 2019 measurements were conducted onboard Haaga to determine the actual methane emissions of the vessel. Measurement equipment was installed in the main engine exhaust pipe measuring carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), carbon monoxide (CO), nitric oxide (NO) and nitrogen dioxide (NO<sub>2</sub>) emissions. Onboard measurements proved that there was practically no methane emissions from the engine.

<sup>1</sup>) Evaluation of Methane Emissions Originating from LNG Ships Based on the Measurements at a Remote Marine Station. Tiia Grönholm, Timo Mäkelä, Juha Hatakka, Jukka-Pekka Jalkanen, Joel Kuula, Tuomas Laurila, Lauri Laakso, and Jaakko Kukkonen. Environmental Science & Technology 2021 55 (20), 13677-13686



237 621

**CO<sub>2</sub>-EMISSIONS  
IN TOTAL**

Target 2050  
Net zero CO<sub>2</sub> emission  
operations

15.74

**CO<sub>2</sub>-EMISSIONS  
GRAMS PER TON-MILE**

Target 2030:  
50% lower carbon intensity per  
ton-mile compared to 2008 and  
respective vessel class

0%

**GREY WATER  
PUMPED TO SHORE**

Target: 50% by 2025  
and 100% by 2050

## ENVIRONMENTAL RESPONSIBILITY

# NEW REGULATIONS SHAPE SHIPPING

While we support initiatives to reduce GHG emissions from shipping, it is crucial that the regulations are worldwide and sailing in ice conditions is taken into account.

There are currently several initiatives for greenhouse gas (GHG) reduction regulations but with the present scope, they are only applicable to ships over 5,000 GT except EEXI. This means that the current AtoB@C Shipping fleet is excluded. Below is a very short overview of some of the initiatives:

### EU EMISSIONS TRADING SYSTEM (ETS) TO INCLUDE SHIPPING (2023-)

As from 2023, ships presently reporting emissions under the EU MRV regulation are required to purchase CO<sub>2</sub> emission credits. The system includes all intra EU-voyages and 50% of the emissions for voyages, which arrive or depart from EU ports. ETS is expected to increase energy cost between 30-100% assuming that the emission allowance price is 50-200 EUR per ton of CO<sub>2</sub>e.

During 2021, ESL Shipping has been developing an extranet where our clients can access the emission data of their shipments. The planned launch for the extranet is during the first half of 2022.

### SHIP-SPECIFIC CARBON INTENSITY INDICATOR (CII) (2023-)

CII measures how efficiently a ship transports goods and is given in grams of CO<sub>2</sub> emitted per cargo-carrying capacity and nautical mile. Each vessel is given a rating from A to E with all vessels required to reach a C-level. If the rating is lower, the owner is required to present an approved corrective action plan. The rating thresholds will become increasingly stringent towards 2030. Vessel ratings can be improved by increasing energy efficiency and usage of low carbon fuels. Currently all our vessels reach a rating of A to C except our supramaxes. For Arkadia and Kumpula we will limit their engine power in order to reach acceptable rating.

CII is based on IMO's Data Collection System (DCS) data, which means that only vessels over 5,000 GT are included. In practice, this means that European coaster trade including AtoB@C Shipping's fleet is excluded.

### ENERGY EFFICIENCY EXISTING SHIP INDEX (EEXI) (2023-)

From 2023, all vessels with GT over 400 must fall below certain threshold of CO<sub>2</sub>-emissions per cargo capacity. EEXI is a theoretical value which measures vessels CO<sub>2</sub>-emissions per transport work based on vessel's design parameters (size and service speed) and is similar to Energy Efficiency Design Index (EEDI) for newbuildings. Calculated EEXI is then compared to the reference line defined by the International Maritime Organization and if the value is below the reference line, the vessel is compliant.

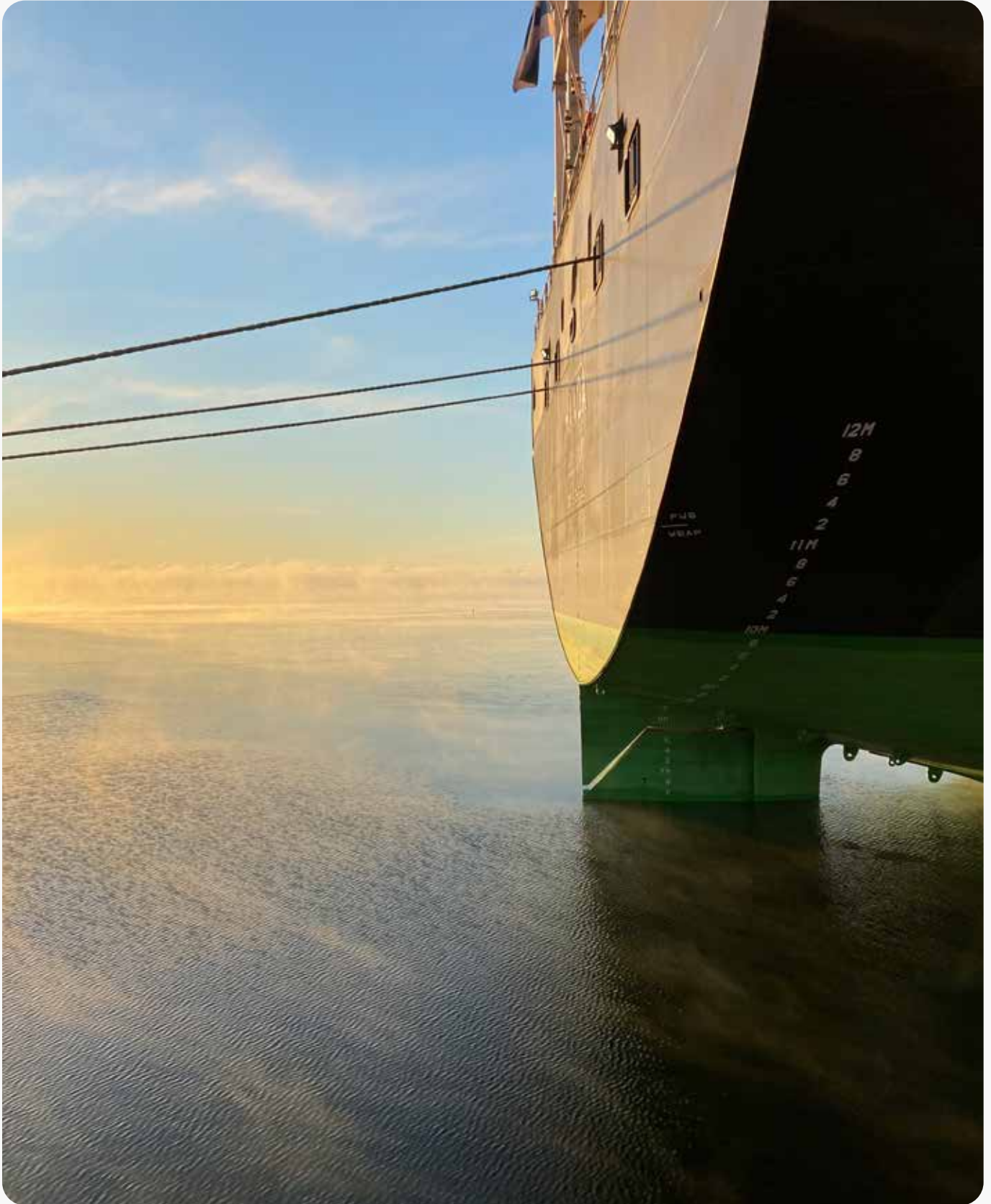
Our way to meet the requirements is to limit the engine power on our supramax vessels Arkadia and Kumpula. Other alternatives to improve vessel's EEXI include battery technology, waste heat recovery systems, air lubrication of the hull, wind propulsion and fossil-free fuels (see our Sustainability Report 2020 to learn more about different fuel alternatives).

### FUEL EU MARITIME (2025-)

This will impose life cycle GHG footprint requirements on the energy used onboard. The regulation applies to the same vessels as MRV regulation and takes into account methane and nitrous oxide emissions as well. Over time this will limit the maximum carbon intensity of marine fuels used in Europe. Successful adaption to the regulation require growing use of renewable diesel, biogas or other low carbon fuels.







# NEW ELECTRIC HYBRID COASTERS REDUCE EMISSIONS BY 50%

In September 2021, AtoB@C Shipping ordered six 5,350 dwt battery hybrid vessels for delivery from 2023 onwards. The new vessels will be market leaders in terms of cargo capacity, technology and innovation. Ice class 1A vessels are equipped with battery technology and shore power connection which enable emission-free and noise-free port visits.

## Hybrid system

Vessels are equipped with 1 MWh battery pack which can be used for main engine peak shaving, battery drive for propulsion and emission free operation in port.

## Rotor sails

Vessels are rotor sail ready.

## Dynamic drive for propulsion

The Optimisation of the relation between the engine rpm and propeller pitch at constant thrust, which reduces the fuel oil consumption. Possibilities to set a maximum speed and/or fuel consumption. Dynamic drive takes into account the thrust generated by e.g. rotor sails.

## PTI/PTO/PTH shaft generator with VFD drive

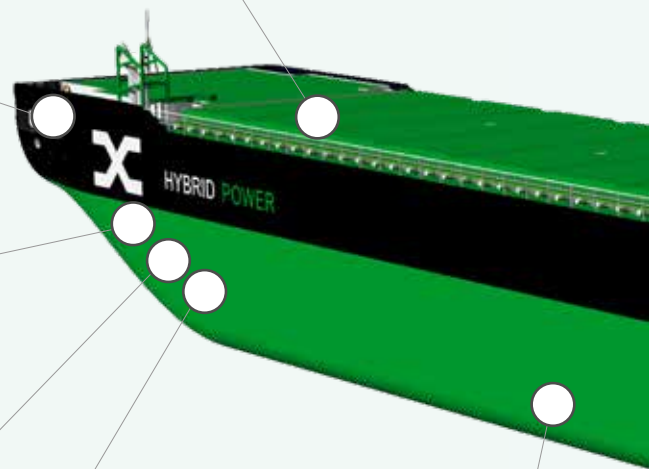
Shaft generator enables flexible and efficient operation of propulsion and power generation at sea as well as extra power for ice conditions through power take in/power take out mode.

## High efficiency propeller and rudder

Optimal hydrodynamic design for propeller and nozzle enable efficient thrust.

## VFD equipment

Engine room fans, steering gear and bow thruster are equipped with frequency drives.



**CO<sub>2</sub>-emissions -50%**

CO<sub>2</sub>-emissions will decrease by nearly 50% compared to present generation of vessels.

**Energy Efficiency Design Index**

Energy Efficiency Design Index (EEDI) of the vessels is approximately 25% below the current Phase 2 requirement and 10% below the Phase 3 requirements.

**Shore power**

Vessel can perform operations in port on shore electricity, reducing emissions in port up to 100%.

**Energy management system**

The system enables crew to optimise energy consumption onboard.

**Electrical motors**

In general, electric motors have an energy efficiency class of IE3 or higher.

**Cargo wash water recovery system**

Vessel is able to re-use the washing water and discharge used washing water to port facilities.

**Hydrodynamic hull form**

Extensive CFD-calculations and model testing was performed to optimise hull form. The bow and stern thruster tunnel openings are provided with scallops and streamline grids. Special attention for the monitoring of hull surface roughness will be done during the building stage.

**Hull coating**

Vessels' hull is painted with low friction ice-resistant paint. No harmful antifouling paint is used. Frequent hull cleaning will be performed to reduce the drag of the hull.

**Ballast water treatment system (BWTS)**

UV-type with capacity of 1 x 300 m<sup>3</sup>/h. System is approved by the United States Coast Guard.



## ENVIRONMENTAL RESPONSIBILITY

# RECORD YEAR OF DOCKINGS FOR ESL SHIPPING

In 2021, ESL Shipping made major investments in maintenance and environmental upgrades to its fleet. In all dockings, ballast water treatment systems were installed onboard.

"This year has been extremely busy for our technical team when docking the whole handy fleet, except for Kumpula and Pasila. Dockings were carried out in Finland, Estonia, Denmark and Turkey", comments Technical Director Janne Eklöf.

Our LNG-powered 25,000-tonners Viikki and Haaga were dry-docked for the first time since their delivery in autumn 2018. In addition to the normal docking works, service was carried out to the fuel gas supply system, which required more careful planning due to cryogenic work.

"Bunkering was planned together with the Operations department so that the LNG tank was almost empty on arrival to the shipyard. Before the start of the maintenance, the system was warmed up and made gas-free. After the maintenance was completed, the LNG storage tank was cooled down to approximately -160 degrees. The process for gas freeing and cooling down of the LNG storage tank is both time consuming and a challenge for keeping the tight docking schedules", explains Eklöf.

### LABOUR INTENSIVE REPAIRS IN OLDER TONNAGE

During the year all three 20,000-tonners and one 13,000-tonner were docked for BWTS retrofit and routine maintenance. Repairs were focused on surface treatment in cargo holds, hatch cover repairs and maintenance of cargo cranes to ensure smooth cargo operations.

Docking of Kallio included extensive steelworks in cargo holds where large parts of worn cargo hold bulkhead plating were renewed. Altogether, 120 tons of steel was

replaced and about 2,000 metres of the new welding seam was welded. Painting works included 10,000 square metres of cargo hold walls and ballast water tanks.

Tali's docking included extensive repairs to the cargo cranes. Given the intensive use of the cranes, it was necessary to replace the whole crane foundation for two of the cranes.

Arkadia was docked just before Christmas in Turkey and completed in January. Extensive surface treatment of cargo holds was performed, resulting in the painting of almost 17,000 m<sup>2</sup> of cargo holds alone. Class renewal and routine maintenance were performed during the dry-docking, including the renewal of the sewage treatment unit.

### PUSHERS AND BARGES

During the summer, the pusher barge system was also dry docked for maintenance and installation of ballast water treatment systems. Due to their unique design and large ballast water capacity, the work was challenging. While in conventional vessels the space is often the issue, the biggest issue with barges was the size of the parts due to the ballast capacity of 2,000 cubic metres per hour.

As the most visible sign to the outsiders, the vessels' topsides were fully blasted and painted according to company colours with the green underwater hull. Steelworks were done in the cargo holds to replace worn parts of the bulkheads.

229

DOCKING DAYS

14

DOCKED  
VESSEL UNITS

15.3

INVESTMENTS,  
MEUR







16.6

**TOTAL INCIDENT  
RATE**  
Target: Zero

94%

**RETENTION RATE OF  
SEA PERSONNEL**  
Target: Over 90%

AA+

**EMPLOYEE  
SATISFACTION**  
Target: AA+

## SOCIAL RESPONSIBILITY

# EMPLOYEE SATISFACTION IS THE KEY TO SUCCESS

In 2021 we launched different projects aimed at improving internal communications in order to create a more unified company both at sea and ashore.

The safety and wellbeing of the personnel has remained a key focus area in 2021. Our shore personnel has continued to work remotely most of the year and we have closely followed the instructions received from authorities in Finland and Sweden. Extensive testing of sea personnel before going back to work continued in 2021 but regardless of all precautionary measures, some COVID-19 cases were recorded onboard. However, these cases had only minor effects to the operation of the vessels.

ESL Shipping and its subsidiaries treat its employees in a just and equal manner in all countries where it operates. The applicable local legislation and regulations are complied in all contracts of employment. The Group is committed to respecting internationally accepted human rights as defined in the Universal Declaration of Human Rights and the UN Guiding Principles on Business and Human Rights. Our Code of Conduct defines a common set of rules for the Group's entire personnel. We reject any discrimination based on education, competence, position, personality, way of life, work experience, ethnic origin, religion, gender, sexual orientation, age, nationality, abilities or other qualities.

The COVID-19 pandemic continued to have a particularly significant impact on crew changes, maintenance and spare parts deliveries on ESL Shipping's vessels due to insufficient flight connections and various travel restrictions. Preventive measures for protecting crew members' health security, including advance testing and quarantine arrangements, continued throughout the year.

ESL Shipping's vessels are an important part of the national education system providing opportunities for mandatory training for future seafarers. In 2021, 86 students were on board ESL Shipping's Finnish-flagged vessels for mandatory

training. On average, each student spent 37 days onboard, around a week longer than before the pandemic. This is mainly due to the COVID-19 situation and travel restrictions in place which made crew changes challenging.

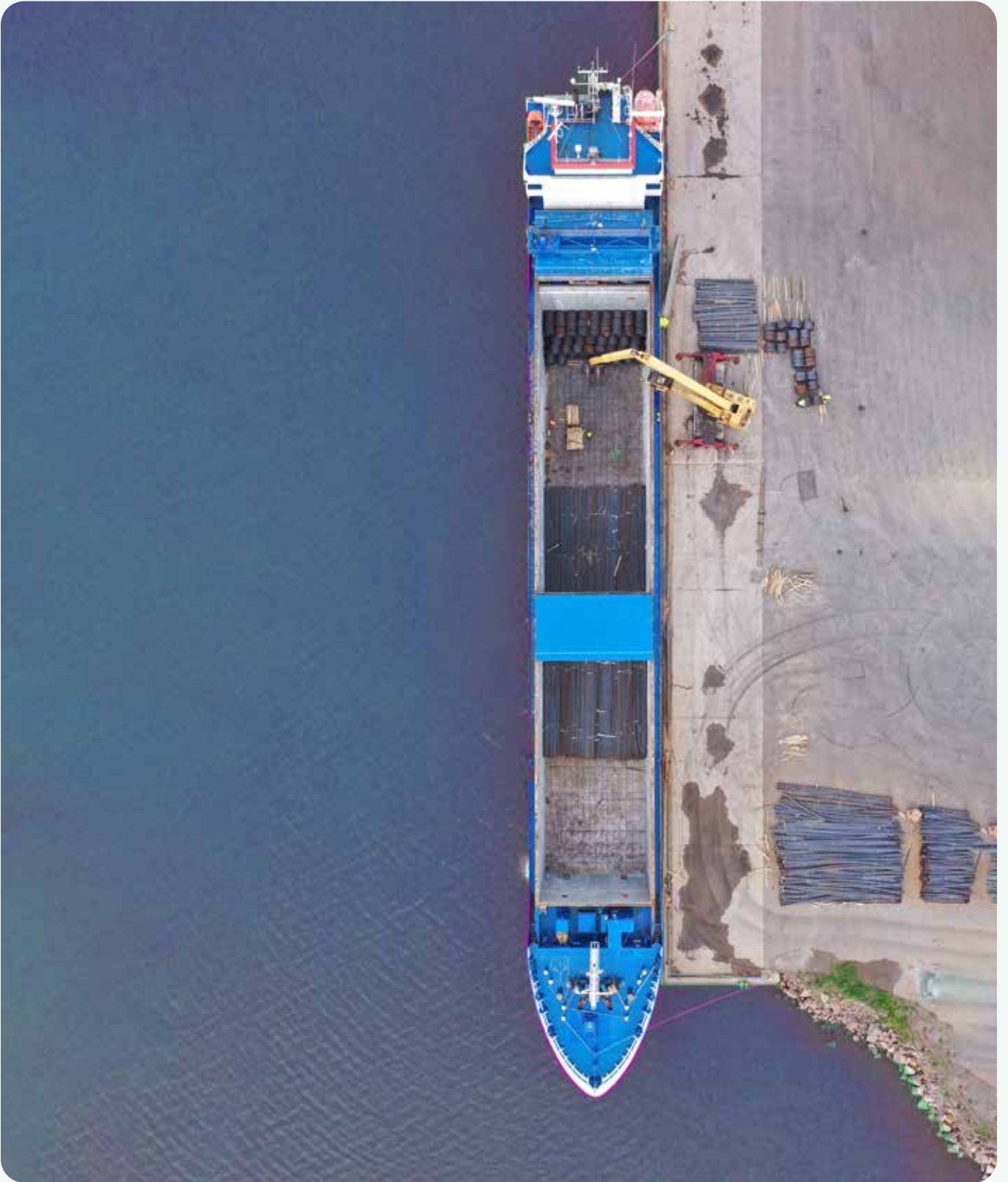
### IMPROVEMENTS IN INTERNAL COMMUNICATION

In 2021 we launched two projects to improve internal communications within the ESL Shipping group. Since the beginning of the pandemic, we have had a weekly online morning coffee for the whole shore personnel where everyone has the opportunity to share the latest updates with everyone.

In addition to this, there has been the need for written communication as well. In December, we launched the first newsletter designed to give every employee both ashore and at sea a recap of what is happening across the group.

Secondly, we have worked hard to find a suitable intranet solution for our seafarers. This mobile based app will be launched during the first half of 2022. One of the key features of the app is automatically updated vessel itineraries, where seafarers are able to see the latest schedule Operators have planned for a vessel. This year the content and functionality of the app will be developed together with users based on the feedback and suggestions. The project to renew the intranet presently available for shore personnel commenced at the beginning of 2022.







## SOCIAL RESPONSIBILITY

# COVID AND TYPHOON IMPACTED CREW IN THE PHILIPPINES

Despite the challenges caused by the COVID-19 pandemic and typhoon Odette, we were able to continue crew changes of Filipino crew members through 2021.

The global community continued to face the challenges of the COVID-19 pandemic for the second year. Our crewing team in the Philippines continues to work together with our partner PTC to protect the health, safety, and welfare of all Filipino crew members to enable them to fulfill their essential work at sea.

### VACCINES FACILITATED CREW CHANGES

While conducting crew changes during the first year of COVID-19 was challenging, the implementation of the Green Lanes initiative in the Philippines and the establishment of clearer local and international crew change protocols proved to be a game changer. Thanks to this, crew change procedures for our Filipino crew members were implemented smoothly and efficiently despite the travel restrictions caused by the Delta variant.

To ensure the health and safety of our Filipino seafarers, all Metro Manila-based crew were required to undergo seven days of home quarantine prior to their deployment. Given this preventive measure, only two COVID-19 positive cases were recorded out of the 53 crew members deployed from July to December 2021.

We ramped up our vaccination program for all seafarers, with those onboard receiving their vaccines in ports across the globe. Shore personnel were likewise vaccinated through the vaccination program of PTC or via their respective local government units. All crew members were also encouraged to take their booster shots three months after completing the initial doses of their COVID-19 vaccine.

### TYPHOON ODETTE CAUSED CONSIDERABLE DAMAGE

As the Philippines continued its battle with COVID-19, Super Typhoon Odette devastated the southern part of the Philippines on December 16, leaving considerable damage to the country's infrastructure and agricultural industry. The typhoon

affected the lives of thousands of Filipinos who were left without homes and with no access to clean water, electricity, and communication services.

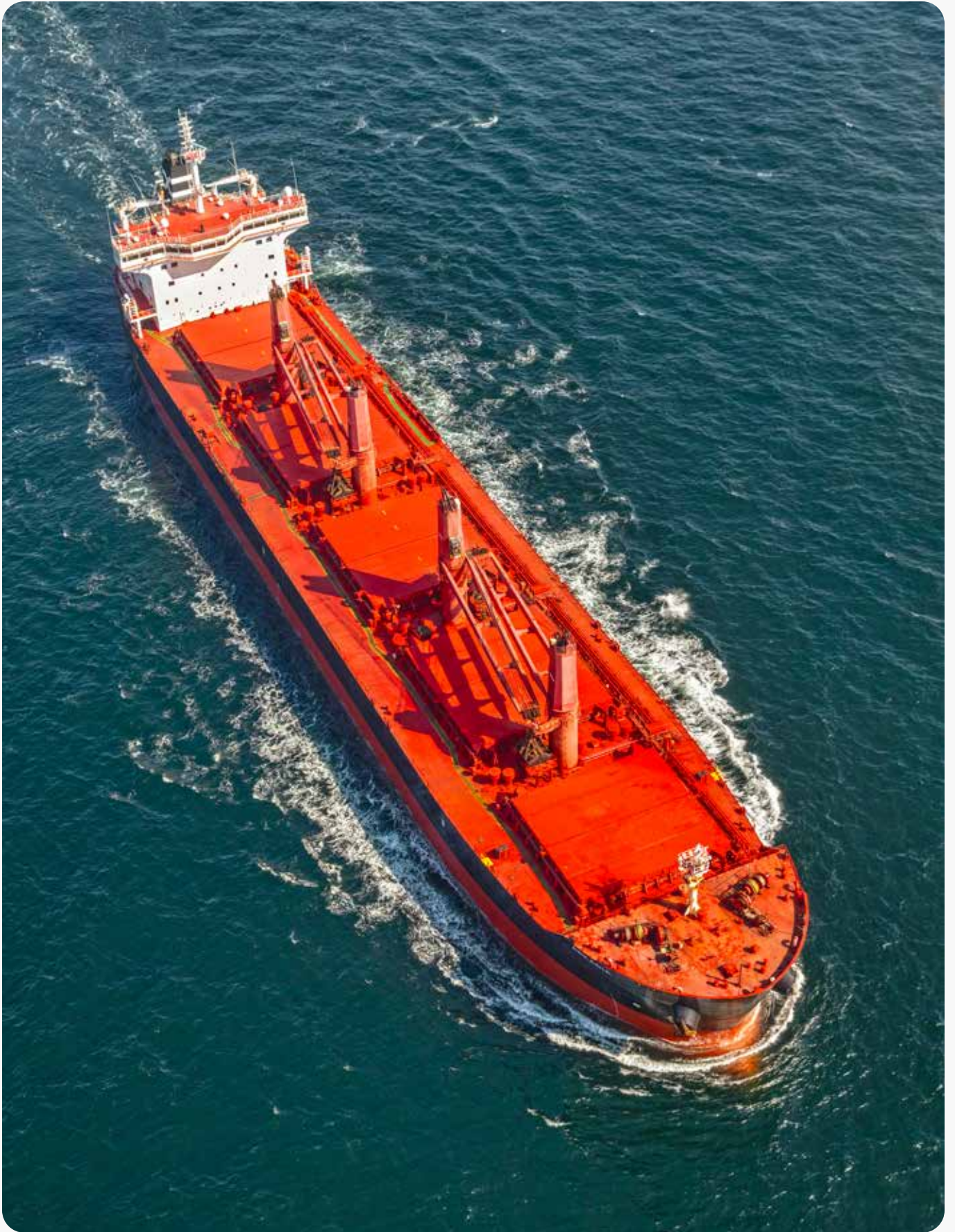
Personnel from these areas had difficulty getting in touch with their loved ones as internet service was cut off in the aftermath of the calamity. One crew member reported getting into a minor accident while their home was ravaged and another one reported that his house was damaged due to fallen trees and other debris. Fortunately, no other incidents were reported from these affected regions and all crew members and their families have been safely accounted for.

### EXERCISING AGILITY AND FLEXIBILITY

As 2022 entered, the country reported rising cases of COVID-19 due to the Omicron variant. Authorities put the Capital Region and other parts of the Philippines under Alert Level 3 which limited the conduct of non-essential activities and restricted the movement of unvaccinated individuals.

To mitigate the number of positive cases, we mandated new guidelines for onboarding Filipino sea personnel. RT-PCR testing will now be conducted for all embarking crew members seven days prior their scheduled departure. While waiting for their results, they will be placed under quarantine for seven days at a hotel and will again be tested a day before their scheduled flight. Medical protective coveralls will be provided for them while a sanitised van will transport them from the hotel to the airport.

Thanks to our crewing team's agility and quick response to changing regulations, we are confident that we are able to continue performing regular crew changes in 2022.



## SOCIAL RESPONSIBILITY

# SYSTEMATIC DEVELOPMENT OF SAFETY CONTINUES

In order to ensure quality and safety of its fleet, AtoB@C Shipping introduced a dedicated Quality Superintendent who will frequently inspect both owned and chartered tonnage.

ESL Shipping's operations and all of its vessels are certified in accordance with the requirements of the International Maritime Organization's International Safety Management (ISM) code which provides an international standard for the safe management and operation of ships and for pollution prevention. This certificate is re-validated annually for the office and every 2.5 years for the ships. In addition, ESL Shipping holds the Document of Compliance issued by DNV GL on behalf of Finnish Transport and Communications Agency Traficom. The document indicates the compliance with SOLAS Chapter IX.

ESL Shipping's alcohol and drug policy is enforced through random testing and focused on testing of suspected breaches. During 2021, ESL Shipping discovered one incident (two incidents in 2020) where the shipping company's substance abuse policy was violated. This incident did not endanger maritime safety, and the company reacted to these violations by taking appropriate action as required by the company's safety policy and collective agreements. To ensure safety, ESL Shipping monitors any substance abuse by its employees through unannounced control tests. In 2021, these tests showed no violations.

Total Reported Incident Rate (TIR) in 2021 was 16.6. Previously this figure has only included ESL Shipping's sea personnel, but from 2021 onwards we report the figure that includes the whole personnel. All but one incident required First Aid and medical treatment. No working time was lost due to these minor incidents. ESL Shipping continues to focus on

the development of preventive actions to decrease the risks and minimise the consequences of any incidents or accidents. A good safety attitude, active identification of hazards and effective mitigation of the identified risks are the cornerstones to a comprehensive safety culture.

In March, a tragic accident leading to the loss of life of one crewmember took place on one of AtoB@C Shipping's vessels while the crew was doing a regular maintenance to the hatch covers. In order to improve the safety culture within the coaster vessels, a new cooperation with external training organisation commenced. In the new model, an onboard trainer joins the vessel for a few days. During this period, the trainer ensures that the Safety Management System is fully followed onboard and arranging safety training, practical drills and refresher courses. The reactions from the crew have been very positive and practical training onboard the vessel has proved useful.

In 2021, AtoB@C Shipping employed a dedicated Quality Superintendent. The role includes frequently visiting both owned and time-chartered vessels to ensure that the vessels fulfil our requirements when it comes to the safety culture and technical quality of the vessel. Frequent inspections improve our possibilities to address potential issues also in the time-chartered fleet.

84

**INCIDENT AND NEAR  
MISS REPORTS**

0.7%

**SICK LEAVES**  
Shore personnel

16.6

**TOTAL INCIDENT  
RATE (TIR)**



## GOVERNANCE

# HUMAN RIGHTS AND GOVERNANCE

Ensuring sound governance practices at all levels, is a key part of sustainability at ESL Shipping. Our Code of Conduct defines a common set of rules for sustainable business for the Group.

As an international company, ESL Shipping also operates in countries in which corruption is common. According to Transparency International, these include for example Russia. Our Code of Conduct prohibits corruption and bribery in all forms. Code of Conduct training includes anti-corruption issues and provides guidance for identifying any suspicious situations and practices considered unethical. In 2021, over 98% of the ESL Shipping's shore personnel completed the Code of Conduct training.

The key tool in the prevention of corruption and bribery is the responsible management of the supply chain. To ensure appropriate operating methods, Aspo has prepared the Supplier Code of Conduct, with compliance required from all suppliers. Significant numbers of the partners of ESL Shipping are major international companies, with which each of these businesses have been engaged in long-term cooperation and have their own stabilised processes for the responsible management of supply chains.

ESL Shipping checks possible sanction risks of all

counterparties with modern and efficient tools. No business is allowed before the sanction risks are checked and evaluated thoroughly. In addition, the Group monitors closely sanction risks of current counterparties as the sanction schemes evolve constantly and new sanction risks may emerge suddenly.

Compliance often means the observance of requirements, laws, rules and regulations. At ESL Shipping Group, compliance also means ensuring that we act in accordance with requirements that are derived from laws and regulations, our compliance manual, internal guidelines, Aspo's Code of Conduct and the UN Global Compact principles.

ESL Shipping group companies all have a whistleblowing channel which is accessible on the websites of all three group companies. The system is managed by an external company which ensures the full anonymity for a person who wishes to report suspicious behaviour against our compliance requirements.

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## REMOTE PILOTAGE PROJECT CONTINUES

ESL Shipping's vessels Haaga and Viikki are part of Sea4Value (S4V) program, a joint co-creation program of industry, research and authorities started early 2020. Program is designing steps towards maritime digitalization, service innovations and information flows.

Haaga and Viikki will be involved and participating especially in the remote pilotage trials. To carry out remote pilotage, certain equipment, such as navigational data gathering systems with antennas, are installed onboard the vessel to share real-time information to remote (pilotage) locations. In addition to onboard installations, shore-based equipment, such as video feed, is used to monitor and confirm vessels' entrance.

In early November, equipment was installed onboard Haaga

and her inbound pilotage to Kellosaari, Helsinki, was already monitored from a remote location. The aim of the project with Haaga and Viikki is finally to perform pilotage remotely on a certain port call to Helsinki. S4V and its remote pilotage trials is expected to generate useful information for the future when renewing pilotage legislation, how to proceed and gather data from a vessel and how such data is shared and used.

While there will remain a need for pilotage in the future, the means of how it might be provided may change. The intention is to improve the efficiency and sustainability of pilotage and facilitate further development of the pilotage service regardless of how the actual service is provided: onboard or remotely.





98.3%

**COMPLIANCE TRAINING  
COMPLETED**

Target: 100%

98.3%

**CODE OF CONDUCT  
TRAINING COMPLETED**

Target: 100%

100%

**SANCTION CHECKED  
CUSTOMERS AND SUPPLIERS**

Target: 100%

# PERFORMANCE INDICATORS

Reported figures are based on the calendar year 2021 or the situation on December 31, 2021, if not stated otherwise.

More financial information can be found in the Annual Report of Aspo Plc, the parent company of ESL Shipping Ltd.

See [www.aspo.com](http://www.aspo.com) for more details.

<b>SOCIAL PERFORMANCE</b>	<b>2021</b>	<b>2020</b>	<b>2019</b>	<b>2018</b>	<b>2017</b>
Personnel	355	355	337	333	236
Crew members	296	298	287	286	202
Office staff	59	57	50	47	33
Gender breakdown					
Female	40	40	36	35	21
Male	315	315	301	297	215
Average employee age	44	45	45	44	43
Retention rate <sup>1</sup>	94%	90%	89%	92%	93%
Employee satisfaction <sup>2</sup>	AA+	-	-	-	-
Training days <sup>3</sup>	265	168	326	332	264
Total incident rate (TIR) <sup>4</sup>	16.6	21.3	25.9	21.1	8.9
Incident and near miss reports <sup>3</sup>	84	86	59	43	44

## ENVIRONMENTAL PERFORMANCE<sup>5</sup>

Number of vessels	51	50	51	49	18
Distance sailed (nm)	1 996 318	1 801 326	1 924 140	1 042 595	368 741
Fuel oil consumption (t)	75 698	70 359	74 905	50 824	29 073
Total use of fuel (MWh)	898 551	838 743	892 250	597 300	347 830
Consumption per cargo ton (kg/t)	5.10	5.25	4.71	3.74	2.64
CO <sub>2</sub> -emissions (t)	237 621	220 122	237 296	160 988	93 223
CO <sub>2</sub> -emissions per ton-mile (g)	15.74	15.48	15.5	13.1	10.8
SO <sub>x</sub> -emissions (t)	98.36	56.44	179.3	128.9	95.3
SO <sub>x</sub> -emissions per ton-mile (mg)	5.93	3.97	11.69	10.49	10.99
Purchased energy (MWh)	322.1	243.4	117.6	105.2	N/A

## GOVERNANCE

Code of conduct training (%)	98.3	-	-	-	-
Compliance training (%)	98.3	-	-	-	-

## ECONOMIC PERFORMANCE

Net sales (MEUR)	191.4	148.4	175.0	120.1	79.3
Operating profit (MEUR)	26.8	7.6	14.6	15.1	13.5
Investments (MEUR)	15.3	4.2	18.6	41.9	16.8
Cargo volume (Mt)	14.8	13.4	15.9	13.4	11.4

Figures include AtoB@C Shipping from 1<sup>st</sup> September 2018. Viikki and Haaga were delivered in August and September 2018 and are included from 1<sup>st</sup> voyage from Japan. Therefore figures are not comparable.

<sup>1</sup> Based on two-year average (2021/2020, 2020/2019, 2019/2018, 2018/2017 and 2017/2016). Based on terminations of employment during contract period based on employee's own will, excluding pension. Includes ESL Shipping Ltd sea personnel only.

<sup>2</sup> People Power Index has been measured from 2021 onwards and includes shore personnel only.

<sup>3</sup> ESL Shipping sea personnel only.

<sup>4</sup> All injuries per 1 000 000 working hours. 2021 figure includes the Group personnel but 2017-2020 figures ESL Shipping sea personnel only.

<sup>5</sup> Excluding vessels on voyage charter in 2017-2018.



**ESL Shipping**

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