

Sustainability Report 2022



Quick facts 2022

NET SALES
million EUR
254.4
+28.2%

NET PROFIT
million EUR
38.1
+42.2%

CARGO VOLUME
million tons
14.7
-0.7%

PERSONNEL
sea and shore
355
+0%

DISTANCE SAILED
million nautical miles
1.8
-10.2%

VESSELS
average
47
-7.8%

Management team



MIKKI KOSKINEN
Managing Director



JANNE EKLÖF
Technical Director



MIKKO RAUSTI
Director, Sea Personnel,
Quality and Safety



FRIDA ROWLAND
Corporate Business
Development Director



PETTER RUDA
Chief Financial Officer



TONI RÖNNBERG
Commercial Director



KIRSI YLÄRINNE
Operations and
Environmental Director

Greener shipping through cooperation

To make a real difference for the environment, we need long-term cooperation with our customers and all other stakeholders in the supply chain. In the fight against climate change for a cleaner environment, we all need to work together as one.

Almost all of our emissions are from vessel operations and classified as Scope 1 emissions. On the other hand, these same emissions are Scope 3 emissions for clients. So far, most clients have been focused on their Scope 1 and 2 emissions. The quest to provide carbon-neutral products calls for the decarbonisation of the supply chain as well. Our Customer Portal is designed to provide our clients with clear visibility of the emissions from their shipments and it is delightful to see many of our clients benefiting from the system.

As a ship owner and operator, a significant factor enabling us to deliver cargoes with minimal emissions is flexibility. In situations where the client can be more flexible with shipment sizes and loading windows, this provides us with the ability to better optimise the itineraries of our fleet and therefore, contribute to lower emissions in our clients' supply chain.

One simple measure to reduce emissions and rationalise the way we operate is Virtual Arrival. This has a proven track record to reduce emissions by up to 24 per cent without any investments or price premium to the client. The bunker savings is shared with the client meaning that reducing emissions also saves money in the long-term. A real win-win concept.

The carbon intensity indicator (CII) came into force at the beginning of 2023 and time will tell how it will affect the dynamics of the freight market. Together with the EU Emission Trading coming into force in 2024, only one thing is sure: Cargo owners and shippers need to take more responsibility for the emissions of their shipments. It is in the interest of both the shipping company and the client that a vessel is able to trade as efficiently as possible and retain the best possible level of CII rating. Playing it any other way can result in the lack of suitable vessel capacity.

ESL Shipping strives to retain its leadership in providing the most environmentally friendly shipping solutions to our partner industries. That is why we are now working very intensively on the development of a fossil-free sea transportation ecosystem in line with the green transition and the vessels designed for it in cooperation with our key customers. We also take part in major projects aimed to produce green hydrogen through renewable electricity further processing it as fossil-free fuel for our next-generation vessels. We continue to direct effort towards shaping and modernising the shipping industry in our operating area.

Sincerely,

Mikki Koskinen
Managing Director



Year 2022 in review

Year 2022 was characterised on one hand by the recovery from the Covid-19 pandemic and on the other by Russia's invasion into Ukraine.

The war significantly shifted cargo flows globally as companies abandoned Russian origin commodities. The re-routing of the raw material supply out of Russia resulted in increased transportation demand and heavy congestion in certain major contract traffic ports. ESL Shipping was actively assisting customers in the process and in the summer, the company had no remaining transport obligations related to cargo operations from Russian ports or with customers and cargoes related to Russia.

The company's financial performance was excellent, despite the discontinuation of cargo transportation from Russia and related sanctions. ESL Shipping suspended its operations in Russia during the second quarter, after which it no longer had any transportation obligations from Russian ports or for customers and cargoes linked to Russia. The company made record-breaking results each quarter resulting in a turnover of 242.4 MEUR and operating profit of 38.1 MEUR for the whole year. The operating profit rate exceeded the target rate of 14% with a result of 15.5%.

In May, mandatory Covid-testing for seafarers prior to boarding the vessel and other preventive measures were discontinued in light of high vaccination coverage as well as guidelines from Finnish authorities. Some testing was continued according to travel regulations to certain countries. On the shore side, the restrictions applied to working in the office were discontinued with employees strongly encouraged to work remotely if they experienced any symptoms possibly related to Covid-19.

The construction of the first plug-in hybrid vessel for AtoB@C Shipping began in March. During the third

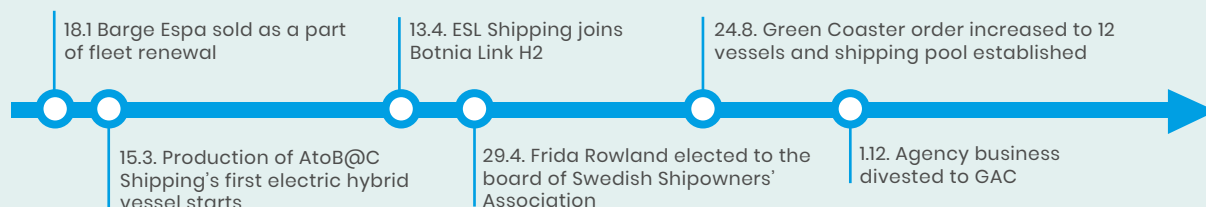
quarter, ESL Shipping achieved a major strategic and structural milestone as it established a long-term Green Coaster pool. The pool consists of energy efficient electric hybrid vessels together with a group of institutional and private investors (page 18 for more detail). As a result of the established pool structure, ESL Shipping's subsidiary AtoB@C Shipping increased the total number of ordered vessels to 12 units. Of the series of twelve new-generation plug-in hybrid vessels, every second vessel will be sold to a company formed by a group of investors. The total amount of ESL Shipping's own investment will remain at six vessels worth approximately 70 MEUR.

In addition to the ambitious newbuilding programme, our environmental work continues to progress within the existing fleet. In June 2022, we launched a partnership with Neste to use their co-processed marine gasoil, enabling zero emission sea transports across our existing fleet.

After a full year in use, Virtual Arrival has exceeded our expectations with respect to emission reductions. In applied voyages, it has helped us to reduce emissions on average by 24%, the amount corresponding to approximately the energy usage of 200 Finnish households.

In December 2022, AtoB@C Shipping entered into an agreement to sell the agency business of its Swedish subsidiary NSG Norra Skeppningsgruppen to GAC Sweden. GAC is one of the world's largest providers of ship agency, husbandry and many support services to ship owners and operators. The transaction enables the group to concentrate on its core operations as the leading carrier of dry bulk cargoes in the Baltic Sea region.

Highlights of 2022





About the company

ESL Shipping is the leading carrier of dry bulk cargoes in the Baltic region. ESL Shipping's competitive edge is based on its pioneering role and ability to responsibly secure product and raw material transportation for industries and energy production year-round, even in difficult conditions.

Our vessels mainly operate in long-term contract traffic in the Baltic Sea and in Northern Europe and 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. ESL Shipping Ltd has been in business for more than 70 years and is a subsidiary of Aspo Plc, listed in Nasdaq Helsinki.

The group operates under two brands: parent company ESL Shipping operates the fleet of fully owned 13,000 to 56,000 dwt vessels. AtoB@C Shipping operates a mix of owned and time-chartered vessels in 4,000-6,000 dwt segment. It also offers port towing and related services at the Port of Raahе with tugboat Charlie. The time-chartered vessels are operated in house and managed by their respective owners. For time chartered vessels we mainly control emissions and commercial decisions. Therefore, this report concentrates on the owned fleet for which we have total control.

At the end of 2022, the group's fleet consisted of 41 vessels with a total capacity of 425,000 dwt. Of the vessels, 23 are wholly owned (80% of the tonnage), two are minority-owned (2%) and the remaining 16 are time-chartered (18%). After the reporting period, one 3,000-tonner was redelivered back to her owners and two 6,000-tonners were added to the fleet. On average, the group operated 47 vessels in 2022.

ESL Shipping Ltd is the parent company of the group and is referred as "group" in this report. Business unit ESL Shipping ("ESL Shipping") comprises handsized fleet from 9,000 to 56,000 dwt. Business unit AtoB@C Shipping ("AtoB@C Shipping") consists of 4,000-6,000 dwt vessels.

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.

VIRTUAL ARRIVAL

Virtual Arrival provides a completely free way to reduce your transport emissions up to 24% in a single sea leg. After a completed voyage, we provide you a calculation of saved bunker and emissions. The basic idea of Virtual Arrival is to reduce a vessel's speed to meet revised arrival time if it is known that the berth will not be free on arrival. Regardless of the actual arrival time, the vessel still retains its place in the line-up based on the arrival time in normal service speed.

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 4,000 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.

RENEWABLE MARINE FUELS

Our whole fleet is able to use Neste's co-processed marine fuel, sustainable drop-in marine fuel that can reduce GHG emissions by up to 80% over the lifecycle when compared to fossil fuels. The fuel is produced using ISCC PLUS certified raw materials such as used cooking oil, animal fat or vegetable oils, reducing our dependency on fossil resources. In addition, our LNG-powered vessels Viikki and Haaga are able to run on 100% renewable liquefied biogas.

PROJECT CARGOES

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.

LINER SERVICE FROM RAAHE

From Raahе, AtoB@C Shipping offers frequent liner service with 4,000-6,000 dwt vessels to several ports in the southern Baltic Sea and to Antwerp, Hull and Pasajes.

41

Vessels in the fleet

12

New vessels on order

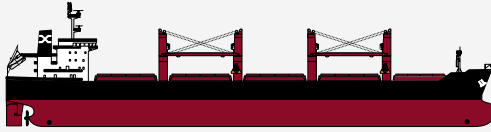
425K

Total capacity
(dwt)

Operated by ESL Shipping

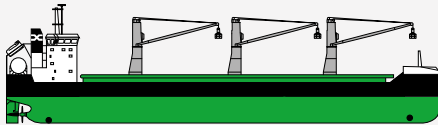
ARKADIA CLASS

2 x 56,000 dwt / Ice class 1A



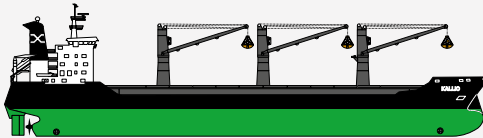
VIIKKI CLASS

2 x 25,600 dwt / Ice class 1A



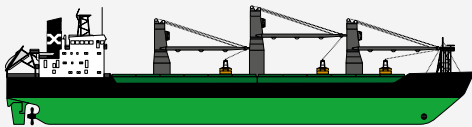
EIRA CLASS

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



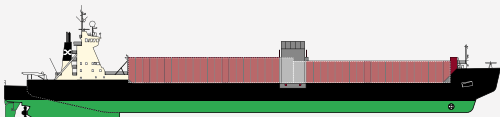
PASILA CLASS

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



PUSHERS & BARGES

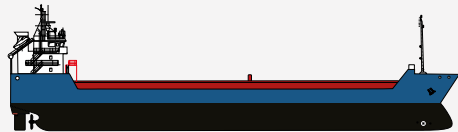
2 x pusher, 4 x 13,500 dwt barge
Ice class 1A Super



Operated by AtoB@C Shipping

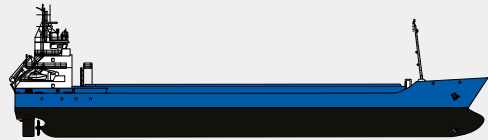
6000 DWT CLASS

2 x 6,000 dwt / Ice class 1A



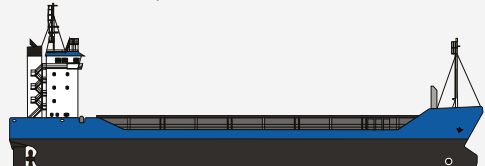
5000 DWT CLASS

10 x 5,000 dwt / Ice class 1A



4000 DWT CLASS

13 x 4,000 dwt / Ice class 1A



5350 DWT HYBRID CLASS

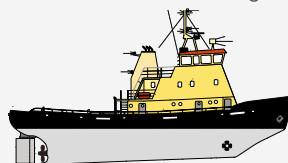
12 x 5,350 dwt / Ice class 1A



COMING IN 2023

TUG BOAT CHARLIE

Provides harbour towage in the port of Raabe



Our sustainability work in 2022

While reducing environmental footprint remains at the core of our ESG work, we are equally committed to improve the experience for people in our value chain and driving sound government practices at all levels.

In 2022, our sustainability work progressed on many fronts. As a significant step towards providing a transparent view to our sustainability work, we completed our first external sustainability performance assessment. The assessment was performed by Ecovadis and resulted in the company receiving a Silver medal and a place among the top eight per cent in our industry. While we are proud of this achievement, we are looking forward to improving our score in 2023.

As a shipping company currently operating around 40 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 CO₂ emission operations by 2050. You can read more about our environmental performance on page 12.

We are committed to transparently reporting our emissions data to our customers and stakeholders through our sustainability reports and Customer Portal. In the Customer Portal, our clients can view the environmental and operational metrics related to the transportation of their goods.

In 2023, we continue to develop the functionality of the portal as well as the backend of the portal to provide more accurate reporting at any given time. In practice this means that the accuracy of the reporting will be enhanced from voyage level to single sea leg level. This will enable the accurate calculation and allocation of emissions and other data for multi cargo voyages.

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

In late April, we launched a mobile intranet for our seafarers making it possible for them to access important

information such as company news, announcements and HR information through an easy, mobile optimised interface.

In the fourth quarter, we took into use a new platform to collect and analyse all sustainability related data. The new platform will also prepare the company for the external verification of sustainability related data in the coming years.

OUR ROADMAP TOWARDS FOSSIL-FREE SHIPPING

Firstly, ensuring that we have access to the 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 order of twelve 5,350 dwt hybrid coasters equipped with battery packs and shore power connection (see pages 17-18) 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. In June 2022, we announced that we entered into an agreement with Finnish fuel supplier Neste for the supply of new co-processed marine fuel oil, which enables up to 80 percent reduction in lifecycle carbon dioxide emissions (see page 15). In April, we announced that we joined BotniaLink H2 project as the first customer-side stakeholder. The project aims to establish an e-fuel hub in Luleå for the production of hydrogen-based fuels for large ships.

Thirdly, we need customers who share a common future vision and interest in low emission shipping. Over time we have worked with many great companies such as SSAB to introduce LNG-powered Viikki and Haaga, which almost halved emissions between Luleå, Oxelösund and Raahе. Furthermore, SSAB and the Port of Oxelösund have played an integral part in the launch of Virtual Arrival, which has enabled a 25% reduction in CO₂-emissions in applied voyages between Luleå and Oxelösund (see page 15).



Our ESG strategy






Growing our business while lowering the pressure on the environment is our key focus for 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 at 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 to ensure that we focus on issues relevant to our stakeholders. As a result of the stakeholder survey and interviews, we were able to determine material topics and areas that our stakeholders value.

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

	Commitment	Target	Indicators
<p>ENVIRONMENT</p> <p>Relevant SDG's</p>  	<p>Growing our business while lowering the pressure to the environment</p>	<p>We target Net zero operations by 2050</p> <p>We work with ports to minimize the amount of grey water and hold washing water to the sea</p> <p>We commit to Science Based Targets initiative by the end of 2023</p>	<p>2050: Net zero CO₂ emission operations (Scope 1)</p> <p>2030: 50% lower carbon intensity per ton-mile compared to 2008 and respective vessel class</p> <p>2025: 50% of grey water pumped to shore reception facility</p> <p>2030: 100% grey water pumped to shore reception facility</p>
<p>SOCIAL</p> <p>Relevant SDG's</p>  	<p>Improving the experience for people in our value chain</p>	<p>We provide a safe and healthy place to work</p> <p>We provide first-class service to our customers</p> <p>We treat everyone equally</p>	<p>Total Recordable Injury Frequency Target: Zero</p> <p>Net Promoter Score Target: retain 57</p> <p>People Power index Target: AA+</p>
<p>GOVERNANCE</p> <p>Relevant SDG's</p> 	<p>Driving sound governance practices at all levels</p>	<p>We conduct ethically in line with applicable law and standards and expect the same from our counterparts</p>	<p>Percentage of employees who have completed Compliance and Code of Conduct training Target: 100%</p>



FIRST ECOVADIS ASSESSMENT RESULTED IN SILVER MEDAL

In 2022, we completed our first EcoVadis sustainability performance assessment resulting a Silver medal and overall ranking in the top eight percent of the companies in our industry.



EcoVadis is the world's largest providers of business sustainability ratings with over 100,000 rated companies. The assessment takes into account environment, labour, human rights, ethics and sustainable procurement thus providing a comprehensive picture of a company's sustainability performance. Sustainability has been an integral part of our strategy for years and we are confident that with the formal assessment of our performance we can further improve our work in all areas of sustainability.

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.



Operational efficiency reduces emissions

In 2022, traditional trade flows changed drastically due to Russia's invasion into Ukraine. As a result, distances sailed especially by our larger tonnage increased significantly.

In 2022, the company's fleet consisted on average of 47 vessels but the number of vessels decreased to 41 at the end of the reporting period due to redeliveries of time-chartered vessels. The emissions decreased partly due to lower average number of vessels in the fleet but also due to increased operational efficiency which is clearly seen in the improved ballast ratio as well as CO₂-efficiency, which improved by 13%. Overall, the company's CO₂-emissions decreased by 8.5 percent and the total use of fuel measured in megawatt hours by 8.7 percent.

As virtually all of our annual carbon dioxide emissions derive from vessel operations, utmost attention is paid to optimise the operation of vessels. Our ship operators work closely with vessels to discuss the most optimal speed for each passage and to optimise the amount of cargo loaded onboard.

ESL Shipping has the ISO 14001 certified Environmental Management System. In 2023, the target is to extend the ISO 14001 certification to cover AtoB@C Shipping's operations as well. In addition, the group holds EcoVadis Silver rating from its sustainability work (see page 10).

Growth in a ship's underwater hull is a factor that can significantly increase a vessel's fuel consumption. No harmful antifouling or TBT-based paint has been used in our owned vessels for years and instead, divers clean vessel hulls frequently. To further help determine the correct timing for hull cleaning, we have acquired an underwater drone for use at our Raahе depot. With the drone, vessel's crew and our maintenance staff ashore can easily assess the condition of the hull growth.

Waste management onboard follows international and national regulations. Each vessel has a garbage management plan, which describes how different types of waste are handled onboard. All waste generated onboard is sorted and delivered to reception facilities ashore. As our vessels mainly trade in the contract traffic, crews have good knowledge about the ports and the recycling facilities there. Garbage statistics are collected from vessels on a monthly basis for further analysis. The aim is to reduce the amount of waste generated onboard and to minimise the amount of mixed waste.

ALL VESSELS EQUIPPED WITH BWTS

The aim of the ballast water treatment systems (BWTS) is to prevent foreign organisms from transferring into other sea areas in the vessel's ballast water tanks. Ballast water is essential for all types of vessels to ensure the stability and correct trim of the vessel. The last four owned vessels were equipped with ballast water treatment systems during their scheduled dockings in 2022 meaning that our whole fleet is now compliant with the upcoming regulations.

In addition to ballast water, there are several other waters that are handled onboard. Oily bilge and sludge waters are always discharged ashore. Grey water, i.e. water from showers and taps is partly discharged ashore and partly overboard depending on the arrangements onboard a vessel. Black water, i.e. sewage from toilets is either discharged to the shore or discharged to the sea after going through a treatment system. While we aim to significantly increase the amount of wastewater delivered ashore, the challenge is that many of our older vessels do not have separate tanks to store black and grey waters. This is especially the case with our smaller vessels where there is not enough tank capacity to store the water. Another challenge is that many ports do not have established reception facilities for waste water.

Generally, cargo hold washing water containing non-harmful cargo residues can be discharged to the sea whereas hold-washing water containing harmful cargo residues must always be discharged to shore reception facilities. In a special area, such as the Baltic Sea, discharge to the sea is only permitted if both of the ports in a voyage are in the special area and there are no adequate reception facilities and the residues are non-harmful to the marine environment.

In 2022, we registered three (2021: 3) minor oil spills. As a result of these incidents, slightly less than 20 litres of oil were released into the environment. These were handled properly and resulted in no further consequences from the authorities.

Carbon footprint can be calculated several ways

There are several ways to calculate carbon footprint from shipping. The below example aims to provide an understanding of how the emissions of a sample voyage would look like with different calculation methods.

In this report, we measure our GHG-emissions in carbon dioxide (CO₂) as well as carbon dioxide equivalent (CO₂e). CO₂ is a major contributor to climate change and is the most commonly reported greenhouse gas, making it a critical metric for understanding our impact on the environment.

Carbon dioxide equivalent (CO₂e) on the other hand is a metric used to express the total impact of GHGs in terms of the amount of CO₂ that would have the same warming effect. This allows for a more comprehensive assessment of a company's greenhouse gas emissions, as different gases have different warming potentials.

By measuring our total emissions, we can understand our impact on the environment and identify areas where we can improve. By measuring CO₂ and CO₂e efficiency, we can benchmark ourselves against the industry and analyse if we are operating in an efficient manner. The efficiency is calculated by dividing the emissions by the transport work (ton-miles) and hence provides a scalable KPI to follow.

Another distinction is made between tank-to-wake (TTW) and well-to-wake (WTW) emissions. TTW refers to the emissions directly caused by the burning of the fuel. WTW additionally measures the "upstream emissions", referring to the greenhouse gas emissions associated with the extraction, production, and transportation of the fuel. These emissions occur throughout the entire supply chain, from the extraction of raw materials to the delivery of the finished energy product, and finally the consumption.

We recognize the importance of understanding and reducing our well to wake emissions, as they give a comprehensive metric for the total environmental effect depending on the fuels used.

WHAT DOES ALL THIS MEAN IN PRACTICE?

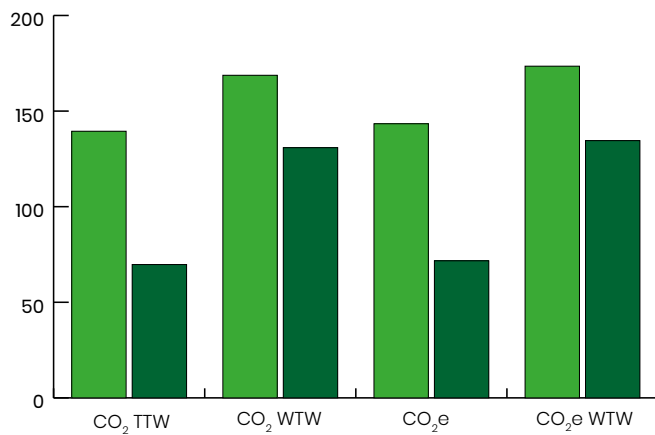
Next, we provide an example calculation displaying how the same voyage can look quite different depending on the reporting style. The difference between magnitudes of CO₂ and CO₂e and how the TTW versus WTW reporting affects the voyage depending on the fuel types used will be analysed in the following section.

The example voyage is from Luleå to Oxelösund. The numbers used in this example are based on the averages of 15 actual similar voyages. In Scenario 1 the voyage is performed by using only low-sulphur fuel oil (LSF) while in Scenario 2 half of the consumed fuel was biodiesel.

The emission factors used in the calculations of the above table are based on the commonly used GLEC 2.0 framework. It is important to note that not all NO_x (significant GHG especially in the maritime industry) are calculated in this framework, as NO_x measurement is quite complex and dependent on the engine types and how they are operated. The actual CO₂e would be higher, but no widely recognised framework exists which could be utilised to include them.

Voyage emissions in total

As seen from the chart, CO₂e is not significantly different from CO₂. However, the WTW numbers differ quite significantly from the TTW numbers, especially when looking at Scenario 2. This is because the TTW emissions of biodiesel are practically nothing, but producing them causes emissions. They still come out on top as significantly more environmentally friendly options compared to fossil fuels, but the gap is smaller.



Scenario 1: 100% low sulphur fuel oil (LSF)

Scenario 2: 50% low sulphur fuel oil (LSF), 50% biodiesel



Virtual arrival reduces emissions by 24%

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

The basic idea of Virtual Arrival is to reduce a vessel's speed to meet revised arrival time if it is known that the berth will not be free on arrival. Regardless of the actual arrival time, the vessel retains its place in the line-up based on the arrival time in normal service speed.

In shipping, vessels are normally scheduled to meet certain arrival times at a port in order to start time counting whether the berth is actually free on arrival or not. If the assigned berth is not free, the vessel will drop anchor on arrival and tender notice from the roads. In other words, the vessel will sail the whole passage with normal speed even though it is known that there will be delays at berthing.

In 2022, Virtual Arrival was applied in the traffic between Luleå and Oxelösund together with SSAB and Port of

Oxelösund. The results are astonishing: CO₂-emissions were reduced on average by 24 percent, which is the equivalent to around 4.3 million kilometres with a petrol car.

Positive experiences have also contributed to the international attention given to the concept. Finnish traffic management company Fintraffic has chosen Virtual Arrival as one of its key projects in 2023. The concept was also one of the initiatives in the Green Shipping Challenge that was launched in the UN Climate Change Conference (COP27) in Egypt.

We continue to work with our clients to extend this practice to other trades in 2023.

Renewable marine fuel available across the fleet

The ISCC PLUS certified marine fuel enables up to 80 percent reduced greenhouse gas emissions over the life cycle compared to fossil fuels.

From mid-2022, our customers have had the possibility to reduce the emissions of their sea transports by opting to use Neste Marine 0.1 Co-processed marine fuel. The fuel is produced at Neste's refinery in Porvoo, Finland, where part of the fossil raw materials have been replaced with renewable raw materials in the conventional refining process.

The drop-in fuel can be taken into use without any fleet modifications as it has a similar composition to conventional bunker fuels. The ISCC PLUS certified marine fuel enables up to 80 percent reduced greenhouse gas emissions over the life cycle compared to fossil fuels and zero tank to wake emissions.

"The co-processed marine fuel is something we have been waiting for a long time. ESL Shipping is committed

to leading the way in reducing greenhouse gas emissions of the maritime industry and we are now fortunate to be able to use this low-emission alternative without having to do any fleet modifications. We believe this is the right thing to do and I am convinced that here in the Nordics we are well-positioned to show the way for the global maritime industry," says Mikki Koskinen, Managing Director of ESL Shipping.

As the lifespan of a vessel can extend from 25-30 years, most of the existing vessels will sail in the company's fleet for many years to come. Neste co-processed marine fuel provides a cost-effective way to extend the lifespan of our fleet and provides our clients a convenient way to reduce the emissions of their shipments regardless of the vessel type.



HAAGA

Powered by Natural Gas



Innovative plug-in hybrid coasters arrive in 2023

The highly anticipated renewal of AtoB@C Shipping's fleet commences this autumn, when Electramar, the first of 12 highly energy efficient plug-in hybrid vessels.

Following Electramar, a new vessel will follow every three months until mid-2026. The construction of the vessels has progressed on schedule and the steel cutting of the fourth vessel was celebrated just before the New Year.

For clients, the new vessels provide significantly more cargo capacity with lower emissions compared to existing vessels. Vessels are tailored to the needs of our clients and the Nordic winter conditions. The latter is clearly visible in the design in a form of fully enclosed bridge and covered mooring stations both at the bow and stern.

During 2022, naming competition was arranged to the group's personnel to find the most fitting names for the new vessels. The first six vessels will carry the following names listed in the order of construction: Electramar, Stellamar, Ecomar, Aquamar, Maximar and Terramar. Chosen names reflect the environmental friendliness of the vessels and AtoB@C Shipping's established tradition to name vessels with the -mar suffix.

Vessel highlights

Future-proof powertrain

The electric-hybrid powertrain can run on renewable fuels and shore power with an option for wind propulsion

50% less emissions

The CO₂-emissions per cargo unit transported will decrease by nearly 50% compared to the present generation of vessels.

Hybrid system with 1 MWh battery pack

The battery pack can be used for the main engine peak shaving, power the propulsion and emission-free operation in port

20% more capacity

Special attention has been paid to the arrangement of cargo spaces resulting in significant increase in cubic capacity

Clean and quiet port calls

Vessels can arrive and leave the port in electric mode. Shore power connectivity enables emission-free and quiet port stays.

All cargo hold wash water is collected

Vessels are able to re-use the washing water and discharge used washing water to port reception facilities.

Pooling arrangement accelerates our growth

ESL Shipping established a long-term Green Coaster pool for energy efficient plug-in hybrid vessels in August 2022 with an investor group consisting of institutional and private investors.

The pooling structure is a commonly used practice in international shipping operations for the ownership and operation of vessels. The established Green Coaster pool accelerates ESL Shipping's growth and improves its profitability and return on equity. At the same time, the pool marks the first stage in the shipping company's new low-carbon growth strategy based on investor funding and the pooling model.

AtoB@C Shipping acts as the manager of the pool, and all twelve upcoming vessels will be part of the shipping company's existing and growing contract traffic operations. Investors are provided with end-to-end services for the construction and maintenance of vessels following the turnkey principle. ESL Shipping's total investment comprises six vessels and roughly 70 MEUR.

The greenhouse gas emissions of the new vessels, including CO₂ per transported unit of cargo, will be almost 50% lower than those of current vessels, which makes them the most energy-efficient in the world in their size category. The vessels' batteries, shore power connection and electric hybrid operation enable fully zero-emission and practically noiseless visits to ports.

High level of employee satisfaction

One significant glass roof was broken in 2022, when the first female Captain took a helm of a ESL Shipping vessel. We hope that this important step serves as an inspiration to all other female seafarers.

The Covid pandemic has had a significant effect on the way work is conducted amongst the group. While before the pandemic most of the shore staff worked at the office every day, the hybrid work model is the new normal. A new hybrid work policy was launched to provide clear guidelines for employees who choose to partially work from home.

As employee health and safety remains the responsibility of employer even during remote work, new policies were established to improve the ergonomics for the home office. Employees have nowadays the possibility to request stand up desks, work chairs and extra screens which are loaned to the employee by the company. Regardless of the transition to more flexible working arrangements, employee satisfaction has remained high with ESL Shipping reaching AA-level (AA+ in 2021).

ESL Shipping and its subsidiaries treat its employees in a just and equal manner in all countries where it operates. The applicable local legislation, collective bargaining agreements and regulations are complied within all contracts of employment. These concern, among other things, working hours, remuneration, development opportunities, human rights and working conditions. We aim to improve the personnel's engagement and wellbeing at work by promoting employees' professional development at all organisational levels and by building an encouraging atmosphere.

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.

ESL Shipping's vessels are an important part of the national education system providing opportunities for

mandatory training for future seafarers. In 2022, 63 (86 in 2021) students were onboard ESL Shipping's Finnish-flagged vessels for mandatory training. On average, each student spent 44 (37) days onboard, around a week longer than before the Covid pandemic.

MOBILE INTRANET LAUNCHED FOR SEAFARERS

In late April, we launched a mobile intranet solution for our seafarers making it possible for them to access important information such as company news, announcements and HR information through a easy to use mobile interface. The response from the seafarers have been positive and the activation rate has remained over 80 percent.

In 2023, the intranet will be expanded to cover the vessels owned by AtoB@C Shipping. The project to renew the intranet for shore personnel was completed in the summer. In addition to the better functionality and updated content, the intranet is now accessible without using VPN connection producing a hassle free experience.

FIRST FEMALE CAPTAIN APPOINTED

When Captain Katariina Mankinen took helm of pusher Rautaruukki in March 2022, she became the first woman to be in command of a vessel in ESL Shipping's fleet. Seafaring is traditionally been a male dominant business and still today, only less than a tenth of our seafarers are female. Looking at all EU-flagged vessels, only two percent of seafarers are female. Ensuring the equal possibilities for everyone to advance one's career within the company is one of the key elements for high employee satisfaction and retention rate.

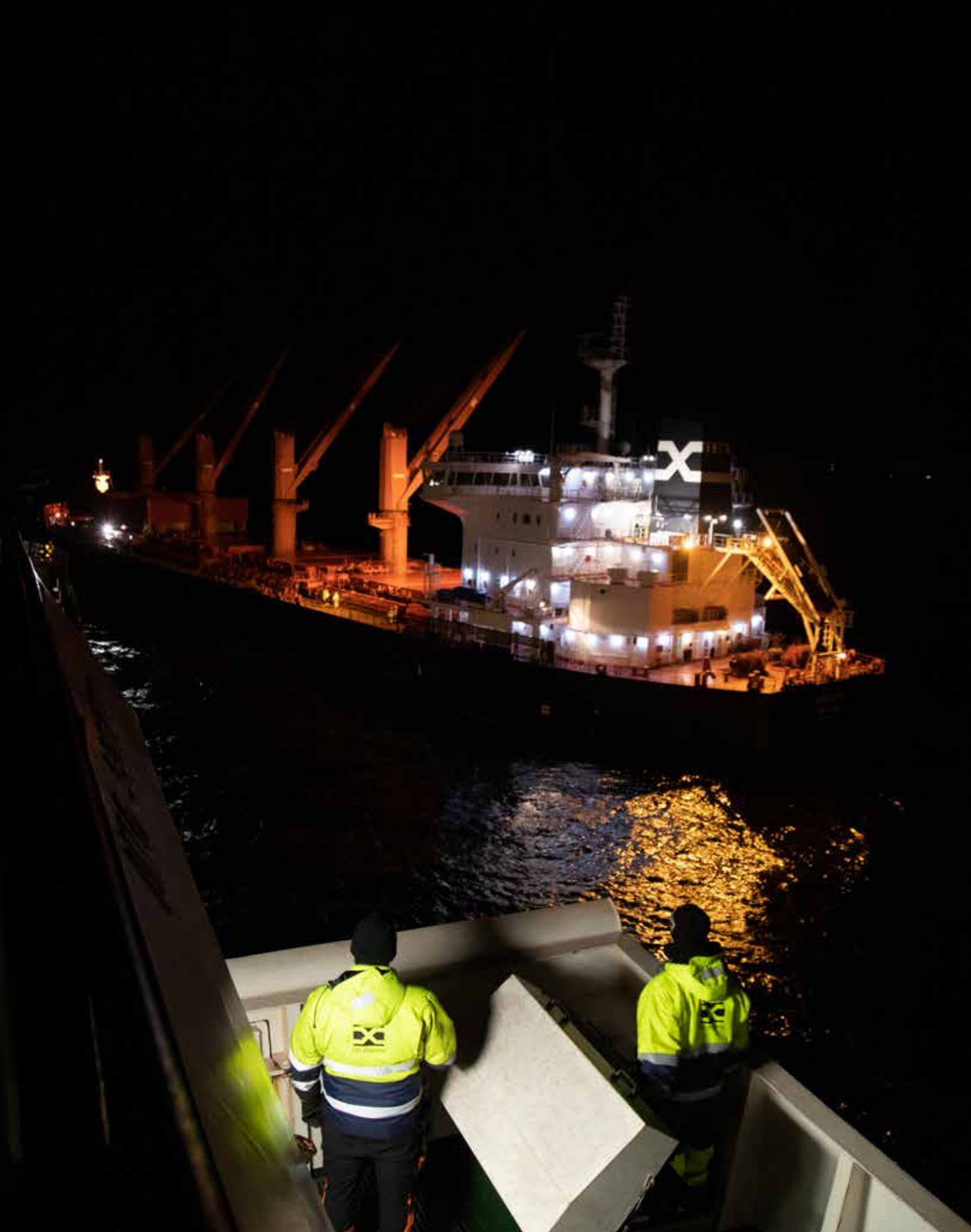
On a larger scale, there is big generational shift ongoing as many long serving employees retire and the global demand for a competent crew increase. On a positive note, this an opportunity to promote young and hard-working personnel to new positions and ranks within the fleet.



S

IMO 850

air



Safety is our first priority

In 2022, the workplace safety indicators remained at the same level as in 2021. As employee safety and wellbeing is paramount to us, the strong focus on the improvement of safety indicators will continue in 2023.

ESL Shipping and all of its vessels are certified in accordance with the requirements of the International Maritime Organisation's International Safety Management (ISM) code which provides an international standard for the safe management and operation of ships and for pollution prevention.

ESL Shipping holds the Document of Compliance (DoC) from DNV issued under the authority of the Government of Finland, covering the vessels owned and managed by ESL Shipping. The vessels hold the Safety Management Certificate (SMC). The Document of Compliance is verified annually and the SMC every two and half years. The documents indicate compliance with the provisions of the ISM Code (Chapter IX of International Convention of the Safety of Life at Sea (SOLAS) 1974).

Vessels owned by ESL Shipping's subsidiary AtoB@C Shipping sail under the Cyprus flag and are managed by our long-term partner GoTa Ship Management, who holds a document of compliance from Cypriot authorities.

WORKTIME INCIDENTS

Workplace safety is closely monitored at the group level. Two key metrics followed are Total Reported Incident rate (TRIR) and Lost Time Incident Frequency Rate (LTIFR). TRIR includes all incidents whereas LTIFR takes into account only accidents, which require absence from work.

The Total Reported Incident Rate (TRIR) in 2022 was 17.4 (16.6 in 2021) and LTIFR 3.5 (2.4). No severe injuries or other accidents were recorded in 2022. Three minor incidents required sick leave whereas the rest required first aid or light medical treatment. On a positive note, there were no long-term sick leaves caused by worktime accidents. 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 cor-

nerstones to a comprehensive safety culture. Seafarers are encouraged to report possible safety hazards and encouraged to send proposals which improve onboard safety. Each ESL Shipping vessel has an occupational safety and health committee which covers the entire crew and meets four times a year.

ESL Shipping's alcohol and drug policy is enforced through random testing and focused on testing of suspected breaches. During 2022, ESL Shipping discovered four incidents (one incident in 2021) where the shipping company's substance abuse policy was violated. These incidents did not endanger maritime safety and the company handled these violations by taking appropriate measures 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 2022, these tests found one violation (none in 2021) which was handled according to company procedures and collective bargaining agreements.

FOCUS AREAS IN SAFETY IN 2023

In 2023, a key focus of safety is to remove accidents, which could have been easily prevented, for example by using protective equipment correctly. To increase the understanding of the type of accidents onboard the company fleet, accident statistics from 2022 were discussed in a meeting with management level officers onboard vessels in January.

Onboard safety walks by the members of the management team will be introduced in 2023 with an aim to increase the common understanding of the importance of safe working practices. The aim of these initiatives is to improve the safety statistics and to bring the Total Incident Rate below 12 at the group level.

A more systematic approach to quality

Sharing and combining the expertise between different segments improves the quality and safety performance.

The amount of external inspections have increased in the past year as customer requirements for the vessels used to carry their cargoes have become more stringent. As requirements between the inspection bodies are somewhat different, resources have been added shore side to support crew onboard to prepare for upcoming inspections.

One initiative to improve the performance has been sharing the Quality and Safety resources between ESL Shipping and AtoB@C Shipping. This change has enhanced performance on external inspections (vettings) as well as in fleetwide Port State Control statistics. In this respect, the outlook for 2023 seems positive.

In 2022, our Quality Superintendent performed 45 vessel inspections for both owned and chartered tonnage. Some of the inspections were pre-inspections to prepare the vessel and the crew for upcoming inspection, whilst the majority of the inspections were general safety and quality inspections. All the remarks and deficiencies are recorded to the reporting system where corrective actions can also be recorded for future evidence. All external vettings and audits for ESL Shipping-managed vessels resulted in no major findings.

During the year, the outline for the inspections was standardised by introducing the Responsible Shipping Initiative (RSI) questionnaire as a template for the inspections. In addition, mandatory audits of the Safety Management System were performed both onboard vessels and at the office.

In the course of the year, we have developed a more systematic way to monitor the performance of the time chartered vessels in Port State Control inspections performed by port state authorities. In doing so, we are able to compare different shipowners and better focus our inspections and efforts to the owners and vessels where performance can be improved.

INDUSTRY BENCHMARKING WITH DRYBMS STANDARD

One of the initiatives to improve safety culture and vessel performance has been benchmarking ESL Shipping's

safety, security and environmental management system against industry best practices. Furthermore, the preparation of gap analysis based on Dry Bulk Management System (DryBMS) standards to identify and plan the most effective management upgrades required across the company to raise the bar to the next levels.

The DryBMS sets out 30 areas of management practice within four sections: Performance, People, Plant and Processes. Companies that improve in these four sections will deliver more safe, compliant and reliable operations, gaining a sustainable advantage over their competitors.

The review through 30 different modules of DryBMS was carried out during second half of 2022. As a general finding, our systems fulfil legal requirements, however the systems and data is slightly fragmented and there is a need to integrate manuals and procedures together for easier management to bring out potential efficiencies. The identified action points will be followed up through 2023.

CUSTOMER SATISFACTION ON A HIGH LEVEL

As a way to further improve our client experience, ESL Shipping and AtoB@C Shipping conducted their first client satisfaction survey in 2022. Going forward, the survey will be conducted regularly to provide an insight to the areas of improvement as well as where our clients see us performing well.

The results from the 2022 survey were very positive and the net promoter score was high at 57. Most of the positive comments were related to a high level of professionalism and the service attitude of both operations and chartering.

"Our aim is to provide tailor-made solutions for our clients' sea transportation needs. Therefore, we were very pleased to see that many clients gave positive feedback for our solutions-oriented approach and the flexibility", says Commercial Director Toni Rönnerberg.





How sea transports are vital to Metsä's success



Finnish forest industry company Metsä Group is one of AtoB@C Shipping's key clients. Owned by over 90,000 Finnish forest owners, Metsä Group focuses on the growth sectors of the forest industry. The raw materials used for Metsä products is renewable wood grown in sustainably managed Northern forests.

AtoB@C Shipping's vessels transport raw materials to Metsä's sawmills and pulp mills in Finland and Sweden and finished products to Metsä's customers in Northern and Central Europe. Both companies share ambitious targets to move towards more sustainable operations by significantly reducing their carbon footprint with Metsä Group targeting zero emission production by 2030.

"Sea transports are important for Metsä Group as our operations are mainly based in Finland and Europe but our customers are worldwide. Our investments in new sawn timber and pulp mills increase the need for sea transports as well", says Helena Hartiala, VP, Quality and Operational Excellence from Metsä Group's Sourcing & Logistics.

AtoB@C Shipping's new, energy efficient plug-in hybrid vessels are optimised for the transport of forest industry products and help Metsä Group to reduce emissions from its sea transports as well as prepare its sea transports for the new environmental regulations from EU and IMO.

"These vessels will also result in savings when the emission trading system is implemented in shipping. We are looking forward to using the new green coaster vessels in our sawn timber, pulp and wood transportation", Hartiala continues.

"A key pillar of our roadmap towards fossil-free shipping is the close cooperation with clients to develop vessel concepts which are superior in both the environment and commercial aspects and we are very happy to continue our long-term cooperation with Metsä

through these new vessels", explains Toni Rönberg, Commercial Director of ESL Shipping and AtoB@C Shipping.

As the requirements for more transparent emission calculations increases, Metsä is enhancing the calculation of transport emissions in 2023 in order to gain a better understanding of the current state, discusses Hartiala.

AtoB@C Shipping is ready for the increased requirements for environmental performance reporting. Our in-house developed Customer Portal provides emission and voyage data to our clients almost in real time. Given it is developed in-house, it can be customised according to the needs of a client.

"Some of Metsä Group's customers are interested in the carbon footprint of our products, including transportation. Therefore, having carrier, ship and voyage level emission data is useful for those purposes", concludes Hartiala.



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.

ESL Shipping's highest decision-making authority lies with the Board of Directors. Chaired by the CEO of Aspo Group, the members are external to the company and support operative business management. There were no changes in the composition of the Board of Directors in 2022. At the end of 2022, ESL Shipping's management team consisted of seven members, which are presented on page 1.

During 2022, the work and responsibilities of the management team were reorganised and as a result, Regional Director Ari Hurula left the management team in February and Frida Rowland moved into the role of Corporate Business Development. Her previous responsibilities in AtoB@C Shipping's business unit management were distributed to other members in the management of the group.

Sustainability activities in the group are led by the Managing Director in accordance with the group's ESG Policy. The Management team of the group has shared the specific areas of responsibility in ESG matters between Kirsi Ylärinne (environment), Mikko Rausti (social) and Petter Ruda (governance).

ESL Shipping actively participates in industrial cooperation. Managing Director Mikki Koskinen is Chairman of the Board of Finnish Shipowners Association and a Member of the Board at the International Chamber of Shipping. Frida Rowland is a Member of the Board of Swedish Shipowners' Association.

COMPLIANCE AT ESL SHIPPING

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 and internal guidelines, the parent company Aspo's Code of Conduct and the UN Global Compact principles. The company's compliance is the responsibility of the CFO.

ESL Shipping's vessels operate in international traffic and occasionally can visit countries where corruption

is common. Our Code of Conduct absolutely 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 2022, all 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, ESL Shipping has its own Supplier Code of Conduct. The compliance with the code is required from all suppliers. A significant number of the partners of ESL Shipping are major international companies, with many of these businesses having been engaged in long-term cooperation. Many of the companies also have their own stabilised processes for the responsible management of supply chains.

Knowing the counterparties we work with is an essential part of our compliance work. ESL Shipping checks possible sanction risks as well as solvency of all counterparties with modern and efficient tools. No business is allowed prior to sanction risks being checked and evaluated thoroughly. In addition, the Group closely monitors sanction risks of current counterparties as the sanction schemes evolve constantly and new sanction risks may suddenly emerge.

Our internal guidelines set clear guidelines regarding the monetary acceptance limits of individual employees and management team members. Furthermore, all financial transactions require the approval of two individuals.

All ESL Shipping group companies have a whistleblowing channel which is accessible on the websites of all group companies. The system is managed by an external company which ensures the full anonymity for a person who wishes to report behaviour or actions that go against ESL Shipping's values, Code of Conduct or our compliance requirements.



Performance indicators

Reported figures are based on the calendar year 2022 or the situation on the December 31, 2022 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 for more details.

ENVIRONMENTAL PERFORMANCE ¹

	2022	2021	2020	2019	2018
Number of vessels ²	47	51	50	51	49
Tonnage (dwt)	429 000	473 000	465 000	468 000	464 000
Distance sailed (nm)	1 792 533	1 996 318	1 801 326	1 924 140	1 042 595
SCOPE 1					
Fuel oil consumption (t)	69 373	75 698	70 359	74 905	50 824
Total use of fuel (MWh)	822 559	898 551	838 743	892 250	597 300
Consumption per cargo ton (kg/t)	4.72	5.10	5.25	4.71	3.74
CO ₂ -emissions (t)	217 526	237 621	220 122	237 296	160 988
CO ₂ -emissions per ton-mile (g)	13.67	15.74	15.48	15.5	13.1
SO _x -emissions (t)	87.7	98.36	56.44	179.3	128.9
SO _x -emissions per ton-mile (mg)	5.52	5.93	3.97	11.69	10.49
SCOPE 2					
Purchased energy (MWh) ³	328.4	322.1	243.4	117.6	105.2
CO ₂ e-emissions (t)	12.9	-	-	-	-

217 526t

CO₂-emissions in total
Change: -8.5%

Target: Net zero by 2050

13.67g

CO₂-emissions per
ton-mile
Change: -13.2%

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

¹ Excluding vessels on voyage charter in 2018.

² The reported number is based on the number of vessels at the end of the year for 2018–2021. From 2022 onwards the figure is the average number of the vessels during the year. At the end of 2022, our fleet consisted of 41 vessels.

³ Includes electricity, heating and cooling. Consumption mainly measured, otherwise estimated for the whole year. The figures include Raahé depot from 2020 onwards. Tug Charlie's use of shore-side electricity increases energy consumption from 2020 onwards.

SOCIAL PERFORMANCE

	2022	2021	2020	2019	2018
Personnel	355	355	355	337	333
Sea personnel	294	296	298	287	286
Shore personnel	61	59	57	50	47
Female	45	40	40	36	35
Male	310	315	315	301	297
Average employee age	44	44	45	45	44
Retention rate ⁴	91%	94%	90%	89%	92%
Employee satisfaction ⁵	AA	AA+	-	-	-
Training days ⁶	241	265	168	326	332
Total Recordable Incident Rate (TRIR) ⁷	17.4	16.6	21.3	25.9	21.1
Lost time incident frequency rate (LTIFR)	3.5	2.4	-	-	-
Incident and near miss reports ⁸	130	84	86	59	43
Net promoter score	57	-	-	-	-

AA

Employee satisfaction
Target: AA+

17.4

Total Recordable Incident Rate
Target: zero

GOVERNANCE

	2022	2021	2020	2019	2018
Code of conduct training (%)	100	98.3	-	-	-
Compliance training (%)	100	98.3	-	-	-
Ecovadis score	66	-	-	-	-

100%

Code of conduct and Compliance training
Target: 100%

ECONOMIC PERFORMANCE

	2022	2021	2020	2019	2018
Net sales (MEUR)	254.4	191.4	148.4	175.0	120.1
Operating profit (MEUR)	38.1	26.8	7.6	14.6	15.1
Investments (MEUR)	16.5	15.3	4.2	18.6	41.9
Cargo volume (Mt)	14.7	14.8	13.4	15.9	13.4

15.5%

Operating profit margin
Target: 14%

Figures include AtoB@C Shipping from 1st September 2018. Viikki and Haaga were delivered in August and September 2018 and are included from 1st voyage from Japan. Therefore figures are not comparable with the following years.

⁴Based on two-year average (2021/2020, 2020/2019, 2019/2018 and 2018/2017). Based on terminations of employment during contract period based on employee's own will, excluding pension. Includes ESL Shipping Ltd sea personnel only.

⁵People Power index has been measured from 2021 onwards and includes shore personnel only.

⁶ESL Shipping sea personnel only.

⁷All injuries per 1 000 000 working hours. 2021 figure includes the Group personnel but 2018-2020 figures ESL Shipping sea personnel only.

⁸Includes AtoB@C Shipping owned vessels from 2022 onwards.



ESL Shipping

ESL Shipping

Lintulahdenkuja 10
00500 Helsinki
Finland
www.eslshipping.com

AtoB@C Shipping

Hamntorget 2A
27139 Ystad
Sweden
www.atobatc.com