



# Sustainability report 2020

# Successfully responsible

In your hands (or more likely on your screen) is the first sustainability report in the history of Meriaura Group. When planning the contents of this report, we have naturally benchmarked similar reports from other companies. Sustainability reports are just making their way to the shipping industry. We have strived to make this report open, honest and transparent, and in line with our values. Our organisation, and especially the corporate responsibility team that has actively been working on this report are to thank for that.

In the working group, we also discussed what responsibility actually means. Our definition is that responsibility starts where legislation ends. At Meriaura Group we have always preferred action over giving speeches. That is why we have concentrated on reporting what we are doing beyond the obligations of the legislation, instead of telling something considered self-evident.

Meriaura was established to support sustainable development and fair-trade projects. In the 1980s, these issues began to emerge, though they were still on the margins for a long time. Carbon-neutral goals and a vision for more sustainable shipping have been involved throughout the company's 35-year history. In 1990, I did my sea captain's dissertation on utilizing wind power in shipping. Those goals have not yet been achieved, but we are now finally in a situation where the whole industry, under pressure, will have to consider the various means and forces that will be used to reduce maritime emissions in the coming decades.

A family-owned company doesn't necessarily have to make a big profit or seek quick wins. However, it is important to maintain profitability at a level that enables the development of operations. Despite an exceptional COVID-19 year, 2020 brought success both financially and in terms of social responsibility. The most important success story is the strong involvement of our staff in creating and achieving business-related and environmental goals. For 2021, we have ambitious goals, e.g. the construction and certification of a functioning environmental system, as well as the development of a carbon-neutral transport concept.

In addition to stopping greenhouse gas emissions, we will need active carbon sequestration and also compensation. We have a few openings and research projects underway, of which we hopefully will be able to tell you more about soon.

Jussi Mälkiä  
President of Meriaura Group





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# MeriAURA Group

MeriAURA Group is a family owned business group, that is a growing provider of marine transport solutions, crewing and technical management services, logistical solutions and environmental technology. **Our vision is to be the leading forerunner in environmentally friendly, innovative and solution-oriented maritime transport and ship management services.** We want to be strongly involved in building a sustainable society based on circular economy and clean energy.

MeriAURA Ltd. is a shipping company specialising in demanding project cargo and transporting industrial bulk and raw materials. We offer services to both long term and spot market customers. Our fleet of 15 vessels operates mainly in Baltic and North Sea areas.

VG-Shipping Ltd. is a ship management and ship owning company, and the parent company of MeriAURA Ltd. Besides its own vessels, VG-Shipping manages the Finnish state owned research vessel Aranda, hydrographic vessels, dredging vessels and an icebreaker.

## The Board of Directors of MeriAURA Group

Jussi Mälkiä, puheenjohtaja  
Riinu Walls  
Antti Vehviläinen  
Ari Kaaro (since 3/2021)

## Management Team

Beppe Rosin, Managing Director, MeriAURA  
Ville Koskinen, Managing Director, VG-Shipping  
Miia Peltonen, CFO  
Jutta Seppänen, HR and Legal Director  
Jussi Mälkiä, President  
Elina Mälkiä, Communications Manager

## Our values

### Innovativeness

We are not afraid of questioning existing practises and finding new ways of building cleaner and more efficient shipping

### Cooperation

We nurture the power of collaboration to maximize expertise and success between both co-workers and customers

### Honesty

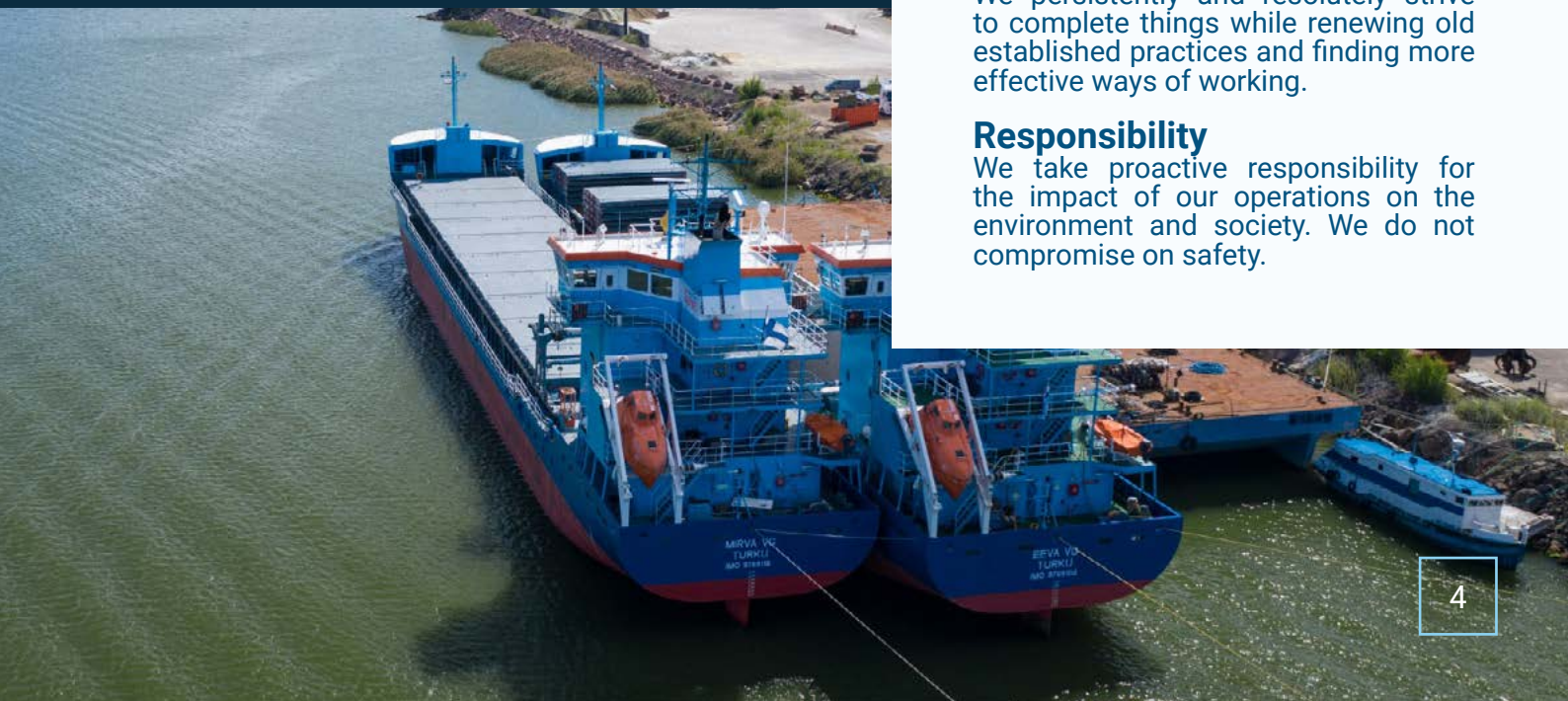
We handle things sincerely, ethically and fairly, respecting each other and our stakeholders

### Hard work

We persistently and resolutely strive to complete things while renewing old established practices and finding more effective ways of working.

### Responsibility

We take proactive responsibility for the impact of our operations on the environment and society. We do not compromise on safety.

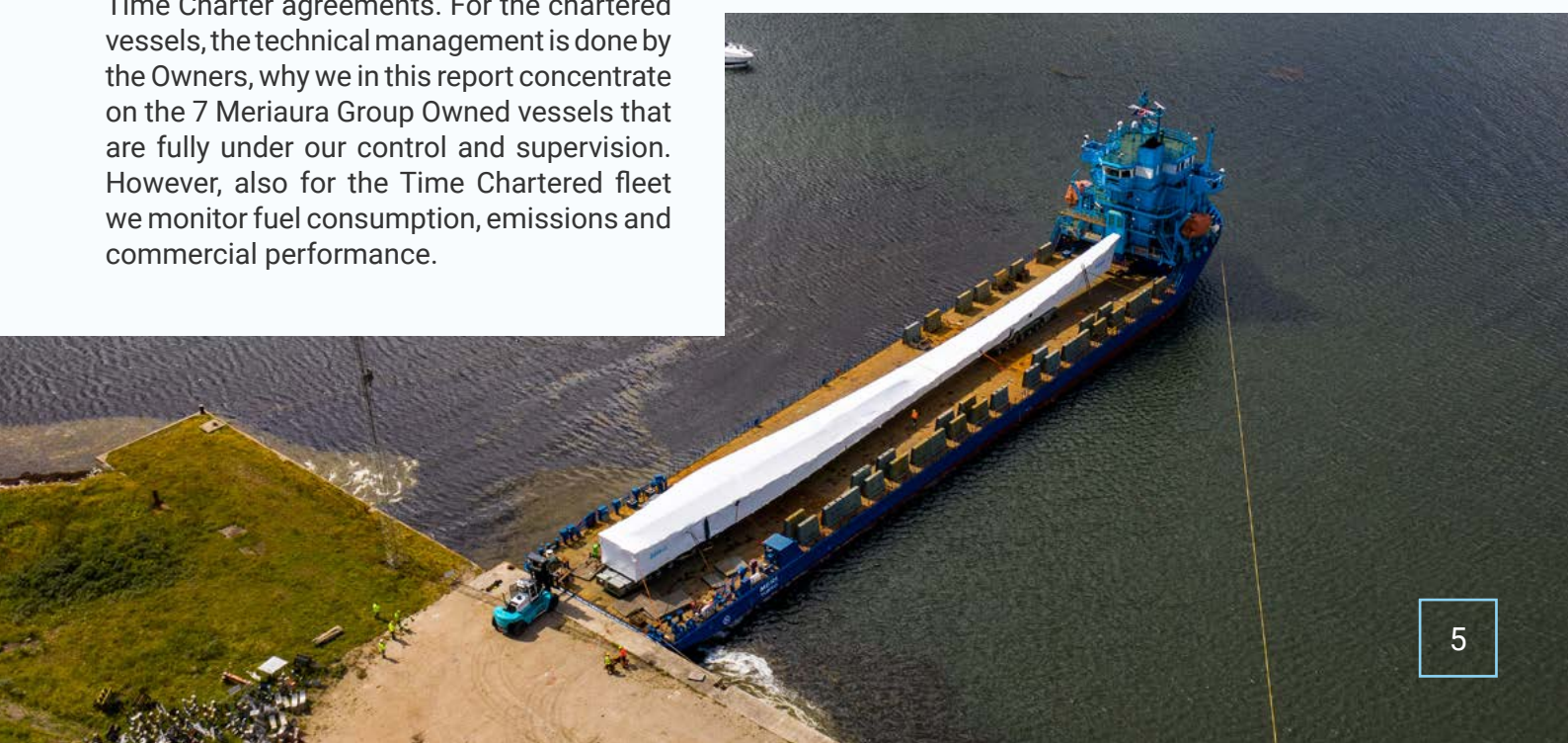


# Our fleet



Vessel size	Number	Owned vessels/ time chartered vessels
3000 DWT	3	<b>Helena VG</b> Baltic Sailor Adele
4000 DWT	4	<b>Aava VG</b> Lottaland Loraland Aurelie
4500-5000 DWT	4	<b>Eeva VG</b> <b>Mirva VG</b> Flex Keston Friendland
6000-8000 DWT	3	<b>Polaris VG</b> Antonia Airisto
Deck cargo carriers	2	<b>Meri</b> <b>Aura</b>
Ships under VG-Shipping management	6	Aranda Boann Sinann Pohjanmeri Airisto Kaiku

At the end of 2020 one vessel was partly and 7 vessels entirely owned by Meriaura Group. The remaining vessels were operated under Time Charter agreements. For the chartered vessels, the technical management is done by the Owners, why we in this report concentrate on the 7 Meriaura Group Owned vessels that are fully under our control and supervision. However, also for the Time Chartered fleet we monitor fuel consumption, emissions and commercial performance.





# The UN Sustainable Development Goals at Meriaura Group

The UN Agenda 2030 for Sustainable Development aims at eradicating extreme poverty world-wide, and at ensuring wellbeing in an environmentally sustainable manner, considering equally the economy, the environment and human well-being. The structure of our report also follows the threefold principle of sustainable development, and at the same time the UN principles are linked to Meriaura Group's day-to-day operations. Our key areas of influence are included in the following five objectives:



## Gender equality

Meriaura Group provides equal opportunities for everyone to participate fully in the operations and management, regardless of gender. We offer flexibility regarding work tasks, according to one's life situation.



## Affordable and clean energy

We are increasing the use of renewable energy in both office and marine operations. Our EcoCoaster vessels are ESI-certified (Environmental Ship Index) to ensure energy-efficient operation.



## Responsible consumption and production

We pay attention to the amount of food waste on our ships. We reduce the amount of waste by preventing, recycling and reusing. We aim for energy efficiency on our ships and the phasing out of fossil fuels.



## Climate action

We use renewable and carbon neutral electricity. We produce bio-fuel from waste-based material. Waste-based bio-oil is ethically sustainable and its use reduces the ship's CO2 emissions by up to 97% compared to the traditional fossil fuel option.



## Life below water

We reduce the nutrient load to the sea by delivering the wastewater from our vessels ashore for proper treatment.

# Sustainability needs profitable business

Our basic mission is to provide our wide and heterogeneous customer base with high quality and safe transportation services. We strive to understand our customers' processes and appreciate the matters that are important to each customer. A specifically important role is to support and help our customers achieve their own environmental and responsibility goals as well. We recognize financial realities and understand that profitable business throughout the value chain is a prerequisite for developing business sustainability. That is why we strive to develop our operations in such a way that transport efficiency and thus also environmental efficiency can be improved without raising transport costs.

The key is to maximize capacity utilization and operational efficiency. On average, the voyages we make take about 7 days, and more than 40% of this time is spent in ports, which significantly reduces capacity utilization. We are actively working on shortening port calls and seeking voyage combinations that minimize the distance traveled in ballast. We monitor the occupancy rate of each shipment and strive for continuous improvement. Whenever possible, we seek to combine cargos, as this is not only environmentally beneficial but also beneficial to shippers. We identify defects and time thieves in the transport chain and consult both our customers and partners with our suggestions for improvement.

Achieving high environmental goals requires significant investments in know-how, information systems and, above all, fleet. We boldly try new solutions and want to be a leader in our field. Instead of maximizing short-term profit, we invest significantly in resources and funds in product development and innovation. As the estimated useful life of a new building is approximately 30 years, our future investments will be based on technology that enables carbon-neutral operation. However, from the point of view of responsibility, it is essential that the investments are on a financially sound basis, which guarantees the continuity of operations and the ability to meet obligations not only to the customer base but also to financiers and other stakeholders. Therefore, mapping and understanding the current and, above all, future needs and wishes of our customers play a very important role in our business planning.

Beppe Rosin  
Managing Director, Meriaura Ltd.

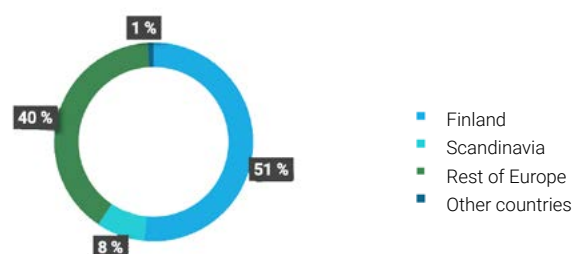


Economical responsibility

## Continuous improvement is a prerequisite for successful operations

In 2020, despite the exceptional circumstances, we succeeded in significantly streamlining our operations. The appr.10 % decrease in turnover was due to the considerably lower bunker price compared to the previous year and on the other hand, to the fact that part of the tonnage was chartered out to external operators. The operating profit clearly improved mostly because we reached our goal of increasing the load and utilization rate of ships and reducing the share of ballast voyages. The ratio of export to import volumes improved from the previous year. This was partly due to a clearer focus on our core traffic area, but above all active and proactive communication with the customer base. Long-term customer relationships have increasingly evolved towards partnerships that seek to avoid any kind of idle. In practice, this means proactive action and joint efforts to reduce loading and unloading times. The positive development has also been influenced by the fact that a slightly higher share of port calls has been directed to ports where loading and unloading also take place on weekends. In a capital-intensive sector with a significant share of fixed costs, both service providers and customers, and ultimately the national economy, will benefit from improved utilization. Despite the improved situation, there is still work to be done in this area in the years to come.

Turnover by location of customers 2020



VG-Shipping concern (M€)	2020	2019	2018
Turnover	55	61	56
Profit	3	1	2
Investments	1,7	1,4	5,1
Transported tons *	2,53	3,00	2,79
Transported tons of tonnage given on time charter	0,54		
Purchases in Finland	22	21	22
% of all purchases	48%	41%	49%

\* the figure does not include project and special transport cargoes whose transport performance is not measured in tonnes.



# Highlights in 2020

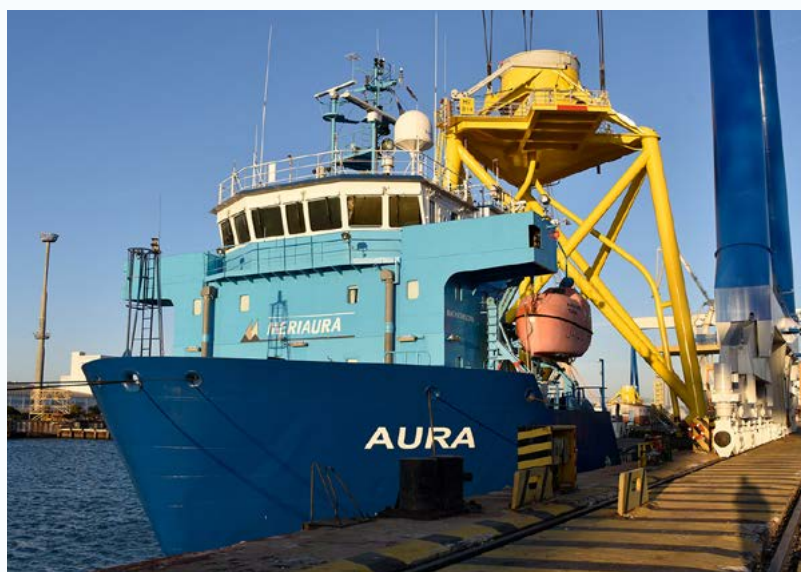


## Gypsum & Archipelago Sea

In the spring 2020 Meriaura was selected as the service provider for the KIPSI (Gypsum) project, that is organized by the Centre for Economic Development, Transport and the Environment and funded by the Ministry of the Environment. Meriaura is responsible for the entire supply chain, which includes the procurement, transport and distribution of gypsum all the way to farmers' fields. In 2020, a total of approximately 35,400 tonnes of gypsum was applied to almost 9,000 arable hectares in Southwest Finland. During the summer, Meriaura transported gypsum from Siilinjärvi by water through the Saimaa canal, a total of 17 shiploads to the ports of Naantali and Skogby. From there, the gypsum was distributed and applied to the fields by a subcontracting network. The KIPSI project is a very large-scale project for concretely improving the state of the Archipelago Sea.

## Wind energy projects

Both our open deck carriers M/V Meri and M/V Aura performed several single shipments carrying various windmill components in Northern Europe, participating in the development of different wind-farms that were under construction during 2020. As the greatest milestone, M/V Aura kept herself busy for several months with Moray East offshore wind farm project, carrying a total of 20 jackets from Spain to UK. Moray East is being developed in the Outer Moray Firth, 22km off the coast of Scotland. It will consist of 100 x MHI Vestas V164 9.5 MW turbines. Moray East represents a step-change in the delivery of renewable power in terms of cost and scale.



## Marine Research

VG-Shipping Oy and the Finnish Environment Institute (SYKE) renewed the agreement for the management of the marine research vessel Aranda. VG-Shipping won a public tender in autumn 2020 for both price and quality. The renewed contract includes Aranda's crewing, operation and technical management. The contract covers the years 2021–2023 and includes two + two option years. Aranda has been managed by VG-Shipping since 2007.



# Together through the demanding year

The well-being of staff and keeping up work motivation are based on long-term, open and innovative team play. We operate in a multicultural field, where paying respect to different kinds of people and systematically increasing skills and know-how are important for achieving our goals. We want to enable career paths and opportunities for our employees to develop and thrive in a safe and healthy environment.

Through environmentally friendly innovations, we are building new types of safe work and development opportunities in the future. Everyone can influence the processes of their own work and even the contents of the work itself, enabling increased efficiency and renewal of processes.

We support an open discussion culture where everyone is free to raise issues of abuse, inappropriate treatment, and other issues to colleagues, superiors, and top management. We will introduce an anonymous whistleblowing channel for reporting suspected misconduct in 2021, as required by the EU Directive.

Due to the corona pandemic, 2020 was special and demanding in every way. However, we were able to arrange the normal rotation of seafarers almost without exception. Together, with the hard work and flexibility of the entire staff, we managed to overcome the challenges by developing working methods and learning how to telework effectively, and finding the courage to use it for our advantage also in the future.

Ville Koskinen  
Managing Director, VG-Shipping Ltd.



Sosial responsibility



## Occupational safety at sea

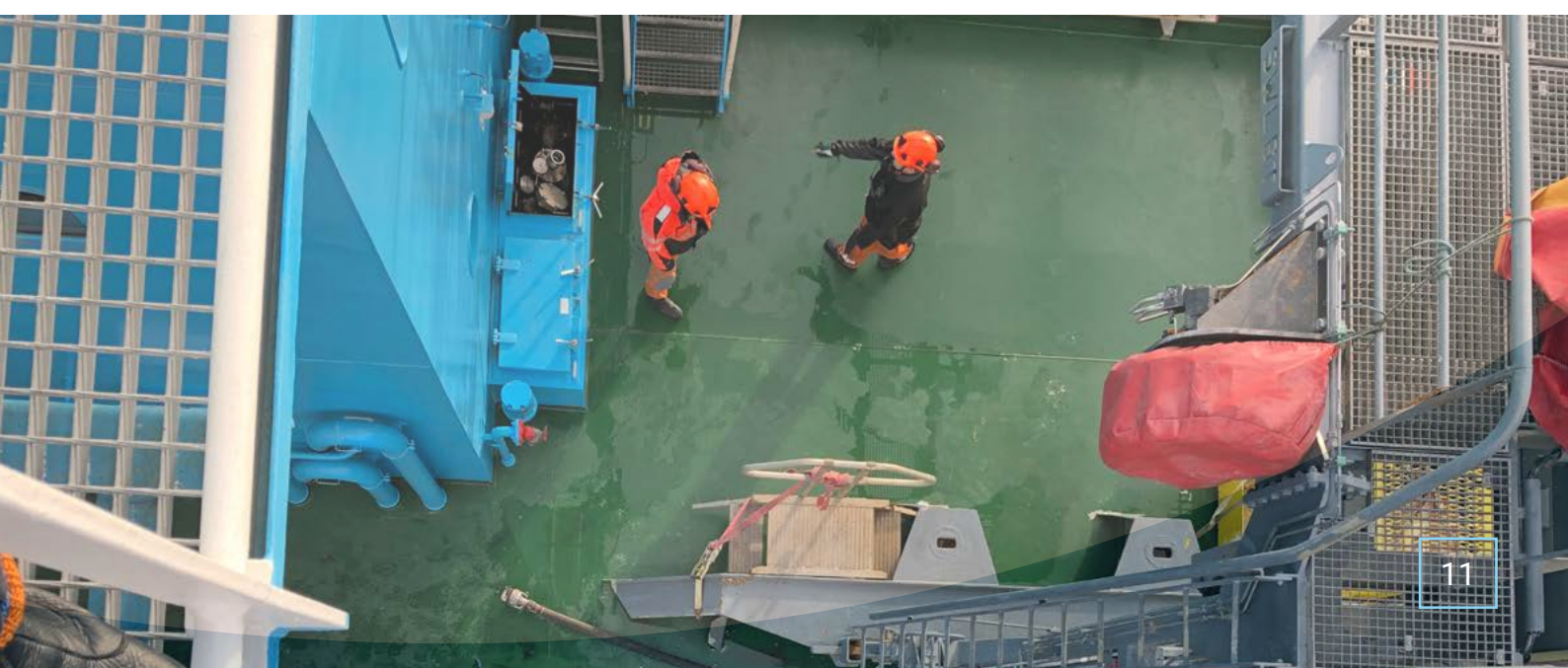
In terms of occupational safety, the ship environment is more challenging than an onshore office. A moving ship is at the mercy of the weather and it may take longer than expected to get help. Our goal, of course, is to lower the amount of accidents to zero. Each accident is reported and the means to eliminate the risks in the future are discussed comprehensively.

In 2020, we offered the masters of our vessels an online safety training provided by the Finnish Institute of Occupational Health. The training addressed current issues such as occupational safety responsibilities, well-being at work and risk assessment. After this training the masters are better able to manage their overall responsibility for occupational safety on board.

When calculating the accident frequency, the number of employees, the average number of hours worked and the number of accidents that occur are taken into account.

Accident frequency = Number of accidents at work \* 1,000,000 / Hours worked

Tapaturmat Meriaura Groupissa	Incidents 2020	Frequency 2020	Incidents 2019	Frequency 2019	Incidents 2018	Frequency 2018
<i>Working hours total</i>	256020		280621		272012	
Total recordable case frequency	7	27,34	7	24,94	6	22,06
Lost time injury frequency	6	23,44	6	21,38	4	14,71
Medical Treatment Case frequency	1	3,91	1	3,56	2	7,35
Fatal Accident Frequency	0	0	0	0	0	0



## Good benefits ensure well-being and motivation of staff

As a Finnish shipping company in a highly competitive industry, we are able to provide maritime personnel with commendable working conditions and suitable rotation, which enable workers to live as normal family and private life as possible. They also have the possibility to enjoy good benefits and opportunities for the rotation of tasks, including shore-based work in the company.

Extensive employment benefits encourage office workers to have healthy leisure time and a smooth combination of work and free time to maintain work motivation. In order to promote work ability and well-being, our companies have provided occupational health care, leisure accident insurance, the possibility to receive an influenza vaccine annually, lunch benefit, recreation days annually, a massage chair, a weekly fresh fruit basket plus coffee and tea at the office. In addition, shore-based staff with a fixed-term employment contracts of more than one year can enjoy a sports and massage benefit. Permanent employees are also offered the opportunity to apply for company health insurance.

VG-Shipping concern staff at the end of the year	2020	2019	2018
Staff ashore	28	30	21
Staff at sea	112	125	118
Staff altogether	140	155	139
Women	21	22	15
Men	119	133	124
Average age of staff ashore	41	40	43
Average age of staff at sea	41	40	40



## Towards more innovative work life through participatory development

As the corporation grows and the operations get more complicated, we run the risk of losing sight of the people and everyday work behind the processes. In 2020, in order to safeguard the existing good while continuously striving for improvement, we have decided to launch a project for organizational development: "Competitiveness through participatory organizational development – making use of personnel know-how by leading the operational culture."

The core of the project is to influence each employee's ability to develop their own and their team's work. Joint innovation workshops tackle obstacles to development and learn how to find one's own strengths and areas for development. Psychological safety in the work community ensures everyone's development potential; this is reinforced by coaching to increase the skills and abilities of superiors, as well as training, campaigns and weekly challenges to increase staff work community skills. In addition to the development project, Lean coaching and management coaching will further build a philosophy of continuous improvement, and ensure the rationality and appropriateness of processes in a way that creates value for the customer. Smart and creative activity also means a job and work community for employees that they want to commit to. Talented, creative, happy and committed employees are our most important and valued resource, and this development project is one of the ways Meriaura seeks to invest in the well-being and expertise of staff.

## Meriaura Group is a 4,2 star employer

### Sea personnel's job satisfaction

At the end of 2020, we conducted our first job satisfaction survey for our sea personnel. 62 crew members responded to the survey. Most of our sea personnel are satisfied with the working conditions and with Meriaura Group as an employer. The survey mapped e.g. working atmosphere, living, working and leisure conditions on board, administration and management, communication between the ship and the land organization and opportunities for officers to participate in decision-making. The most important deficiency was the lack of wi-fi connection for the crew on the open sea. More than 90% of the respondents considered the working atmosphere on the ships good. Also the annual Officers meetings were considered useful for sharing information. As an overall rating as an employer, Meriaura Group received 4.2 stars out of a maximum of five. In the future, the seafarers' job satisfaction survey will be renewed annually. We are also actively developing working conditions in order to maintain and improve job satisfaction of our sea personnel.



# Environmental responsibility

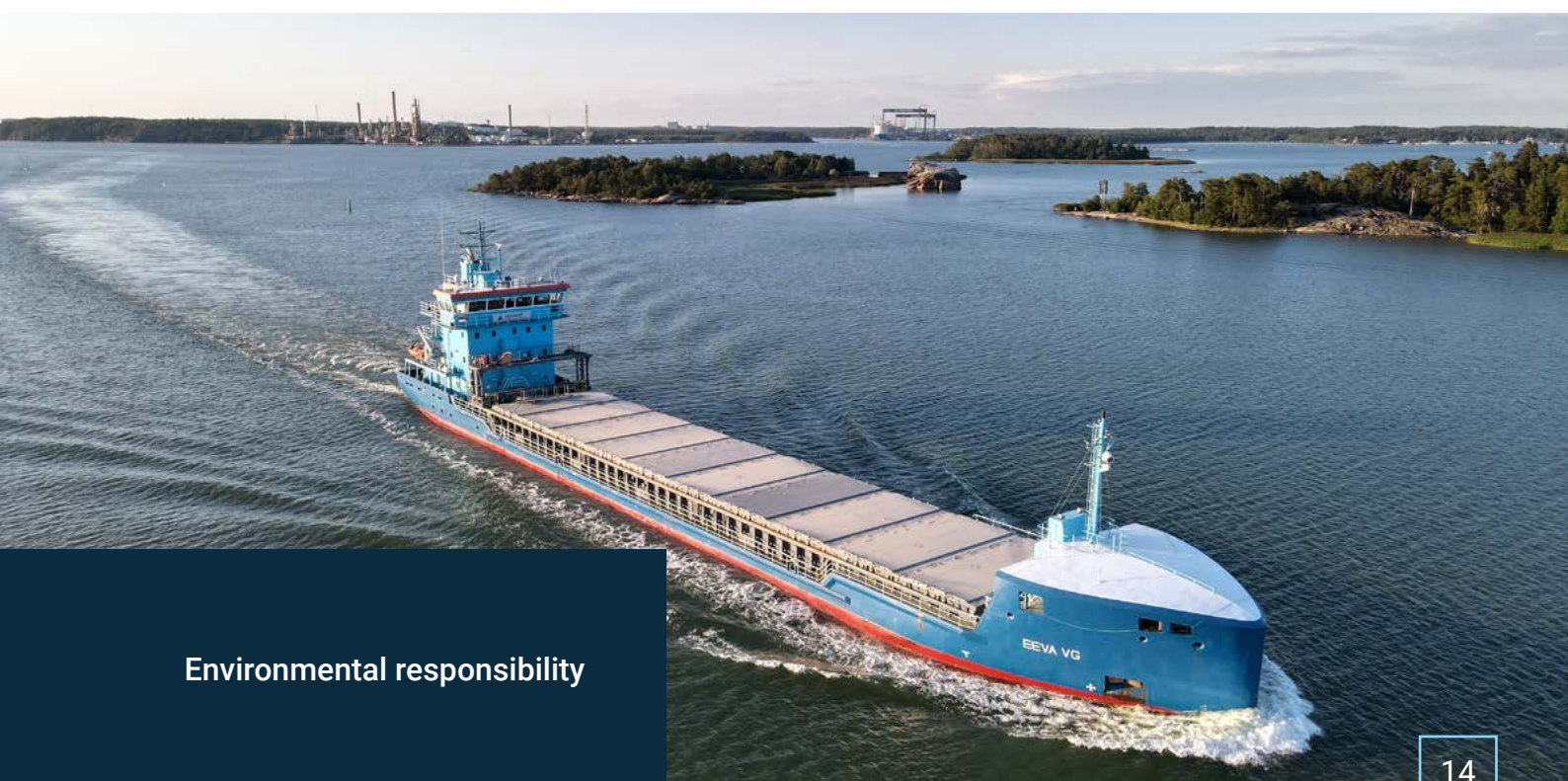
The responsibility for the well-being of the environment and biodiversity belongs to everyone, even according to the constitutional law. On the corporate side, expectations of concrete actions and open communication come from all stakeholders, most directly from our customers. In recent years environmental responsibility has placed particular emphasis on overall responsibility for the environmental impact of operations and along with that on life-cycle thinking.

Environmental responsibility is strongly linked to the perceptions of management and owners about the importance of the subject. At Meriaura Group, minimizing environmental impacts has always been the basis of all operations, and from this point of view further developing is motivating and easy for the staff.

For a shipowner, environmental work logically focuses on what happens on the ships; energy efficiency, reduction of fuel consumption and littering. Fuel choices have a direct impact on air emissions and our own bio-oil production ensures that we know the different stages of the manufacturing process and are able to calculate its life cycle impacts. By reusing waste-based materials, we promote emission-reducing technology and aim for beneficial environmental impacts.

We have a carbon footprint reporting system for performed voyages made using Nautic Ai - Fleetrange software. The report provides us with information on fuel consumption and CO2 emissions and enables us to report these accurately to our customers. In the future, we will also monitor and report the emissions of our entire fleet per tonne-mile and aim for a downward trend.

Mia Hytti, Sustainability Specialist  
Meriaura Group



Environmental responsibility



# Milestones on our environmental path

**1986**

Meriäura Ltd. is founded

**Early 1990s**

A battery-powered shore-side power system with self-produced solar and wind power is introduced on tug-boat Aura

**1992**

The first bio-oil experiment on the tug Aura

**1996**

Acquisition of a ship recycling dock in Korppoo. Lifting of shipwrecks in the Archipelago Sea and recycling them.

**1998**

Meriäura starts using low-sulphur fuels

**2002**

Ownership in Biota BD Ltd. and development projects that preserve the diversity of rainforests in Latin America

**2010**

Investments in the bio- and circular economy, closed circulation aquaculture, biogas and biofuel production

**2012**

Second deck cargo vessel is built at the Turku shipyard. M/V Meri is the world's first commercial cargo ship designed for bio-oil use.

**2015**

Sustainability certification of bio-oil production process

**2016**

Bio-oil-powered EcoCoaster vessels Eeva VG and Mirva VG are built in the Netherlands and start operating in the fleet \*

**2017-2019**

Ship recycling trial in Naantali in cooperation with Turku Repair Shipyard as part of the EU ship recycling regulation and responsibility strategy

**2019**

Meriäura Group launches zero waste program on its fleet. Starting on 1.7.2020 our ships always leave their sewage in the port

**2019**

Meriäura launches EcoVoy charter contract

**2020**

Decision to build an environmental system aiming for ISO14001 certification

**2021**

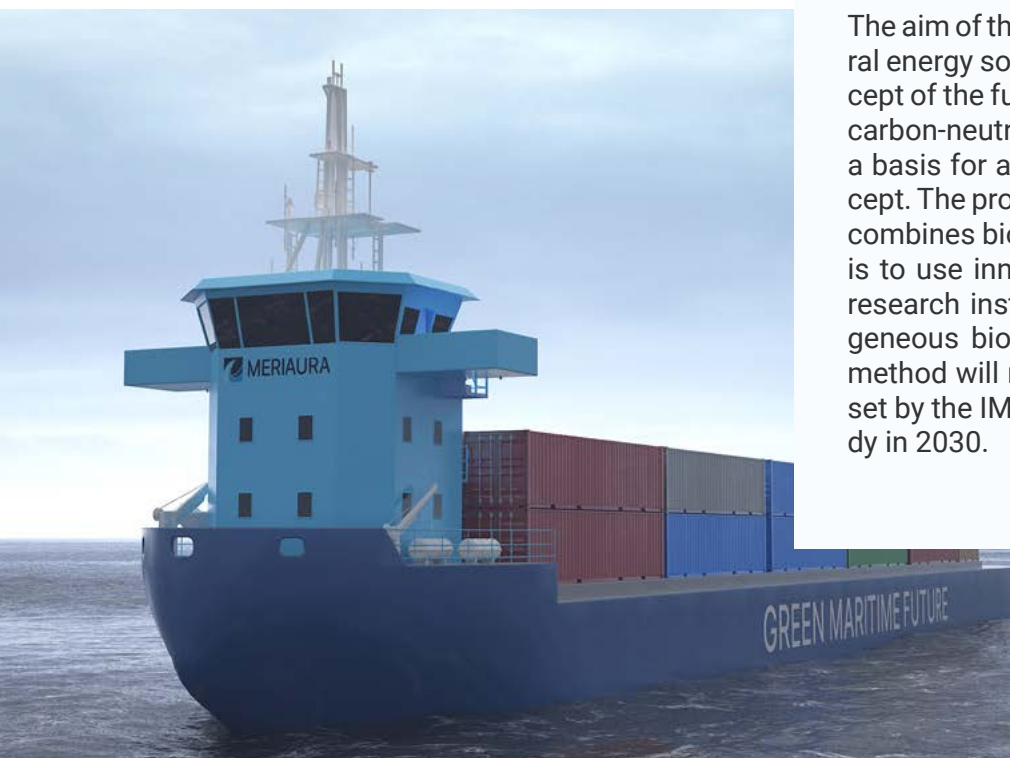
Construction of a tonne-mile performance monitoring system for the entire fleet

\* Our EcoCoaster vessels Mirva VG and Eeva VG are Environmental Ship Index (ESI) certified. The scoring system for this international certificate is based on the environmental performance of ships, taking into account CO<sub>2</sub>, NO<sub>x</sub>, and SO<sub>x</sub> emissions from ships. Incentives are granted to certified vessels, which are linked to the awarded scoring system. With ESI certificate we can demonstrate the environmental and energy efficiency of our vessels.

# Environmental projects in 2020

## Developing a carbon neutral transport concept

The aim of the VG Marine EcoFuel – (Carbon-neutral energy solution for the renewed transport concept of the future) is to explore the possibilities of carbon-neutral energy solutions and thus create a basis for a 100% carbon-neutral transport concept. The project develops an energy solution that combines bio-oil and battery technology. The aim is to use innovations in the energy industry and research institutes, as well as to develop homogeneous biofuels that meet the standards. The method will meet the emission reduction targets set by the IMO, Finland and the EU for 2050 already in 2030.



## Collection of bio-oil intensified

We intensified the collection of bio-oil, especially in the Turku region. The majority of used cooking oils from restaurants in Turku and the surrounding municipalities are recycled to VG-EcoFuel Ltd., (member of Meriaura Group) for further refining. The oils come directly from restaurants or through wholesale collection points. At the same time, we are also researching and exploring other major sources of raw materials.





## Building an environmental system

We have started the development of an environmental system with the aid of Ecocompass-programme. Although we have worked with environmental projects for a long time, with a certified environmental system we are able to reduce and manage the adverse environmental impacts of our operations more effectively and to commit to the principle of continuous improvement. The system covers the impact of all our operations both at sea and on shore. The certificate is based on international environmental management standards and the system helps us to communicate our environmental achievements in a transparent and credible manner. With the basic mapping of the Ecocompass and the target program, we will later move towards the introduction of the ISO 14001 standard.

## Zero waste project

Increased shipping and nutrients that end up in the sea are a burden to all sea areas, but most significantly to the particularly sensitive Baltic Sea. Marine litter is also a giant problem. For these reasons, we have launched a “zero waste” project aimed at minimizing the environmental footprint. We want to be pioneers in preventing all ship discharges. During 2020, the black and gray waters of our ships have been delivered to the ports in the HELCOM area for further processing. The sorting of waste fractions has been intensified and efforts have been made to reduce the amount of waste already at its source. We want to continue to work proactively with ports to make the reception of wastewater a routine and the further processing of solid waste sorted on board so that the fractions remain segregated until final disposal.

## Research for finding new sources of raw material for ship fuel

We are involved in a three-year BioFlex project funded by Business Finland, in which VTT is studying how fuel oils made from biomass and waste plastics are suitable for diesel engines in power plants and ships. The aim is to determine the most ecologically and economically sustainable way to replace fossil fuels. By participating in the project, we support the goals of the International Maritime Organization (IMO) to halve greenhouse gas emissions from maritime transport by 2050.





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