PORT OF NAANTALI
NAANTALIN SATAMA

TOWARDS SUSTAINABILITY TOGETHER

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IN THIS PUBLICATION

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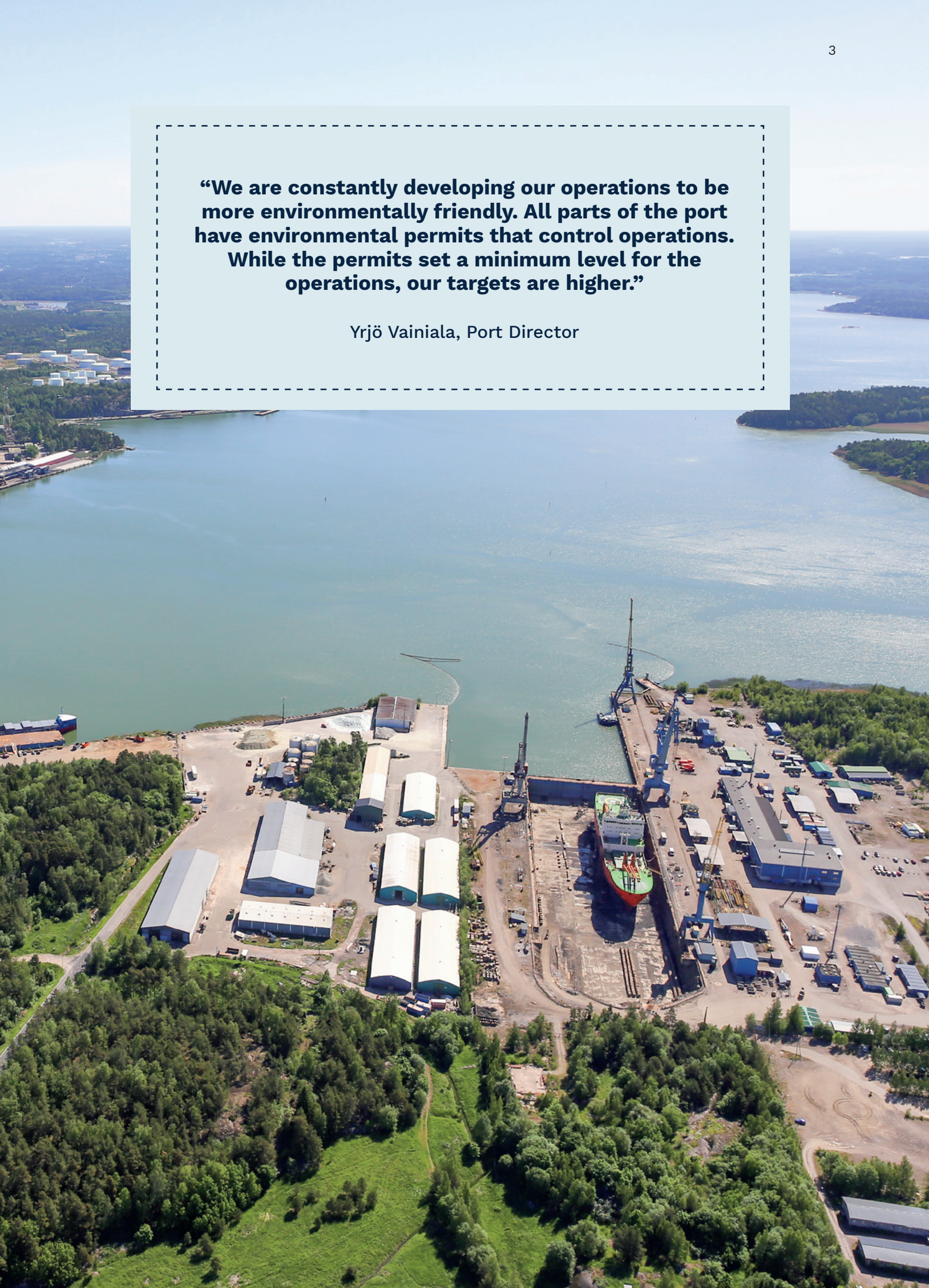
Yrjö Vainiala, Port Director



DEVELOPMENT OF SUSTAINABLE INDUSTRY, LOGISTICS AND MARITIME ECONOMY

Towards Sustainability

A trend is a general tendency or direction of a development or change over time. It can be called a megatrend if it occurs on a global or large scale. Megatrends are powerful, transformative forces with potential to change the global economy, business and society. Some of the current megatrends are identical to global threats. The first and most significant environmental megatrend is climate change. Long-term global warming trends pose a physical threat by changing the natural phenomena on which human life and the economy depend, and tipping points in the near future may exacerbate those long-term changes.

Sustainability is a buzzword these days, widely referenced in campaign slogans and corporate vision statements. The World Summit on Sustainable Development (WSDS) organized by TERI (The Energy and Resources Institute) defines the pillars of sustainability as economic development, social development and environmental protection. These three are not mutually exclusive and can reinforce one another. In most cases, the definition of a sustainable port includes similar aspects: economic prosperity through trade, a healthy environment, and thriving communities.

The Port of Naantali has identified Sustainability as an emerging business megatrend that needs to be taken into account in the port's strategy, investments and development programs and core values. Development towards a responsible sustainable port means that we need to balance commercial, environmental, and public interests. Business profitability, competitiveness and efficiency ensure continuity and lay the foundation for responsible operations. Good results are achieved responsibly by continuously developing port operations to take better account of both the environment and working conditions. Responsible and financially sustainable port operations also create regional prosperity.

The vital role of the ports

Christiana Figueres – Former Executive Secretary of United Nations, Framework Convention on Climate Change – has noted as follows: *"Ports are the connecting nodes of global trade and world economy. There is no way that we can move this world towards sustainability without ports."*

Ports operating as land and sea transport hubs play a significant role in maintaining Finland's security of supply. Ports construct and maintain vital infrastructure for the logistics chain. Ports also serve industry and trade in their surrounding areas. There are also numerous industrial players in the vicinity of the port of Naantali, some of which are integrated directly into the port through conveyors, pipes or other technical and logistical solutions.

The Port of Naantali operates on the principle of continuous development, managing and developing port operations in cooperation with shipping companies, operators and other stakeholders. Several construction projects are constantly ongoing in various parts of the Naantali port area. Environmental considerations are taken into account when guiding the implementation of investments and planning the use of the port areas.

Reducing the environmental impact

The Port of Naantali strives to reduce its environmental impact in many different ways. For example, the Port is currently building a shore-side power supply system for the new Finnlines Superstar-class ropax vessels that

will start operating on the Naantali – Långnäs – Kappelskär route in 2023. Connecting the vessels to the local electricity grid will reduce the need to use their auxiliary engines. The use of shore-side electricity has a major impact on the emissions of an individual ship. This is particularly efficient in scheduled traffic that involves ships regularly idling in the port for hours. At the same time, it directly affects air quality and noise levels.

An automatic mooring system will also be introduced to the ropax vessels in 2023, and will also contribute to reducing the emissions from ships. Automooring is becoming increasingly prevalent and its effect is indirect but significant. When the ship is moored faster, it can sail a little slower on the route, saving fuel.

The Port has also built a wastewater reception system for vessels, which is connected to the municipal sewage network. In addition, the Port introduced a sustainable lighting system based on the latest LED technology a few years ago. In the near future, a geothermal solution will be used for heating the Port's passenger terminal and office premises.

These and many other environmental projects will be announced in more detail on the Port's website in the future. However, this first digital Port's Sustainability publication is now more focused on the projects and environmental issues of the Port's nearby stakeholders and partners.

Environmental permits set a minimum level - the targets are higher

Shipping and port operations have an impact on the environment, but together with our partners, we are constantly developing our operations to be more environmentally friendly. All parts of the port have environmental permits that control operations, regulating issues such as noise and emission levels and waste management. Without environmental permits, the port cannot operate, and the permit conditions must be complied with by all those operating in the port area. While the permits set a minimum level for the operations, our targets are higher.

The Port of Naantali strives to report transparently on the achievement of its sustainable development and responsibility goals as part of its annual reporting. We also expect our partners to act responsibly, especially in environmental matters.

Yrjö Vainiala
Port Director
Chief Operating Officer (COO) & Commercial Director

AHOLA TRANSPORT

– a kilometre not driven is always the environmentally soundest kilometre

Ahola carries a significant share of its cargo to and from Scandinavia via the Port of Naantali.

Attention to environmental impacts has been included in the strategy of the family-owned logistics industry company Ahola Transport since 1998. That has generated good results. Up to 2021, Ahola managed to reduce the CO2 emissions from its operations by 62% compared to the level of 2005. In practice, it means that the 30% goal for emission reduction set by the EU on road transports was clearly exceeded and 10 years ahead of schedule. Reductions of emissions were achieved by working in four different areas: optimisation of vehicles, investments in training, utilisation of digitalisation in the planning of operations, and use of low-emission energy sources.

“A kilometre not driven is of course the most ecological option, and that’s why we aim at making our operations as effective as possible, by driving as few unnecessary kilometres as possible with as high a filling rate as possible. That also has a positive effect on profitability” says Åke Nyblom, Business Director of Ahola Transport.

The company’s own, self-developed enterprise resource planning system allows for the advanced optimisation of transports regarding filling rate and routes. The drivers can also monitor the ecological aspects of their driving style in the on-board computer. By combining vehicle data with operative data it is possible to measure and report the actual emissions per shipment, which is presumably unique in the transport industry and responds to the needs for sustainability reporting among Ahola’s customers. The customers can also choose Green Kilometers additional service for their shipment, in which case the fuel used will be HVO biodiesel. That way the emissions of goods transport amount to just a few per cent the emissions of regular transport.

Port of Naantali is very significant to Ahola

The transport hub located in the immediate vicinity of the Port of Naantali is Ahola Transport’s biggest in terms of floor area. The Port of Naantali is very significant to Ahola due to its optimal location and good sea connections.

”The Port of Naantali plays a key role in our Scandinavian cargo transports, and that’s why we value highly our excellent long-term co-operation with the Port”, Mr Nyblom says. They are also looking into the future. “There are new investment and development projects being planned for Naantali, and we have already negotiated with the City on some of them. The development projects include e.g. electrification projects in which hybrid technology and infrastructure for charging heavy vehicles are mapped and tested. Brand new business is also being planned”, Mr Nyblom says.

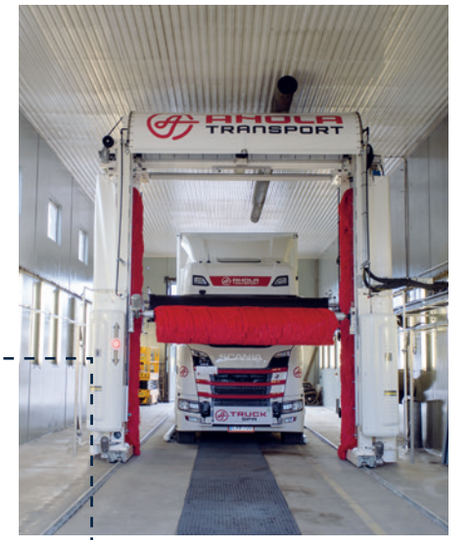
Read more about Ahola Transport aholatransport.com/services/road-transports

Environmental thinking is not limited to driving

Ahola Transport opened a unique washing station for heavy vehicles in its Naantali transport hub in autumn 2021. The washing station is made unique by its ability to recycle the washing water. Water consumption has been reduced considerably, as the water circulation system is closed, and washing water can be recycled almost completely.

”The washing of one articulated vehicle takes around 2,000 litres of water, of which some 5 per cent is water loss due to water going out with the vehicle. We only use new water in the final rinsing to keep the vehicles shining white. We estimate that in our case the recycling rate of water in the new washing station is around 85–90%. The figure will be specified later”, Åke Nyblom says.

”The fully automated washing station serves 24/7. The camera function recognises the model of the incoming vehicle, and the washing programme is automatically selected accordingly. The capacity is dozens of vehicles per day. Previously, the challenge with a manned station was that often the staff and the vehicles were not present at the same time”, says Alf Nyblom, Local Manager in Naantali.



Opened in autumn 2021, the washing station for heavy vehicles was named, after a competition, AT Truck Spa as an homage to Naantali’s long history as a spa town.

FINNLINES

– a seaway for freight and passengers between Finland and Sweden

Finnlines is a leading shipping operator of ro-ro and passenger services in the Baltic Sea, the North Sea and the Bay of Biscay. The company has a major role in ensuring the security of supplies for Finland.

Finnlines is a part of the Italian Grimaldi Group, one of the world's largest operators of ro-ro vessels and the largest operator of freight and passenger services in Europe.

Operating in Naantali since 1997

Finnlines began operating between Naantali and Kapellskär in 1997. A call to Långnäs in the Åland Islands was added to the route plan in 2013. The service is currently operated with two Star class vessels, both have capacity for 4,200 lane metres of cargo and over 500 passengers. These vessels service the passenger and freight industry by providing the daily capacity of over 750 cargo units and 2,200 passengers. The successful Finnlines' route is one of the vital maritime links for Finland's security of supply.

Environmental responsibility as a key part of business operations

Finnlines provides safe and high-quality services while minimising the environmental effects of its operations. In 2021, Visit Finland granted Finnlines the Sustainable Travel Finland label as recognition for complying with economic, ecological, social and sociocultural requirements.

During the past decade Finnlines has invested around one billion euros in new vessels, emission abatement technology, and modification and upgrade of existing vessels. As a result, the energy efficiency has greatly improved, and carbon dioxide emissions have decreased by more than 30% compared with the 2008 level.

Star Class vessels Finnswan and Europalink carry freight and passengers on the Naantali–Långnäs–Kapellskär route twice a day.

Read more about Finnlines finnlines.com

Finnlines
a Grimaldi Group company

A certified environmental system under the ISO 14001 standard provides a tool to monitor and measure the impact of all environment-related operations and services. To minimise fuel consumption and subsequent air emissions of the vessels Finnlines optimises:

- schedules
- routes
- speed
- load and trim

The underwater hull is regularly cleaned during the open water season to remove micro-organisms, which have attached to the hull, increasing fuel consumption. Gradual transition to carbon neutral and renewable fuels is being investigated with an engine manufacturer.

Finnlines co-operates with waste management companies to reuse and recycle waste efficiently. Sewage from vessels is pumped to the sewer in the Port of Naantali.

Superstars in the Archipelago

Two new environmentally friendly Superstar passenger-cargo vessels will begin operating from Naantali in autumn of 2023. These new vessels will bring more capacity to the route with 5,200 lane meters and 1,100 passengers per departure. Environmental aspects are being considered in all operations, ranging from energy generation to smart light management and ventilation.

Technical innovations include:

- an air lubrication system, reducing friction and improves energy efficiency.
- high-powered lithium-ion battery units, allowing the use of renewable energy.
- an auto-mooring system, speeding up port operations to enable a lower average sailing speed resulting in a decrease of fuel consumption.
- an onshore power supply, making port calls emission-free and reducing noise.
- smart interior design, includes using recycled and ecological materials

Finnlines' Naantali –Långnäs–Kapellskär route is one of the vital maritime links for Finland's security of supply.

With space for 1,100 passengers and 5,200 lane metres for rolling freight, the 235-metre-long Superstar ro-pax vessels will be Finnlines' largest passenger-freight vessels.

MERIAURA

– responsible business and sustainable operations at sea

Meriaura has a long history with the Port of Naantali. At the beginning of the 1990s, Meriaura started work in Naantali by operating icebreaking with tugboats, helping vessels, and conducting cargo inspections. Today, Naantali is the port visited most frequently by Meriaura vessels. In 2021, the company unloaded 92 vessels and loaded 31 vessels in the Port of Naantali. Meriaura carries e.g. wood chips, grain and gypsum to Naantali and loads e.g. recycled glass and crushed stone for outbound shipments. At present, Meriaura Group also has in Luonnonmaa district near the Port of Naantali its own port terminal which works in close co-operation with the Port of Naantali. Responsible business operations and sustainable development have been among Meriaura's leading operating principles since the company was established.

Gypsum for recovering the Archipelago Sea is transported via Naantali

Naantali is located at the heart of the Archipelago Sea, and extensive blue-green algae blooms caused by eutrophication are a nuisance every summer. In the light of the most recent research it seems that the condition of the Archipelago Sea and Baltic Sea can be improved by spreading gypsum on fields. For reducing the phosphorus loading it is more affordable than any of the currently used means of water protection, and it does not require changes in farming practices, and does not reduce the farming area or weaken the crops.

In 2020, the five-year Gypsum project was initiated in Southwest Finland with the goal to spread gypsum on 50,000–85,000 hectares of fields in the catchment area of the Archipelago Sea. Meriaura won the competitive bidding organised by the Centre for Economic Development, Transport and the Environment for the practical implementation of the gypsum project which includes purchasing, transports and spreading of gypsum on the farmers' fields. Meriaura transports the gypsum mainly during the summer season by water via the Saimaa Canal to Southwest Finland, mostly to Naantali. Due to the geopolitical situation, sea transports via Saima Canal will be replaced by trucks during 2022. However, the port area will be utilized as storage and used as a hub for the transports to the farms. From Naantali the gypsum is forwarded to the fields through Meriaura's network of subcontractors.

Waste water from cargo ships discharged to land

For several years, one of our most significant environmental goals has been to discharge the waste water from ships to the reception systems in the ports. Legislation permits the discharging of the waste water from cargo ships to the sea, although even after treatment they contain nutrients, bacteria, lipids and chemical whose entry to the sea we in Meriaura want to prevent. Naantali reacted to our wish at an early stage, and the discharging of waste water was arranged without trouble. The Port's reception system for other types of waste also deserves our thanks.

Read more about Meriaura meriaura.fi/en

MERIAURA

Responsible business operations and sustainable development have always been among Meriaura's leading operating principles.

We want to provide services of the same high standard that we require of the ports. Hence our own port terminal VG-Port in Luonnonmaa district is equipped with a system through which ships can discharge their waste water directly into the sewer system. That way we will avoid additional waiting for the transport equipment and unnecessary intermediaries in the process.

Certified environmental system – goal-oriented and measurable environmental work

At the turn of the year, Meriaura's environmental policy was audited and we received an EcoCompass certificate. Although we have conducted environmental work for a long time, with the certified environmental system we can more efficiently reduce and manage the adverse environmental impacts of our operations as well as committing ourselves to the principle of continuous improvement. The system covers the impact of all land and sea operations of our group of companies. The certificate is based on international standards of environmental management, and the system helps us to communicate about our environmental achievements in a transparent and credible manner. Through basic mapping and programme of EcoCompass we are progressing towards the introduction of the ISO 14001 standard at a later date.

SUOMEN VILJAVA

– responsibility is part of everyday work

Suomen Viljava has been operating in Naantali since 1959, when the construction of the first block of silos was completed. The grain terminal has been expanded twice, in the 60s and 70s. It is the biggest grain terminal in the Baltic Sea. Co-operation between Viljava and the Port of Naantali during a period of more than 60 years has been seamless. Viljava and its customers really appreciate all the development investments and other operations that the Port of Naantali has been doing for efficiency and safety of port operations and to make the port more environment friendly.

One of the first in the sector

Viljava aims at being a pioneer in its sector in all sub-areas of business responsibility. Responsibility is our operating method and a fixed component of the company's management system.

We consider its effects in various stages of our operations, in terms of the profitability and continuity of our staff's well-being, customer service and environmental effects as well as our operations. At Viljava, responsible operations are part of everyday work.

Viljava has a national obligation, for its part, to safeguard the operation of the domestic food supply chain in exceptional circumstances, as well as ensure the functionality of grain storage and handling markets and the non-interference of duties concerning the EU intervention operations.

We respond to food safety with a comprehensive quality assurance programme and modern analysis methods for the products to be stored. We regularly develop the staff's skills in the sub-areas of quality assurance and food safety. These allow us to ensure that the product safety of food products and feed products as well as the technical and hygienic quality of our customer products are maintained during storage.

Viljava's operations are guided by the Code of Conduct and the Corporate Governance guidelines. Viljava's responsible operating method has been audited on the basis of the objectives of the Government's ownership steering policy principle. Clear environmental responsibility objectives are included in Viljava's strategy. Viljava is an almost carbon-neutral operator, and the emphasis in reducing the carbon footprint during upcoming years lies in the environmental effects of the grain logistics chain.

Objectives of Viljava's social responsibility

1. Motivated and skilled staff
2. High customer satisfaction
3. Reduction of environmental effects
4. Financial result confirming continuity

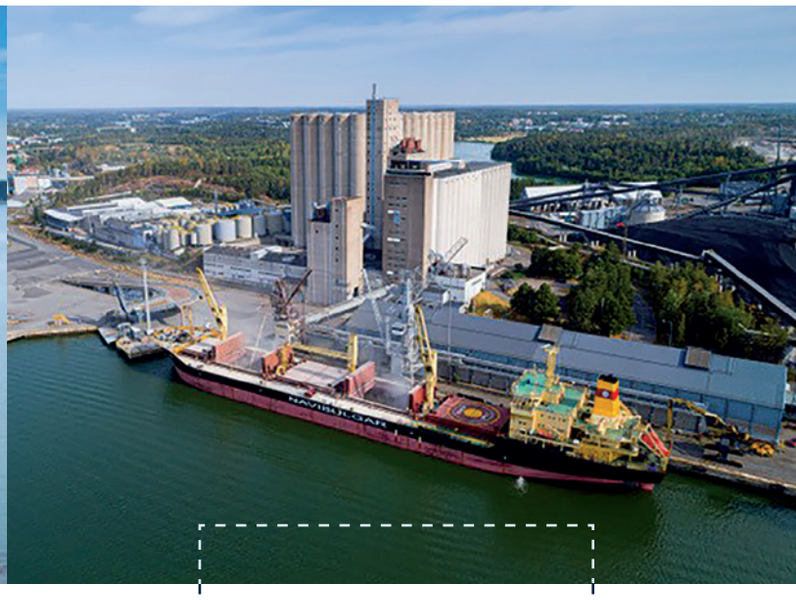
Viljava's own operations near carbon-neutrality

Viljava's objective is to be an industry pioneer in reducing carbon dioxide emissions. To strengthen this, we have already carried out measures in accordance with the objectives of the different levels of the GHG (Green House Gas) protocol, which has made the company almost carbon-neutral in terms of its own operations and delivered energy.

During the next few years, the emphasis will lie in the third level of the protocol, i.e. the reduction of indirect greenhouse gas

Viljava's objective is to be an industry pioneer in reducing carbon dioxide emissions.

Read more about Suomen Viljava suomenviljava.fi/en



Emissions from grain logistics are the next important subject of reduction.

emissions. The co-operation between us and our various partners plays a key role in achieving this objective.

Emissions from grain logistics are the next important subject of reduction. In 2021, we clarified the logistical carbon footprint of grain arriving and leaving Viljava's storage facilities. The carbon dioxide emissions were calculated separately for the road, rail and sea transports. The emissions for transports were only calculated for loaded transports. The study was carried out on the basis of a 12-month period of grain shipments, and the emission values of VTT's Lipasto database were used in the determination of CO^2 emissions.

The transport distance of goods arriving by road was half of the corresponding distance for departing goods. Viljava's extensive network of storage facilities and their placement in key cultivation areas enables efficient grain logistics during the busy harvest season and at the same time has a positive impact on the carbon dioxide emissions.

During the review period, the highest total carbon dioxide emissions in grain logistics were generated by sea transports. On the other hand, if sea transports were replaced with road transports, the emissions of grain exports and imports would increase significantly. The lowest emissions were generated by rail transports, where electric locomotives are mainly used. The modes of transport are, therefore, not entirely comparable, because their logistical function is different. Road transport is for local traffic, rail transport is for traffic of the east, and sea transport is for long distances.

Read more about Stevena stevena.fi/en/stevena

STEVENA

– responsible port operations in Naantali for 40 years

Stevena started operations in Naantali in 1982. At first, the company's basic duty was to look after the cleanliness and high-quality handling of animal feed ingredients imported to Finland. A unique control system had been created in Finland in co-operation by the animal feed factories and the authorities to ensure that the imported feed is clean and salmonella-free. The system was so important that the quarantine and control processes could also be retained when Finland joined the EU.

The system required investments in warehousing and load handling in ports. In the early 1980s, a terminal area was set up in the Luonnonmaa district in Naantali through which large volumes of ingredients for the feed industry were imported. The operations had an important effect on the quality and competitiveness of the Finnish food industry already back then. And the requirement for all that was that the persons and organisations involved took their responsibility for the clean ingredients.

Stevena's sustainability thinking originates in those days. We worked sustainably long before sustainability became a key business trend. We apply the same care, precision and attention to the customers' needs to all cargo we handle, even if no special requirements have been set for us.

Stevena as part of goods flows of circular economy

The key word of sustainable development is resource-efficiency. The reuse of raw materials and utilisation of recycling flows call for providers familiar with the operations. Raw materials and recycling flows are generated in different places from where they are used. Inexpensive products – which may sometimes even have a negative value – require efficient operating and economics of scale in logistics.

Stevena has participated in a number of circular economy flows since the beginning, such as shipping and storage of recycled

Stevena has the following certified management systems in place:

- ISO 9001 Quality Management System
- ISO 14001 Environmental System
- ISO 45001 Occupational Health and Safety System
- EFISC-GTP Feed Ingredient Safety Certification
- Stevena is also included in the Reliable Partner system.

The key word of sustainable development is resource-efficiency.

metal and glass. Recycling flows are not suited to all ports and not to all port operators, but they require the right equipment, operating environment and approach to the work. The products of circular economy need to be viewed as important raw material flows and saving of natural resources and not as waste management.

Accuracy in operations creates cost savings

The most significant emissions of port operations to the environment are dust and traces in the processing areas. The goods have to, however, go to the right place and to the intended transport unit. Stevena continuously develops the accuracy and cleanliness of load handling. Avoiding contaminations is an obvious requirement, and we also see to it that the cleaning waste is untainted and recyclable. The waste management and disposal costs are often more expensive cost elements than the product itself, so minimising them is a high priority already during the load handling.

New technology allows for new solutions

Saving energy and reducing emissions are key arguments while making new investments. We are continuously following the development and introduction of the latest technology. We conduct a dialogue with machine manufacturers on the electrification of heavy vehicles. The driving power solutions of heavy machinery progress more slowly compared to passenger cars or light-weight trucks, and we aim at being at the forefront of development.

Stevena is part of KWH Logistics group which is one of the leading port operators in Finland and a major logistics operator. KWH Logistics is participating in a large pilot project in which heavy diesel-powered trucks are converted to make them electrically powered. Stevena's sister companies provide practical pilot targets for their introduction in port and factory areas.

In addition to the driving power solutions for machinery, we utilise the potential of solar power whenever it is technically feasible. Our warehouses and offices have thousands of square metres of roof area that offers good opportunities for placing solar panels.

TURUN SEUDUN ENERGIAN-TUOTANTO (TSE)

– heat for homes and power for industry

Turun Seudun Energiantuotanto (TSE) produces district heat for the inhabitants in the Turku region and steam for the industrial customers in the port, as well as electricity for the markets. TSE combines local expertise in the energy sector with leading knowledge in the Nordic energy industry. We ensure that the Turku region receives its basic heating in an economic, efficient and sustainable way. Our goals are to increase renewable energy and create a flexible energy production system.

The power plants of TSE are located in the immediate vicinity of the Port of Naantali. Through its predecessors, the history of TSE dates back to the late 50s when a decision was made to build the first coal power plant in the area. The company's important raw material flows, earlier coal and more recently increasingly wood-based fuel, are transported through the Port of Naantali to the power plant for utilisation in energy production.

In recent years, TSE has taken significant steps towards carbon dioxide-free production, and so far the most significant step is the completion of the multi-fuel power plant in 2017, which enabled initially limiting the use of coal to around half of the fuel base. The rest is mainly wood fuel, the volume of which was increased by building a conveyor for wood fuel, referred to as the maritime bio line, directly from the port to the power plant to allow for the starting of wood fuel imports by sea. Maritime transports also operate in partially carbon-neutral way, using waste fat from restaurants, as Meriaura has developed the fuel base of its vessels.

After the completion of the power plant, investments in decreasing coal were continued, and a year ago TSE introduced a flue gas condenser which increased the district heat capacity of the new unit by 30% without increasing the volume of the fuel used. In terms of energy, it equals the thermal energy used by 600 blocks of flats. In 2021, a reception and conveyor system was completed at the power plant, and TSE will start burning of waste not suited for recycling.

Turun Seudun Energiantuotanto's plant in Naantali.

As a result, unit 4 can stop using coal in normal operations.

In the future, the focus of development of TSE's operations will lie even more in improving energy-efficiency. In addition to utilising waste heat from waste water in the Kakola thermal pump plant in Turku, TSE is continuously looking for opportunities to enhance the use of waste heat in the process of the Naantali power plant. The close connection between TSE and the Port of Naantali has developed over the years, and it is expected to stay that way in the foreseeable future, even if the materials flows are changing.

Read more about TSE tset.fi/ in-english

BLRT
REPAIR YARDS
BLRT GRUPP

Arctia Oy's icebreaker Voima in dry dock – lifespan extension project in 2016. A. Soini.

TURKU REPAIR YARD

Turku Repair Yard in the footsteps of sustainable development – since 2005

Turku Repair Yard was the first shipyard in Finland that was granted environmental system certification in accordance with the ISO 14001 standards. The project aimed at the certification of the environmental system started in 2003 and the certification was carried out in 2005. Since then, the Turku Repair Yard has participated in a number of different projects related to the promotion of sustainable development.

Turku Repair Yard joined e.g., the Baltic Sea Challenge among the first companies in 2007. Over the years, the Challenge has supported e.g. the operations of the Protection Fund for the Archipelago Sea and conducted two extensive sediment studies in the Port of Naantali's water areas in good cooperation with the Port of Naantali and the Centre for Economic Development, Transport and the Environment.

The most recent bigger challenge was the Green Ship Recycling project which was implemented from 2017 to 2019 with support from TEKES and in cooperation with Delete Finland Oy and Meriaura Oy. At the same time, the shipyard was involved in the ResponSea commitment of Finnish Maritime Industries to develop environmentally sound and

Read more about Turku Repair Yard blrtyards.com/en/

Aerial photo of Turku Repair Yard in 2022. Tallink Silja's Baltic Queen in dry dock and Viking Line's Gabriella in berth.

occupationally safe ship recycling. As one goal of the project, the Turku Repair Yard was accepted to the European List of Ship Recycling Facilities where it is still included – as the only Finnish shipyard.

Located opposite the Port of Naantali, in addition to providing traditional ship repair services Turku Repair Yard today acts as a testing site for the rotor sails designed by Norsepower Oy:

"Norsepower's rotor sail is a modernised Flettner rotor which can be installed in new vessels or retrofitted in existing ships. The rotor sail produces a thrust using the Magnus phenomenon and reduces the ship's need for propulsion power. The completed rotor sail installation is Norsepower's fourth and it is estimated to reduce the ship's emissions by 4–5% without altering its speed or schedule." Norsepower: www.norsepower.com

At present, ship repairs nevertheless remain the shipyard's key business area and that way we are involved in extending the lifespan of vessels as part of sustainable development.

In recent years, the shipyard has aimed at systematically reducing the emissions generated in connection with the surface treatment work during ship repair projects – thanks to its own efficient operations e.g. by planning the introduction of alternative surface treatment methods alongside traditional sandblasting together with the other companies in the BLRT Group.

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